

transport assessment

Land south of Beyton Road,
Thurston, Suffolk

CCE/X601/TA-01

June 2019

For Bloor Homes and Sir George
A. Agnew

APPENDICES

- A Illustrative Site Layout
- B AECOM & SCC technical work relating to the “five sites”
- C Scoping Correspondence
- D Local Bus Timetable
- E Personal Injury Accident (PIA) data
- F Neighbourhood Plan Site Assessment
- G Agreed S106 funding the five sites
- H Percentage Impact Calculations
- I ARCADY Output Files
 - J2 Station Hill (Mini-roundabout) Existing
 - J2 Station Hill (Mini-roundabout) Proposed Geometry
 - J4 Beyton Road Changed to Mini-roundabout Junction
- J PICADY Output Files
 - J1 Fishwick Existing
 - J1 Fishwick Staggered Junction
 - J3 Pokeridge Corner Existing
 - J4 Beyton Road Existing
 - J6 Proposed Site Access South
 - J7 Proposed Site Access North

Appendix A



REV	DATE	DESCRIPTION	DRAWN
E	24/06/19	Road improvements shown	SW
D	20/06/19	Junctions revised	EW
C	18/06/19	Red line and internal junctions revised	EW
B	15/04/19	Frontages revised	EW
A	05/04/19	Landscape buffer adjusted, circular route shown	EW
-	25/03/19	First issue	SW

CLIENT
Bloor Homes Eastern

PROJECT TITLE
Beyton Road, Thurston

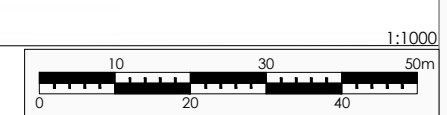
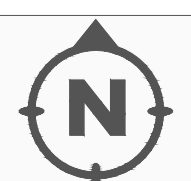
DRAWING TITLE
Illustrative Masterplan

DATE	DRAWN	CHECKED	AUTHORISED
24 June 2019	EW	EW	TN
NUMBER	REV.	SCALE	
19.2012/SL-101	E	1:1000 @ A1	

Boyer



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Appendix B

Project: Mid Suffolk Cumulative Study, SCC **Job No:** 60445024
Subject: Technical Note – Thurston Cumulative Impact Assessment Part 2
Prepared by: Theodore Jones and Georgia Ingleson **Date:** 11th September 2017
Checked by: Bevin Carey **Date:** 12th September 2017
Approved by: Nick Anderson **Date:** 14th September 2017

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1. Introduction

1.1 AECOM has been commissioned by Suffolk County Council (SCC) and Mid Suffolk District Council (MSDC) to undertake a cumulative transport impact assessment on a number of possible residential site allocations within Thurston and Elmswell in the MSDC area. MSDC has received planning applications for five residential developments totalling 827 dwellings in Thurston, of which four developments (689 dwellings) have been granted 'minded to approve'.

1.2 MSDC and SCC have requested the cumulative impact of proposed development (both the 689 and 827 dwelling scenarios) on junction capacity and link flow forecasts within Thurston, therefore this Technical Note (TN) establishes the cumulative impact of the 689 and 827 dwellings scenarios.

2. Scope of Assessment

Sites Assessed

2.1 The sites included in this assessment are those sites in Thurston where planning applications have been validated. The sites included in this assessment are set out below:

- o T1 - Norton Road / Sandpit Lane, Thurston - 175 dwellings (planning ref: 2797/16)
- o T2 - West of Barton Road, Thurston - 138 dwellings (planning ref: 4386/16)
- o T3 - Land to the west of Meadow Lane, Thurston - 64 dwellings (planning ref: 4942/16)
- o T4 - Land west of Ixworth Road, Thurston - 250 dwellings (planning ref: 4963/16)
- o T5 - Land north of Norton Road, Thurston - 200 dwellings (planning ref: 5070/16)

2.2 The four proposed developments that have been granted 'minded to approve' are T1, T3, T4, and T5, equating to a total of 689 dwellings.

2.3 The indicative locations of the proposed sites in Thurston are shown on **Figure 1** included at **Appendix A**.

Junctions Assessed

2.4 The cumulative development traffic for the proposed developments have been distributed and assigned to the study area. A total of five junctions, all located in or near Thurston, have been analysed from a capacity perspective, as requested by SCC. The five junctions are set out below:

1. C691 Barton Road / C562 Station Hill Three Arm Mini Roundabout
2. C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road Crossroads (Pokeridge Corner)
3. C693 Thurston Road / C692 Thurston Road Crossroads (Fishwick Corner)
4. C559 Norton Road / C562 Ixworth Road / C562 Station Hill staggered Crossroads
5. C691 Barton Road / C559 Norton Road 'T' Junction

2.5 For the link flow forecasts, three additional junctions have been used, which are set out below.

6. C560 Beyton Road / C691 Barton Road 'T' Junction
7. U4920 Sandpit Lane / C559 Norton Road / U4921 Meadow Lane Crossroads
8. A143 / C691 Thurston Road Crossroads

2.6 The locations of these junctions are shown on a location plan included at **Appendix B**.

Assessment Scenarios

2.7 In order to assess the vehicular impact on the local road network associated with the proposed residential developments, four assessment scenarios have been considered for the AM and PM peak hours based on the current junction arrangement. The four scenarios assessed in this report are set out below:

- o 2017 Baseline scenario
- o 2021 Baseline scenario
- o 2021 Future Year with Development of 827 dwellings scenario (full five proposed developments)
- o Sensitivity Test - 2021 Future Year with Development of 689 dwellings scenario (four developments granted 'minded to approve')

3. Highway Network Assessment

Traffic Data

3.1 Traffic data has been obtained from a number of Transport Assessments / Statements for developments within Thurston for use within the junction capacity assessment and link flow forecast. In addition a traffic survey was undertaken at one junction, which has been used for link flow forecast. The source of the traffic data for each of the junctions used for both junction capacity assessments and link flow forecasts is detailed below:

- o Junction 1: C691 Barton Road / C562 Station Hill Three Arm Mini Roundabout, Junction 2: C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road Crossroads (Pokeridge Corner) and Junction 7: U4920 Sandpit Lane / C559 Norton Road / U4921 Meadow Lane Crossroads
 - Manual classified turning count data has been extracted from the TA for the proposed development 'Land at Norton Road, Thurston' (planning reference: 5070/16) for these two junctions. The TA contains the full results of the surveys undertaken on 10th November 2016 between the hours of 0700 to 1000 hours and 1600 to 1900 hours.
- o Junction 3: C693 Thurston Road / C692 Thurston Road Crossroads (Fishwick Corner) and Junction 6: C560 Beyton Road / C691 Barton Road 'T' Junction.
 - Manual classified turning count data has been extracted from the TA for the proposed development 'Land adjacent to Barton Road, Thurston' (planning reference: 4386/16) for this junction. The TA contains the survey results undertaken on 21st October 2015 between the hours of 0700 to 1000 hours and 1600 to 1900 hours.
- o Junction 4: C559 Norton Road / C562 Ixworth Road / C562 Station Hill staggered Crossroads and Junction 5: C691 Barton Road / C559 Norton Road 'T' Junction
 - Manual classified turning count data has been extracted from the TA for the proposed development 'Land adjacent to Barton Road, Thurston' (planning reference: 4943/16) for this junction. The TA contains the full results of the surveys undertaken on 8th March 2016 between the hours of 0700 to 1000 hours and 1600 to 1900 hours.

- o Junction 8: A143 / C691 Thurston Road crossroads
 - A manual classified turning count and queue length survey was procured as part of this assessment. These were undertaken on 29th March 2017 between the hours of 0700 and 1000 and 1500 and 1900 hours.

Traffic Growth

3.2 The current version of TEMPRO (Version 7.2 and dataset 72) has been used to derive local growth factors for the Mid Suffolk Middle Super Output Area (MSOA) - Mid Suffolk 004 area. Mid Suffolk 004 MSA was chosen as it includes Thurston and therefore encompasses a larger proportion of the study area compared to other surrounding MSOAs.

3.3 Growth rates from TEMPRO have been calculated to growth the 2015 and 2016 traffic flows to a 2017 baseline year, and to growth the 2017 traffic flows (prepared for Phase 1b TN) to a 2021 future baseline year.

3.4 The alternative assumptions tool within TEMPRO has been utilised to alter future growth in households between the base year of 2017 and the agreed future year of 2021. Within the alternative assumptions tool, the increase in the number of households identified to be built between 2017 and 2021 has been altered to a 0 dwelling increase as anticipated residential growth has been manually added in this assessment.

3.5 Applying the alternative assumption tool within TEMPRO to the Weekday AM and PM time periods with Origin/Destination trip ends results in adjusted growth factors (adjusted to NTM and alternative assumption) as set out **Table 1** below.

Table 1: TEMPRO Adjusted to NTM & Alternative Assumption Growth Factors and TEMPRO Adjusted to NTM Growth Factors - Mid Suffolk 004

Period	Growth Rate	
	AM	PM
2015 - 2017	1.012	1.014
2016 - 2017	1.008	1.007
2017 - 2021	1.025	1.018

3.6 The growth factors set out in **Table 1** above have been applied to the relevant 2015 and 2016 baseline traffic flows in order to generate 2017 baseline traffic flows, and also to 2017 baseline traffic flows in order to generate 2021 future year traffic flows. The traffic flow diagrams are included at **Appendix C**.

Peak Hours

3.7 To derive the AM peak hour flows, data for the busiest period from the available information has been adopted. For the AM peak hour, 0800 to 0900 has been adopted and for the PM peak hour, 1700 to 1800 hours has been adopted for all junctions and links. These peak hours were consistently the peak AM and PM periods at all the junctions where traffic data was obtained.

4. Trip Generation

Residential Vehicular Trip Rate

4.1 The vehicular trip rates set out in **Table 2** below have been applied to the number of dwellings at the sites at Thurston to derive the trip generation.

Table 2: Vehicle Trip Rate (trips per hour per dwelling)

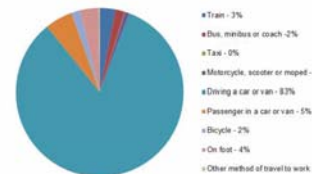
Peak Hour	Vehicular Trip Rates Per Dwelling		
	Arrivals	Departures	Two-way
AM (0800-0900)	0.158	0.520	0.678
PM (1700-1800)	0.456	0.211	0.667

4.2 The above trip rates were derived from a survey undertaken at a housing development access on

Blackbourne Road in Elmswell. This survey was undertaken as part of a TA (dated July 2013) prepared by Phil Jones Associates at the request of SCC. The TA prepared for 'Land North and South of Wetherden Road, Elmswell' (planning reference: 4911/16) used this local trip rate to derive the sites vehicular trip generation.

4.3 Travel to work mode shares for Mid Suffolk 004 MSA have been derived from the 2011 census data. These mode shares are shown in **Figure 1** below.

Figure 1: Travel to Work Mode Share (2011 Census) Percentages Mid Suffolk 004 MSA



4.4 **Figure 1** above indicates that a large proportion (83%) of travel to work journeys are currently being undertaken by car within the MSA. The trip rates used within this assessment reflect this high car driver mode.

4.5 The vehicular trip rates in **Table 2** above have been used as they are bespoke and reflect local travel patterns and provide local vehicular trip rates for a residential development. These trip rates have been validated against the two-way trip rates provided by SCC for both Thurston and Elmswell and are broadly comparable. The Thurston two-way trip rates provided by SCC are slightly lower than those for Elmswell, which could be due to its closer proximity to Bury St Edmunds. As Elmswell and Thurston are similar in terms of location, size and train services, the local trip rates for Elmswell have been applied to those sites at Thurston, therefore providing a worst case assessment.

4.6 The trip rates in **Table 2** have been tested against those in TRICS and are considered to be the most appropriate rates to use in this location.

4.7 A summary of the number of vehicular trips estimated to be generated in the peak hours per site in Thurston are provided in **Table 3** below.

Table 3: Thurston Sites - Total Vehicular Trip Generation

Ref.	Site	No. Dwellings	AM Trip Generation (0800-0900)		PM Trip Generation (1700-1800)	
			Arrival	Departure	Two-way	Two-way
T1	Norton Road / Sandpit Lane	175	28	91	119	80
T2	West of Barton Road	138	22	72	94	63
T3	Land to the west of Meadow Lane, Thurston	64	10	33	43	29
T4	Land west of Ixworth Road, Thurston	250	40	130	170	114
T5	Land north of Norton Road, Thurston	200	32	104	136	91
	Total (827 dwellings)	827	132	430	562	377
	Total (689 dwellings)	689	110	358	468	314

5. Trip Distribution

5.1 The NOMIS website, which is a service provided by the Office of National Statistics and holds publicly available data from the Census and other up to date UK labour market statistics from official sources, was interrogated to establish Journey to Work origin destination data from the 2011 Census.

5.2 Mid Suffolk 004 MSOA was chosen as it includes Thurston, with this MSOA encompassing a larger proportion of the study area compared to other surrounding MSOAs.

5.3 The vehicular trips derived for each of the proposed developments have been manually added to the highway network assessed. Trips have been distributed and assigned onto the highway network as follows:

- The workplace destinations for those living in MSOA 004 have been identified. 7% live and work within the study area and the remaining 93% travel external to the study area.

6. Cumulative Traffic Increases

6.1 Table 4 below provides the cumulative proposed development trips at the five junctions in Thurston that have been assessed in capacity terms within this TN.

Table 4: Cumulative Traffic Increases at Junctions

Table with 6 columns: Junction No., Junction Name, Total Development Trips (689 dwellings) AM, PM, and Total Development Trips (827 dwellings) AM, PM.

7. Junction Capacity Assessments

Junction Models
7.1 The modelling work has been undertaken using nationally recognised modelling software Junctions 9 for priority junctions and roundabouts.

7.2 The following sections discuss the outcome of the capacity assessments undertaken for each of the junctions for the four scenarios of: 2017 Base, 2021 Base, 2021 with Development (689 dwellings); and 2021 with Development (827 dwellings). Within the below sections a number of acronyms are used. The meaning of these acronyms within the capacity assessment results are discussed below.

- RFC Ratio of Flow to Capacity (for priority junctions)
Q Queue length (vehicles) (for priority junctions)

7.3 It is generally accepted that RFC values of 0.85 or less are indicators that a junction is operating within capacity. Although a junction would be said to be operating at capacity at values of 1, the use of 0.85 allows for a margin of error and fluctuations in traffic flows. Junctions are therefore only identified as operating over capacity if these values are exceeded.

7.4 Geometric data for the junctions assessed has been taken from OS mapping and Google Street View has been used to understand the existing junction arrangement. No planned improvement schemes have been put forward for consideration and as such this is considered to be appropriate.

Junction Capacity Results - Existing Junctions

7.5 The results of the Junction Capacity Assessments for five junctions for the four scenarios are out in Table 5 to Table 9 below. The full junction modelling reports for all junctions are included at Appendix D.

Table 5: Junction 1 - C691 Barton Road / C562 Station Hill Mini-Roundabout

Table with 6 columns: Approach, AM Peak Max RFC, Delay (s/Veh), Max Q (Veh), PM Peak Max RFC, Delay (s/Veh), Max Q (Veh). Rows include 2017 Base, 2021 Base, and 2021 with Development (689 and 827 dwellings) scenarios.

7.6 The results set out in Table 5 above indicate that at the C691 Barton Road / C562 Station Hill mini-roundabout, the junction is predicted to operate within desirable capacity limits in the 2017 base and all three 2021 scenarios in both the AM and PM peak hours. The maximum RFC in the 2021 with Development (827 dwellings) scenario is predicted to be 0.69 on Station Hill East in the AM peak hour and 0.78 on New Road South in the PM peak hour.

7.7 Mitigation at this junction would not need to be considered if all five proposed developments in Thurston received planning permission and were developed, unless intensified use exacerbated an existing safety issue.

Table 6: Junction 2 - C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road Crossroads (Pokeridge Corner)

Table with 7 columns: Approach, AM Peak Max RFC, Delay (s/Veh), Max Q (Veh), PM Peak Max RFC, Delay (s/Veh), Max Q (Veh). Rows include 2017 Base, 2021 Base, and 2021 with Development (689 and 827 dwellings) scenarios.

7.8 The results set out in Table 6 above indicate that at the C560 Beyton Road / C692 Thurston Road crossroads, the junction is predicted to operate within desirable capacity limits for the 2017 base and two of the 2021 scenarios in both the AM and PM peak hours - the 2021 Base and the 2021 with Development (689 dwellings) scenarios.

7.9 However, in the 2021 with Development (827 dwellings) scenario the junction is predicted to operate just over desirable capacity limits in the AM peak hour, with a maximum RFC of 0.86 on Thedwastre Road Northeast. In the PM peak hour the junction is predicted to operate within capacity, with a maximum RFC of 0.58 on Unnamed Road Southwest.

7.10 As the junction is not predicted to exceed maximum theoretical capacity in the AM peak hour and is predicted to operate within capacity in the PM peak hour, it is suggested that mitigation at this junction would not need to be considered if all five proposed developments in Thurston received planning permission and were developed, unless intensified use exacerbated an existing safety issue.

Table 7: Junction 3 - C693 Thurston Road / C692 Thurston Road Crossroads (Fishwick Corner)

Table with 7 columns: Approach, AM Peak Max RFC, Delay (s/Veh), Max Q (Veh), PM Peak Max RFC, Delay (s/Veh), Max Q (Veh). Rows include 2017 Base, 2021 Base, and 2021 with Development (689 and 827 dwellings) scenarios.

7.11 The results set out in Table 7 above indicate that at the C693 Thurston Road / C692 Thurston Road (Fishwick Corner) Crossroads, in the 2017 base scenario, the junction is operating over desirable capacity limits in the AM peak hour with a maximum RFC of 0.88, and is predicted to do so in the 2021 Base scenario with a maximum RFC of 0.91.

7.12 In both the 2021 with Development (689 dwellings) and the 2021 with Development (827 dwellings) scenarios the junction is predicted to operate over theoretical capacity limits in the AM peak hour, with an RFC of 1.15 and 1.21 respectively on Barton Road North. In the PM peak hour the junction is predicted to operate within capacity, with a maximum RFC of 0.57 and 0.60 respectively on Barton Road North.

7.13 As the junction is predicted to exceed maximum theoretical capacity in both the 2021 with Development scenarios in the AM peak hour indicating that the junction is oversaturated, therefore the queuing results do not reflect the levels likely to occur at the junction as queuing increases exponentially once the junction becomes oversaturated. Notwithstanding this point, mitigation at this junction would need to be considered for both the 2021 with Development scenarios.

Table 8: Junction 4 – C559 Norton Road / C562 Ixworth Road / C562 Station Hill staggered Crossroads

Approach	AM Peak			PM Peak		
	Max RFC	Delay (s/Veh)	Max Q (Veh)	Max RFC	Delay (s/Veh)	Max Q (Veh)
2017 Base						
Ixworth Road North- Right, Left, Ahead	0.32	9.56	0.5	0.11	6.24	0.1
Ixworth Road North, Norton Road East - Ahead, Right	0.26	7.35	0.5	0.09	6.39	0.1
Station Hill South- Left, Ahead, Right	0.31	9.44	0.5	0.11	6.12	0.1
Norton Road West, Station Hill South - Ahead, Right	0.28	8.18	0.5	0.21	6.81	0.3
2021 Base						
Ixworth Road North- Right, Left, Ahead	0.33	9.73	0.5	0.12	6.26	0.1
Ixworth Road North, Norton Road East - Ahead, Right	0.27	7.41	0.5	0.1	6.4	0.1
Station Hill South- Left, Ahead, Right	0.32	9.65	0.5	0.12	6.14	0.1
Norton Road West, Station Hill South - Ahead, Right	0.29	8.26	0.5	0.21	6.84	0.3
2021 with Development (689 dwellings)						
Ixworth Road North- Right, Left, Ahead	0.55	14.81	1.2	0.19	7.03	0.2
Ixworth Road North, Norton Road East - Ahead, Right	0.43	8.29	1.1	0.15	6.58	0.2
Station Hill South- Left, Ahead, Right	0.37	11.02	0.6	0.19	6.91	0.2
Norton Road West, Station Hill South - Ahead, Right	0.36	9.09	0.7	0.35	7.73	0.7
2021 with Development (827 dwellings)						
Ixworth Road North- Right, Left, Ahead	0.55	14.81	1.2	0.19	7.03	0.2
Ixworth Road North, Norton Road East - Ahead, Right	0.43	8.29	1.1	0.15	6.58	0.2
Station Hill South- Left, Ahead, Right	0.37	11.02	0.6	0.19	6.91	0.2
Norton Road West, Station Hill South - Ahead, Right	0.36	9.09	0.7	0.35	7.73	0.7

7.14 The results set out in **Table 8** above indicate that at the C559 Norton Road / C562 Ixworth Road / C562 Station Hill Crossroads, the junction is predicted to operate within desirable capacity limits in all three 2021 scenarios in both the AM and PM peak hours. The maximum RFC in the 2021 with Development (827 dwellings) scenario is predicted to be 0.55 on Ixworth Road East in the AM peak hour and 0.35 on Norton Road South in the PM peak hour.

7.15 Mitigation at this junction would not need to be considered if all five proposed developments in Thurston received planning permission and were developed, unless intensified use exacerbated an existing safety issue.

Table 9: Junction 5 - C691 Barton Road / C559 Norton Road 'T' Junction

Approach	AM Peak			PM Peak		
	Max RFC	Delay (s/Veh)	Max Q (Veh)	Max RFC	Delay (s/Veh)	Max Q (Veh)
2017 Base						
Norton Road East - Right, Left	0.35	10.10	0.5	0.16	7.34	0.2
Barton Road South - Ahead, Right	0.11	5.70	0.1	0.11	5.42	0.2
2021 Base						
Norton Road East - Right, Left	0.36	10.26	0.6	0.17	7.40	0.2
Barton Road South - Ahead, Right	0.11	5.73	0.2	0.12	5.44	0.2
2021 with Development (689 dwellings)						
Norton Road East - Right, Left	0.48	13.60	0.9	0.22	8.16	0.3
Barton Road South - Ahead, Right	0.11	5.77	0.2	0.12	5.54	0.2
2021 with Development (827 dwellings)						
Norton Road East - Right, Left	0.50	14.58	1.0	0.22	8.42	0.3
Barton Road South - Ahead, Right	0.12	5.83	0.2	0.12	5.39	0.2

7.16 The results set out in **Table 9** above indicate that at the C691 Barton Road / C559 Norton Road 'T' Junction, the junction is predicted to operate within desirable capacity limits in all three 2021 scenarios in both the AM and PM peak hours. The maximum RFC in the 2021 with Development (827 dwellings) scenario is predicted to be 0.50 on Norton Road East in the AM peak hour and 0.22 on Norton Road East in the PM peak hour.

7.17 Mitigation at this junction would not need to be considered if all five proposed developments in Thurston received planning permission and were developed, unless intensified use exacerbated an existing safety issue.

7.18 **Table 10** below provides a summary of the results for the junction capacity assessments for each of the 2021 scenarios within a matrix. The matrix indicates which junctions are under, at and over capacity within each scenario. The following thresholds have been used:

- **Red:** Over capacity (above 1 RFC)
- **Orange:** Operating close to capacity (above 0.85 RFC)
- **Green:** Operating under capacity (below 0.85 RFC)

Table 10: Summary of Junction Capacity Assessments 2021 scenarios

Junction	AM Peak Max RFC				PM Peak Max RFC			
	2017 Base	2021 Base	2021 with Dev (689)	2021 with Dev (827)	2017 Base	2021 Base	2021 with Dev (689)	2021 with Dev (827)
C691 Barton Road / C562 Station Hill Three Arm Mini Roundabout	0.46	0.47	0.65	0.69	0.58	0.60	0.72	0.78
C560 Bayton Road / C692 Thurston Road / U4920 Thedwastre Road Crossroads (Pokeridge Corner)	0.52	0.54	0.84	0.88	0.45	0.46	0.58	0.58
C693 Thurston Road / C692 Thurston Road Crossroads (Fishwick Corner)	0.88	0.91	1.16	1.21	0.45	0.46	0.57	0.60
C559 Norton Road / C562 Ixworth Road / C562 Station Hill staggered Crossroads	0.32	0.33	0.55	0.55	0.21	0.21	0.35	0.35
C691 Barton Road / C559 Norton Road 'T' Junction	0.36	0.36	0.48	0.50	0.16	0.17	0.22	0.22

7.19 The results set out in **Table 10** above indicate that one of the five junctions assessed in terms of capacity for both the 2021 with Development (689 dwellings) and the 2021 with Development (827 dwellings) scenario, is predicted to operate over maximum theoretical capacity in the AM peak hour. The impacts at the C693 Thurston Road / C692 Thurston Road Crossroads (Fishwick Corner) are predicted to be severe in the morning peak hour, but within capacity in the PM peak hour. Mitigation for this junction should be considered in order to accommodate traffic levels safely.

7.20 The other four junctions assessed are predicted to operate below maximum theoretical limits and could therefore accommodate the development trips associated with the proposed four (689 dwellings) or five (827 dwellings) developments in Thurston without capacity related mitigation being required.

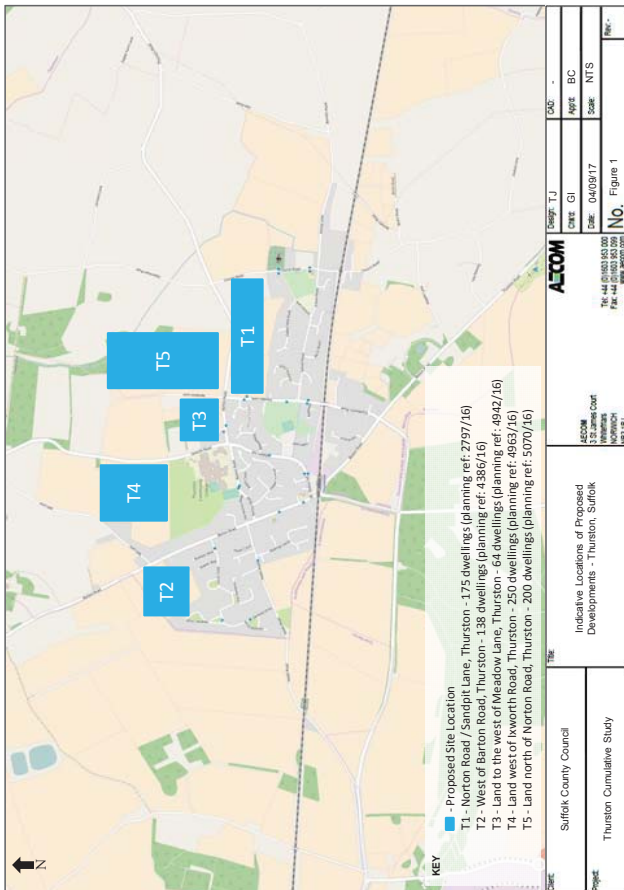
8. Link Flow Forecasts

8.1 The link flow forecasts for a number of links within Thurston are set out in **Table 11** below. A link location plan is included in **Appendix E**.

Table 11: Predicted One Way Link Flows For All Four Scenarios

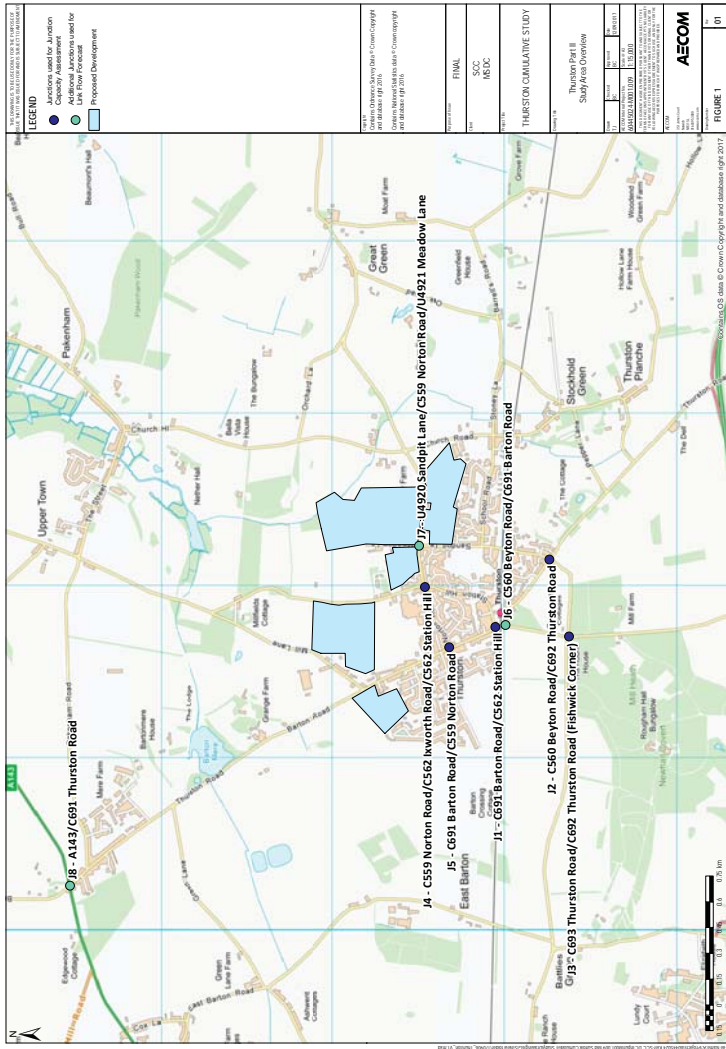
Link Ref.	Road No.	Road Name	Road Location	2017 Base		2021 Base		2021 with Dev (689)		2021 with Dev (827)	
				AM	PM	AM	PM	AM	PM	AM	PM
L1	C091	Thurston Road / Station Road	Norton Road to A143	165	149	977	102	262	162	319	260
L2	C091	Station Road	Norton Road to Station Hill	81	249	276	255	281	107	347	319
L3	C062	Ixworth Road	Norton Road to Hill Lane	88	173	229	178	233	178	233	193
L4	C099	Norton Road	Station Road to Station Hill	88	276	172	263	175	265	179	332
L5	C099	Norton Road	Station Hill to Banting Lane	88	104	112	98	117	103	106	103
L6	C062	Station Hill	Norton Road to Station Hill	88	106	121	92	123	177	169	177
L7	U4920	Thedwastre Road / Sanger Lane	Station Hill to Banting Lane	88	166	140	90	143	102	116	110
L8	C060	Bayton Road	Norton Road to Barton Road	88	169	248	204	252	205	343	235
L9	C060	Thurston Road	Under Railway Bridge	88	201	130	285	102	405	197	403
L10	C060	Thurston Road	Bayton Road to C692 Thurston Road	88	89	159	91	153	134	107	107
L11	C062	Thurston Road	Thedwastre Road to C692 Thurston Road	88	208	175	213	175	206	242	246
L12	-	Moat Road	Fishwick Corner to Banting Lane	88	281	179	288	183	333	201	388
				88	505	304	817	310	653	360	702
				88	319	438	327	446	368	537	373
				88	100	320	325	162	390	165	327
				88	360	169	359	172	449	206	474
				88	112	168	115	190	118	168	118
				88	374	238	303	242	414	266	414
				88	171	462	175	470	197	500	189
				88	440	187	451	170	489	166	497

Appendix A: Site Location Plans

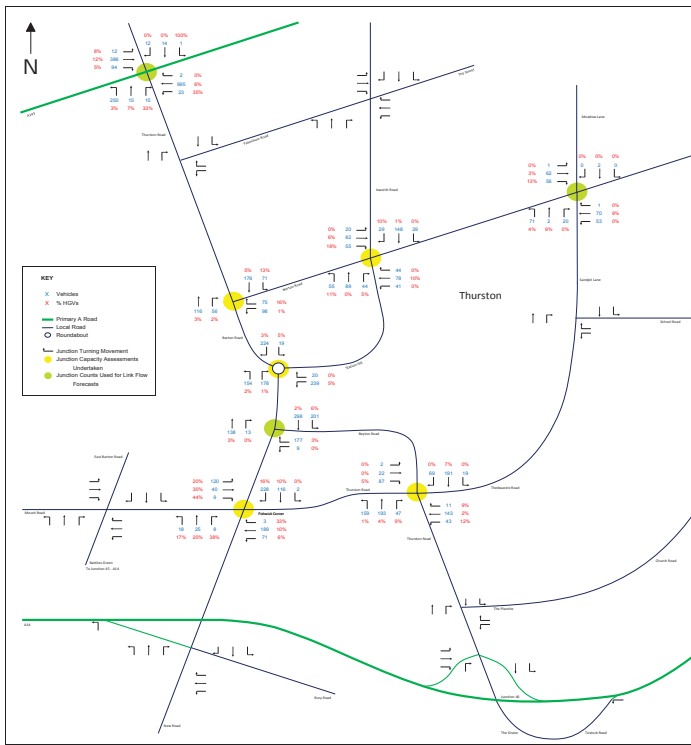


Appendix B: Junction Location Plan

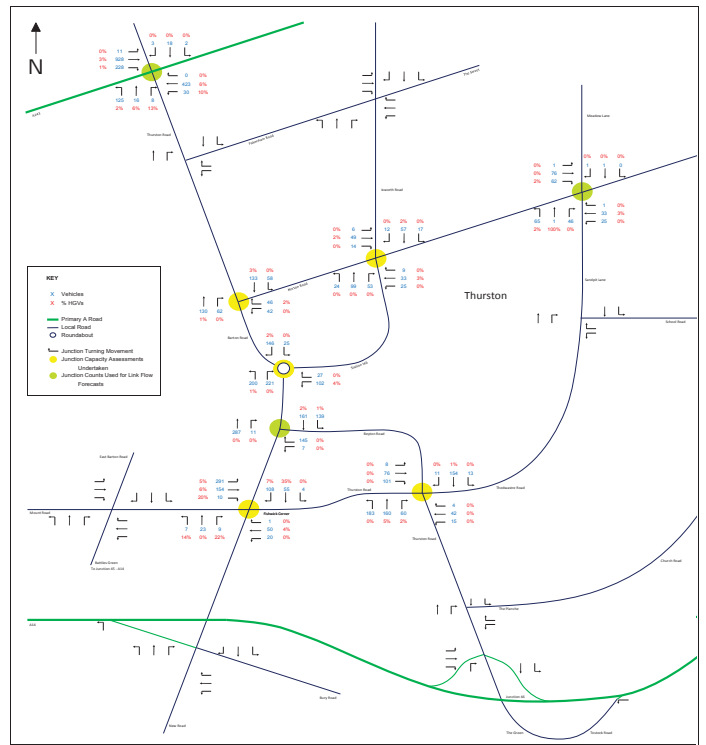
Appendix C: Traffic Flow Diagrams



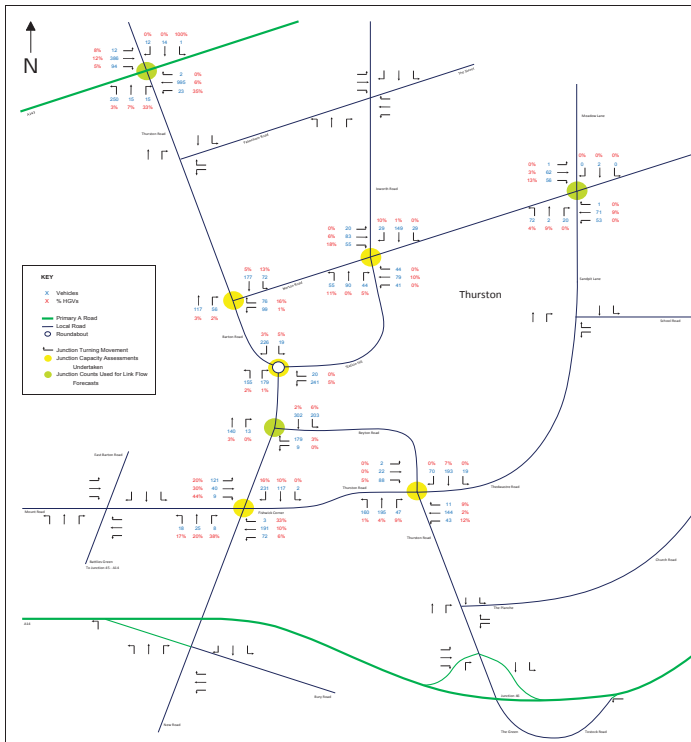
Page: 16 of 18
 Doc: F819 - Revised: April 2009
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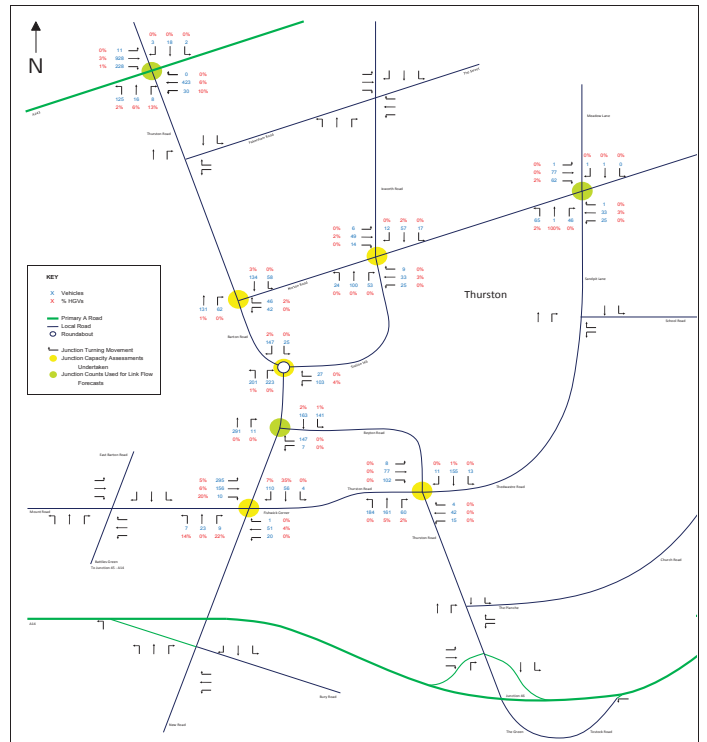
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Client	Title	Drawn	Checked	Approved	Figure
Suffolk County Council	Base Observed Traffic - AM	TJ	GI	BC	1



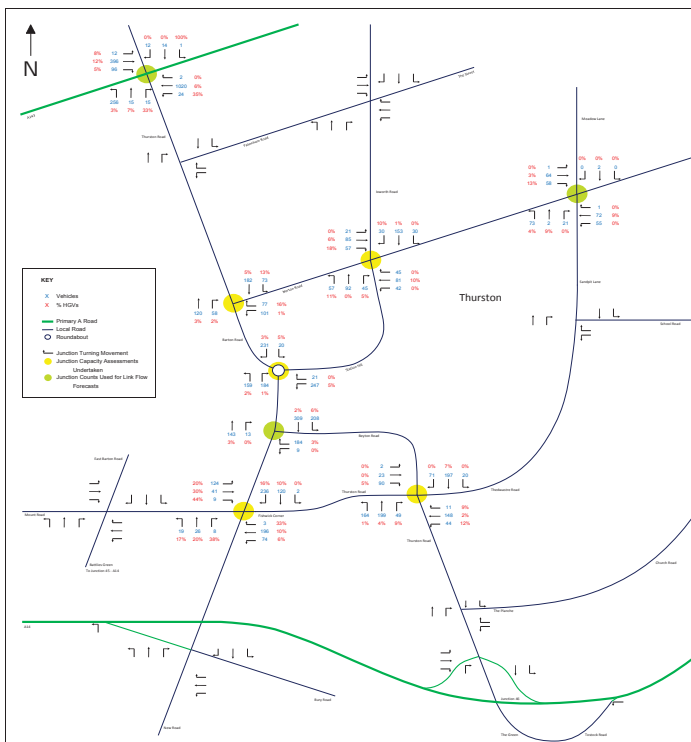
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Client	Title	Drawn	Checked	Approved	Figure
Suffolk County Council	Base Observed Traffic - PM	TJ	GI	BC	2



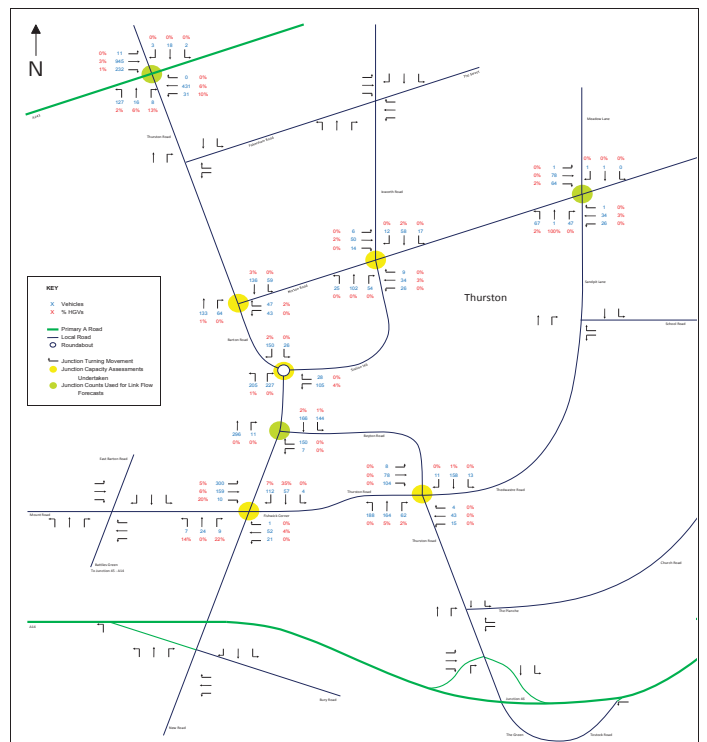
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Year	2017	2021																	
AD	100	100																	
AD	100	100																	
AD	100	100																	
Client	Title	Drawn	Checked	Approved	Date	Figure													
Suffolk County Council	2017 Traffic - AM	TJ	GI	BC	12/09/2017	3													



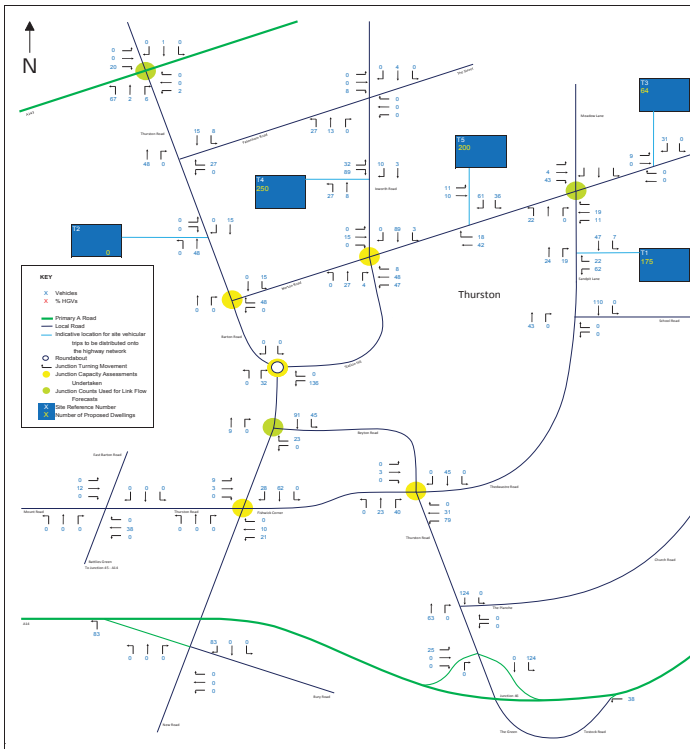
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Year	2017	2021																	
AD	100	100																	
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AD	100	100																	
Client	Title	Drawn	Checked	Approved	Date	Figure													
Suffolk County Council	2017 Traffic - PM	TJ	GI	BC	12/09/2017	4													



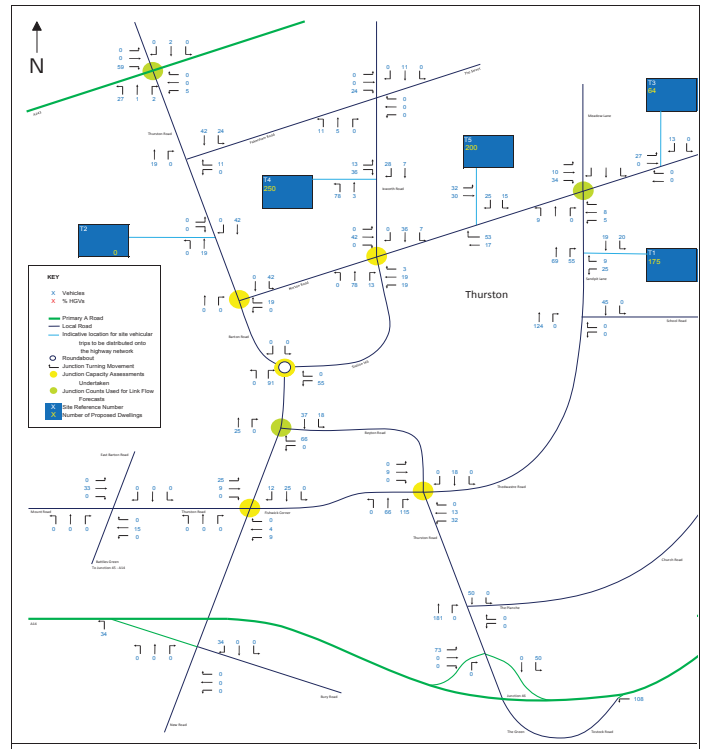
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Thurston Cumulative Transport Study				<table border="1"> <tr><th>Year</th><th>2017</th><th>2021</th></tr> <tr><td>AD</td><td>100</td><td>100</td></tr> <tr><td>AD</td><td>100</td><td>100</td></tr> <tr><td>AD</td><td>100</td><td>100</td></tr> </table>	Year	2017	2021	AD	100	100	AD	100	100	AD	100	100			
Year	2017	2021																	
AD	100	100																	
AD	100	100																	
AD	100	100																	
Client	Title	Drawn	Checked	Approved	Date	Figure													
Suffolk County Council	2021 Traffic - AM	TJ	GI	BC	12/09/2017	5													



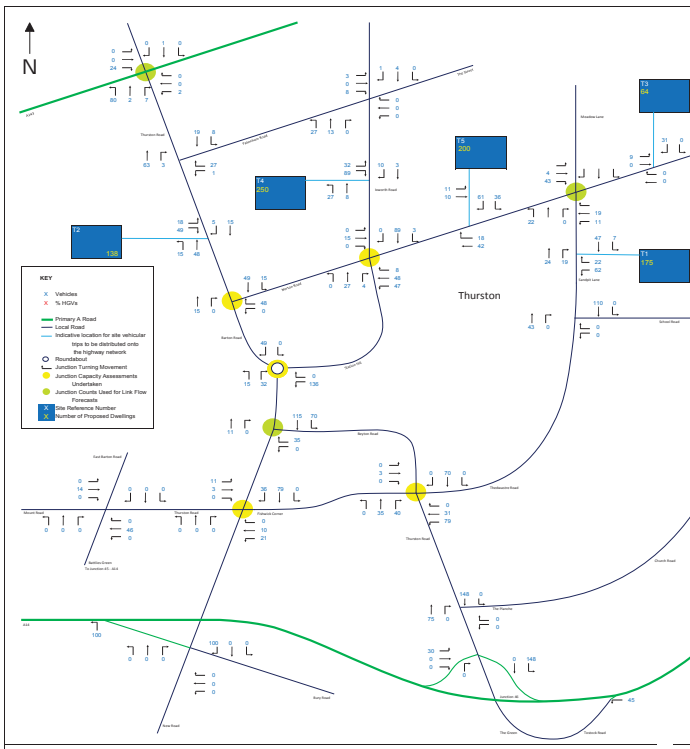
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Year	2017	2021																	
AD	100	100																	
AD	100	100																	
AD	100	100																	
Client	Title	Drawn	Checked	Approved	Date	Figure													
Suffolk County Council	2021 Traffic - PM	TJ	GI	BC	12/09/2017	6													



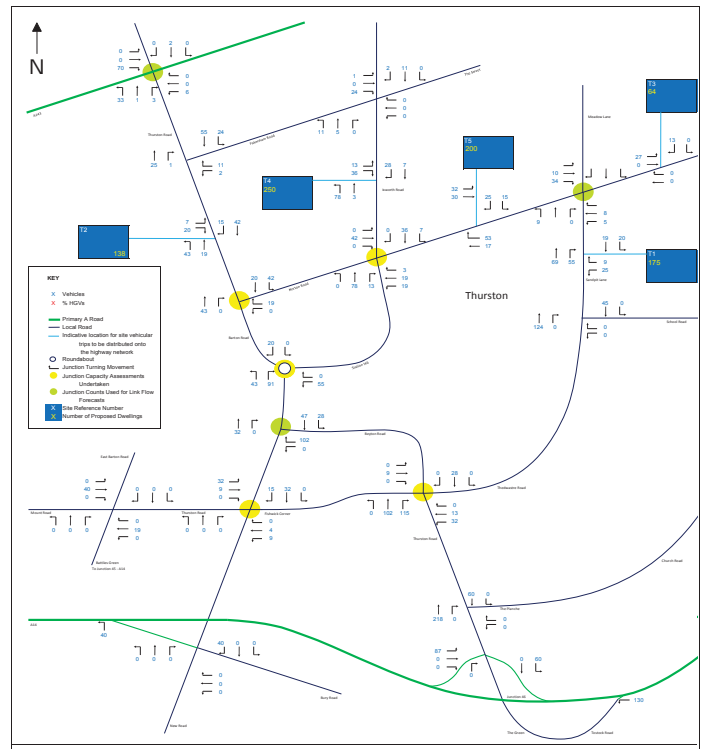
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Thurston Cumulative Transport Study						
Client	Title	Drawn	Checked	Approved	Date	Figure
Suffolk County Council	Development Trip Generation (689 Dwellings) - AM	TJ	GI	BC	12/09/2017	7



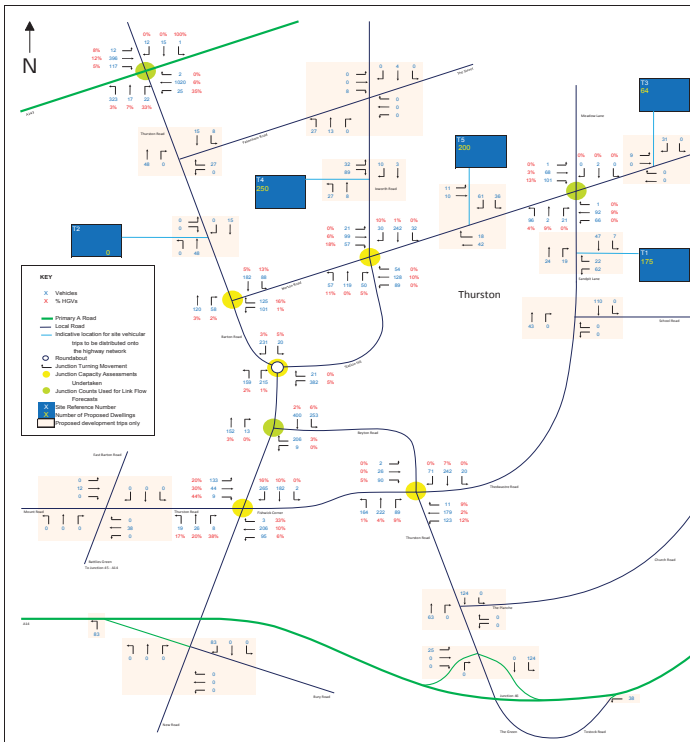
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Client	Title	Drawn	Checked	Approved	Date	Figure
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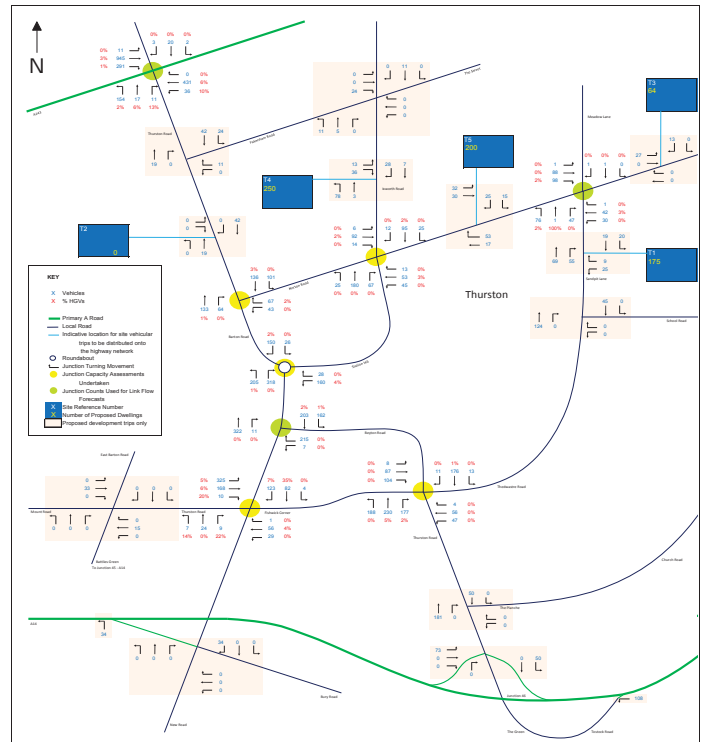
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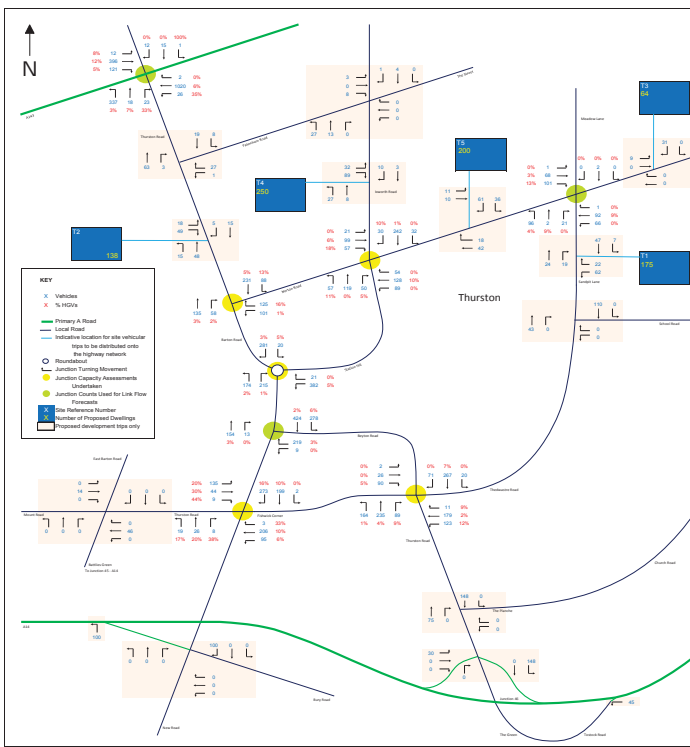
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Thurston Cumulative Transport Study						
Client	Title	Drawn	Checked	Approved	Date	Figure
Suffolk County Council	Development Trip Generation (827 Dwellings) - PM	TJ	GI	BC	12/09/2017	10



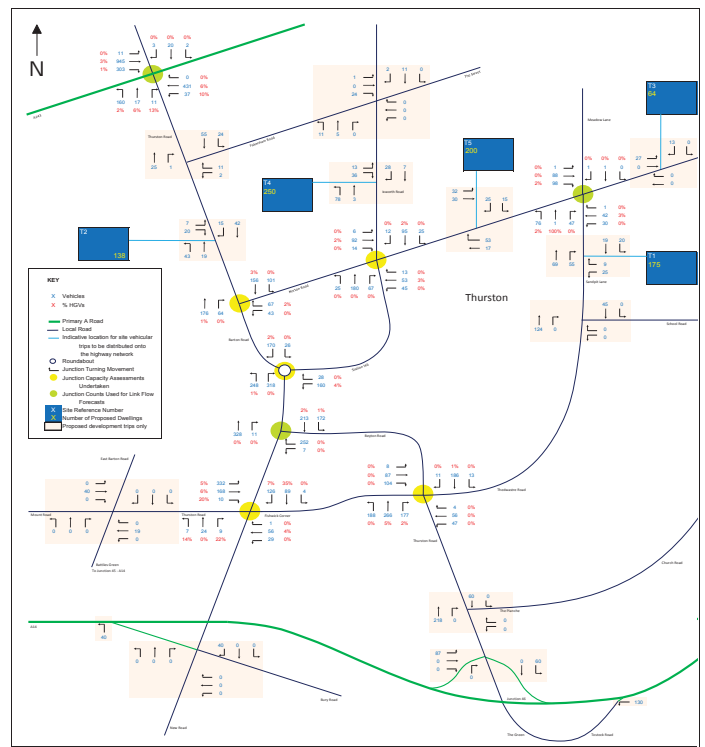
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Client	Title	Drawn	Checked	Approved	Date	Figure
Suffolk County Council	2021 with Development (689 Dwellings) - AM	TJ	GI	BC	12/09/2017	11



Project		AECOM				
Thurston Cumulative Transport Study						
Client	Title	Drawn	Checked	Approved	Date	Figure
Suffolk County Council	2021 with Development (689 Dwellings) - PM	TJ	GI	BC	12/09/2017	12



Project		AECOM				
Thurston Cumulative Transport Study						
Client	Title	Drawn	Checked	Approved	Date	Figure
Suffolk County Council	2021 with Development (827 Dwellings) - AM	TJ	GI	BC	12/09/2017	13



Project		AECOM				
Thurston Cumulative Transport Study						
Client	Title	Drawn	Checked	Approved	Date	Figure
Suffolk County Council	2021 with Development (827 Dwellings) - PM	TJ	GI	BC	12/09/2017	14

Appendix D: Junction Assessment Output Reports

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017	
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	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: 170818_J1_V1.j9
 Path: A:\Projects\60445024 Kier-SCC DC Input\M001.009 Mid Suffolk Cumulative Study\Calculations\Modelling\J1 Barton_Station_New Rb\Thurston Part 2
 Report generation date: 05/09/2017 13:46:55

- »Existing Layout - 2017, AM
- »Existing Layout - 2017, PM
- »Existing Layout - 2021 Base, AM
- »Existing Layout - 2021 Base, PM
- »Existing Layout - 2021 With Development (689 dwellings), AM
- »Existing Layout - 2021 With Development (689 dwellings), PM
- »Existing Layout - 2021 With Development (827 dwellings), AM
- »Existing Layout - 2021 With Development (827 dwellings), PM

Summary of junction performance

	AM					PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
Existing Layout - 2017											
1 - Barton Road Northwest	0.6	8.59	0.39	A		0.4	7.47	0.28	A		49 %
2 - Station Hill East	0.7	9.09	0.42	A	8.67	0.2	5.96	0.19	A	9.13	[3 - New Road South]
3 - New Road South	0.9	8.40	0.46	A		1.4	10.82	0.58	B		
Existing Layout - 2021 Base											
1 - Barton Road Northwest	0.7	8.79	0.40	A		0.4	7.58	0.29	A		46 %
2 - Station Hill East	0.8	9.34	0.43	A	8.90	0.2	6.01	0.20	A	9.35	[3 - New Road South]
3 - New Road South	0.9	8.61	0.47	A		1.5	11.13	0.60	B		
Existing Layout - 2021 With Development (689 dwellings)											
1 - Barton Road Northwest	0.7	9.24	0.42	A		0.5	8.64	0.32	A		22 %
2 - Station Hill East	1.8	15.24	0.65	C	11.68	0.4	6.71	0.28	A	12.55	[3 - New Road South]
3 - New Road South	1.1	9.37	0.52	A		2.5	16.04	0.72	C		
Existing Layout - 2021 With Development (827 dwellings)											
1 - Barton Road Northwest	1.0	10.76	0.50	B		0.5	9.13	0.35	A		13 %
2 - Station Hill East	2.1	17.68	0.69	C	13.01	0.4	6.88	0.28	A	15.25	[3 - New Road South]
3 - New Road South	1.2	9.80	0.54	A		3.4	20.25	0.78	C		

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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

Title	(untitled)
Location	
Site number	
Date	26/04/2017
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	EU/Theodore.Jones
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	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9		✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15
D2	2017	PM	ONE HOUR	16:45	18:15	15
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15
D5	2021 With Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15
D6	2021 With Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15
D7	2021 With Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15
D8	2021 With Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - 2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	8.67	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		69	2 - Station Hill East

Arms

Arms

Arm	Name	Description
1	Barton Road Northwest	
2	Station Hill East	
3	New Road South	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Barton Road Northwest	2.80	2.80	3.29	1.2	13.68	12.12	0.0	
2 - Station Hill East	2.80	2.80	4.03	3.5	12.93	11.05	0.0	
3 - New Road South	2.60	2.60	3.67	1.9	14.03	12.53	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Barton Road Northwest	0.596	829
2 - Station Hill East	0.608	871
3 - New Road South	0.597	821

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 segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

4

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	245	100.000
2 - Station Hill East		✓	261	100.000
3 - New Road South		✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	19	226	
2 - Station Hill East	20	0	241	
3 - New Road South	155	179	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	5	3	
2 - Station Hill East	0	0	5	
3 - New Road South	2	1	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.39	8.59	0.6	A
2 - Station Hill East	0.42	9.09	0.7	A
3 - New Road South	0.46	8.40	0.9	A

5

Existing Layout - 2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	9.13	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		49	3 - New Road South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	172	100.000
2 - Station Hill East		✓	130	100.000
3 - New Road South		✓	424	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	25	147	
2 - Station Hill East	27	0	103	
3 - New Road South	201	223	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	0	2	
2 - Station Hill East	0	0	4	
3 - New Road South	1	0	0	

6

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.28	7.47	0.4	A
2 - Station Hill East	0.19	5.96	0.2	A
3 - New Road South	0.58	10.82	1.4	B

7

Existing Layout - 2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	8.90	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		64	2 - Station Hill East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	251	100.000
2 - Station Hill East		✓	268	100.000
3 - New Road South		✓	343	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	20	231	
2 - Station Hill East	21	0	247	
3 - New Road South	159	184	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	5	3	
2 - Station Hill East	0	0	5	
3 - New Road South	2	1	0	

8

9

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.40	8.79	0.7	A
2 - Station Hill East	0.43	9.34	0.8	A
3 - New Road South	0.47	8.61	0.9	A

Existing Layout - 2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	9.35	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		46	3 - New Road South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	176	100.000
2 - Station Hill East		✓	133	100.000
3 - New Road South		✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	26	150	
2 - Station Hill East	28	0	105	
3 - New Road South	205	227	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	0	2	
2 - Station Hill East	0	0	4	
3 - New Road South	1	0	0	

10

11

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.29	7.58	0.4	A
2 - Station Hill East	0.20	6.01	0.2	A
3 - New Road South	0.60	11.13	1.5	B

Existing Layout - 2021 With Development (689 dwellings), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	11.68	B

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		23	2 - Station Hill East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2021 With Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	251	100.000
2 - Station Hill East		✓	403	100.000
3 - New Road South		✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	20	231	
2 - Station Hill East	21	0	382	
3 - New Road South	159	215	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	5	3	
2 - Station Hill East	0	0	5	
3 - New Road South	2	1	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.42	9.24	0.7	A
2 - Station Hill East	0.65	15.24	1.8	C
3 - New Road South	0.52	9.37	1.1	A

Existing Layout - 2021 With Development (689 dwellings), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	12.55	B

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		22	3 - New Road South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2021 With Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	176	100.000
2 - Station Hill East		✓	188	100.000
3 - New Road South		✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	26	150	
2 - Station Hill East	28	0	160	
3 - New Road South	205	318	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South	
1 - Barton Road Northwest	0	0	2	
2 - Station Hill East	0	0	4	
3 - New Road South	1	0	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.32	8.64	0.5	A
2 - Station Hill East	0.28	6.71	0.4	A
3 - New Road South	0.72	16.04	2.5	C

Existing Layout - 2021 With Development (827 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	13.01	B

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		17	2 - Station Hill East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2021 With Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	301	100.000
2 - Station Hill East		✓	403	100.000
3 - New Road South		✓	389	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South
1 - Barton Road Northwest	0	20	281
2 - Station Hill East	21	0	382
3 - New Road South	174	215	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South
1 - Barton Road Northwest	0	5	3
2 - Station Hill East	0	0	5
3 - New Road South	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.50	10.76	1.0	B
2 - Station Hill East	0.69	17.68	2.1	C
3 - New Road South	0.54	9.80	1.2	A

Existing Layout - 2021 With Development (827 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Junction 2	Mini-roundabout	15.25	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		13	3 - New Road South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2021 With Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Barton Road Northwest		✓	196	100.000
2 - Station Hill East		✓	188	100.000
3 - New Road South		✓	566	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South
1 - Barton Road Northwest	0	26	170
2 - Station Hill East	28	0	160
3 - New Road South	248	318	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	1 - Barton Road Northwest	2 - Station Hill East	3 - New Road South
1 - Barton Road Northwest	0	0	2
2 - Station Hill East	0	0	4
3 - New Road South	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Barton Road Northwest	0.35	9.13	0.5	A
2 - Station Hill East	0.28	6.88	0.4	A
3 - New Road South	0.78	20.25	3.4	C

Junctions 9	
PICADY 9 - Priority Intersection Module	
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Filename: 170824_J2_V1.j9
 Path: A:\Projects\60445024 Kier-SCC DC Input\M001.009 Mid Suffolk Cumulative Study\Calculations\Modelling\J2 Beyton_Thurston_Thedwastre Crds\Thurston Part 2
 Report generation date: 05/09/2017 13:48:52

- »Existing Layout - 2017, AM
- »Existing Layout - 2017, PM
- »Existing Layout - 2021 Base, AM
- »Existing Layout - 2021 Base, PM
- »Existing Layout - 2021 With Development (689 dwellings), AM
- »Existing Layout - 2021 With Development (689 dwellings), PM
- »Existing Layout - 2021 With Development (827 dwellings), AM
- »Existing Layout - 2021 With Development (827 dwellings), PM

Summary of junction performance

	AM					Junction Delay (s)	Network Residual Capacity	PM					Junction Delay (s)	Network Residual Capacity
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)			Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)		
Existing Layout - 2017														
Stream B-ACD	1.1	17.92	0.52	C	6.24	27 %	0.2	8.97	0.14	A	4.41	46 %		
Stream A-BCD	0.3	5.92	0.16	A			0.0	5.32	0.02	A				
Stream D-ABC	0.5	14.88	0.34	B			0.8	14.02	0.45	B				
Stream C-ABD	0.2	5.00	0.12	A			0.2	4.73	0.13	A				
Existing Layout - 2021 Base														
Stream B-ACD	1.1	18.77	0.54	C	6.49	24 %	0.2	9.07	0.15	A	4.49	43 %		
Stream A-BCD	0.3	5.94	0.16	A			0.0	5.33	0.02	A				
Stream D-ABC	0.5	15.39	0.35	C			0.8	14.37	0.46	B				
Stream C-ABD	0.3	5.00	0.12	A			0.3	4.73	0.14	A				
Existing Layout - 2021 With Development (689 dwellings)														
Stream B-ACD	4.4	49.21	0.84	E	15.83	-6 %	0.4	10.87	0.26	B	6.72	17 %		
Stream A-BCD	0.3	5.95	0.18	A			0.0	5.76	0.03	A				
Stream D-ABC	0.7	21.02	0.43	C			1.2	20.73	0.56	C				
Stream C-ABD	0.5	5.59	0.24	A			1.1	6.59	0.41	A				
Existing Layout - 2021 With Development (827 dwellings)														
Stream B-ACD	5.0	55.70	0.86	F	17.11	-8 %	0.4	11.18	0.27	B	6.88	13 %		
Stream A-BCD	0.4	5.86	0.18	A			0.0	5.78	0.03	A				
Stream D-ABC	0.8	22.22	0.45	C			1.3	22.44	0.58	C				
Stream C-ABD	0.5	5.61	0.24	A			1.2	6.61	0.43	A				

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	26/04/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EUITheodore.Jones
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	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15
D2	2017	PM	ONE HOUR	16:45	18:15	15
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15
D5	2021 With Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15
D6	2021 With Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15
D7	2021 With Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15
D8	2021 With Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - 2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network
Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	6.24	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	27	Stream B-ACD

Arms
Arms

Arm	Name	Description	Arm type
A	Beyton Road Northwest		Major
B	Thedwastre Road Northeast		Minor
C	Thurston Road Southeast		Major
D	Unnamed Road Southwest		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Beyton Road Northwest	6.12			213.7	✓	0.00
C - Thurston Road Southeast	6.12			250.0	✓	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 - Thedwastre Road Northeast	One lane	4.46	18	17
D - Unnamed Road Southwest	One lane	5.00	17	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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	698	-	-	-	-	-	-	0.269	0.384	0.269	-	-	-
1	B-A	564	0.102	0.258	0.258	-	-	-	0.162	0.369	-	0.258	0.258	0.129
1	B-C	727	0.111	0.280	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	564	0.102	0.258	0.258	-	-	-	0.162	0.369	0.162	-	-	-
1	B-D, offside lane	564	0.102	0.258	0.258	-	-	-	0.162	0.369	0.162	-	-	-
1	C-B	719	0.277	0.277	0.396	-	-	-	-	-	-	-	-	-
1	D-A	764	-	-	-	-	-	-	0.295	-	0.117	-	-	-
1	D-B, nearside lane	592	0.171	0.171	0.387	-	-	-	0.271	0.271	0.107	-	-	-
1	D-B, offside lane	592	0.171	0.171	0.387	-	-	-	0.271	0.271	0.107	-	-	-
1	D-C	592	-	0.171	0.387	0.136	0.271	0.271	0.271	0.107	-	-	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	282	100.000
B - Thedwastre Road Northeast		✓	198	100.000
C - Thurston Road Southeast		✓	402	100.000
D - Unnamed Road Southwest		✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest	0	19	193	70
B - Thedwastre Road Northeast	11	0	43	144
C - Thurston Road Southeast	195	47	0	160
D - Unnamed Road Southwest	2	22	88	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest		0	0	7	0
B - Thedwastre Road Northeast		9	0	12	2
C - Thurston Road Southeast		4	9	0	1
D - Unnamed Road Southwest		0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.52	17.92	1.1	C
A-BCD	0.16	5.92	0.3	A
A-B				
A-C				
D-ABC	0.34	14.88	0.5	B
C-ABD	0.12	5.00	0.2	A
C-D				
C-A				

Existing Layout - 2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	4.41	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	46	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	179	100.000
B - Thedwastre Road Northeast		✓	61	100.000
C - Thurston Road Southeast		✓	405	100.000
D - Unnamed Road Southwest		✓	187	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest	0	13	155	11
B - Thedwastre Road Northeast	4	0	15	42
C - Thurston Road Southeast	161	60	0	184
D - Unnamed Road Southwest	8	77	102	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest		0	0	1	0
B - Thedwastre Road Northeast		0	0	0	0
C - Thurston Road Southeast		5	2	0	0
D - Unnamed Road Southwest		0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.14	8.97	0.2	A
A-BCD	0.02	5.32	0.0	A
A-B				
A-C				
D-ABC	0.45	14.02	0.8	B
C-ABD	0.13	4.73	0.2	A
C-D				
C-A				

Existing Layout - 2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	6.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	288	100.000
B - Thedwastre Road Northeast		✓	203	100.000
C - Thurston Road Southeast		✓	412	100.000
D - Unnamed Road Southwest		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	20	197	71
	B - Thedwastre Road Northeast	11	0	44	148
	C - Thurston Road Southeast	199	49	0	164
	D - Unnamed Road Southwest	2	23	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	7	0
	B - Thedwastre Road Northeast	9	0	12	2
	C - Thurston Road Southeast	4	9	0	1
	D - Unnamed Road Southwest	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.54	18.77	1.1	C
A-BCD	0.16	5.94	0.3	A
A-B				
A-C				
D-ABC	0.35	15.39	0.5	C
C-ABD	0.12	5.00	0.3	A
C-D				
C-A				

Existing Layout - 2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	4.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	182	100.000
B - Thedwastre Road Northeast		✓	62	100.000
C - Thurston Road Southeast		✓	414	100.000
D - Unnamed Road Southwest		✓	190	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	13	158	11
	B - Thedwastre Road Northeast	4	0	15	43
	C - Thurston Road Southeast	164	62	0	188
	D - Unnamed Road Southwest	8	78	104	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road Northeast	0	0	0	0
	C - Thurston Road Southeast	5	2	0	0
	D - Unnamed Road Southwest	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.15	9.07	0.2	A
A-BCD	0.02	5.33	0.0	A
A-B				
A-C				
D-ABC	0.46	14.37	0.8	B
C-ABD	0.14	4.73	0.3	A
C-D				
C-A				

Existing Layout - 2021 With Development (689 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	15.83	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2021 With Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	333	100.000
B - Thedwastre Road Northeast		✓	313	100.000
C - Thurston Road Southeast		✓	475	100.000
D - Unnamed Road Southwest		✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest		0	20	242	71
B - Thedwastre Road Northeast		11	0	123	179
C - Thurston Road Southeast		222	89	0	164
D - Unnamed Road Southwest		2	26	90	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest		0	0	7	0
B - Thedwastre Road Northeast		9	0	12	2
C - Thurston Road Southeast		4	9	0	1
D - Unnamed Road Southwest		0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.84	49.21	4.4	E
A-BCD	0.18	5.95	0.3	A
A-B				
A-C				
D-ABC	0.43	21.02	0.7	C
C-ABD	0.24	5.59	0.5	A
C-D				
C-A				

Existing Layout - 2021 With Development (689 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	6.72	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2021 With Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	200	100.000
B - Thedwastre Road Northeast		✓	107	100.000
C - Thurston Road Southeast		✓	595	100.000
D - Unnamed Road Southwest		✓	199	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest		0	13	176	11
B - Thedwastre Road Northeast		4	0	47	56
C - Thurston Road Southeast		230	177	0	188
D - Unnamed Road Southwest		8	87	104	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
A - Beyton Road Northwest		0	0	1	0
B - Thedwastre Road Northeast		0	0	0	0
C - Thurston Road Southeast		5	2	0	0
D - Unnamed Road Southwest		0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.26	10.87	0.4	B
A-BCD	0.03	5.76	0.0	A
A-B				
A-C				
D-ABC	0.56	20.73	1.2	C
C-ABD	0.41	6.59	1.1	A
C-D				
C-A				

Existing Layout - 2021 With Development (827 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	17.11	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2021 With Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	358	100.000
B - Thedwastre Road Northeast		✓	313	100.000
C - Thurston Road Southeast		✓	488	100.000
D - Unnamed Road Southwest		✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	20	267	71
	B - Thedwastre Road Northeast	11	0	123	179
	C - Thurston Road Southeast	235	89	0	164
	D - Unnamed Road Southwest	2	26	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	7	0
	B - Thedwastre Road Northeast	9	0	12	2
	C - Thurston Road Southeast	4	9	0	1
	D - Unnamed Road Southwest	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.86	55.70	5.0	F
A-BCD	0.18	5.86	0.4	A
A-B				
A-C				
D-ABC	0.45	22.22	0.8	C
C-ABD	0.24	5.61	0.5	A
C-D				
C-A				

Existing Layout - 2021 With Development (827 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Junction 3	Crossroads	Two-way	6.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	13	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2021 With Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Beyton Road Northwest		✓	210	100.000
B - Thedwastre Road Northeast		✓	107	100.000
C - Thurston Road Southeast		✓	631	100.000
D - Unnamed Road Southwest		✓	199	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	13	186	11
	B - Thedwastre Road Northeast	4	0	47	56
	C - Thurston Road Southeast	266	177	0	188
	D - Unnamed Road Southwest	8	87	104	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road Northeast	C - Thurston Road Southeast	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road Northeast	0	0	0	0
	C - Thurston Road Southeast	5	2	0	0
	D - Unnamed Road Southwest	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.27	11.18	0.4	B
A-BCD	0.03	5.78	0.0	A
A-B				
A-C				
D-ABC	0.58	22.44	1.3	C
C-ABD	0.43	6.61	1.2	A
C-D				
C-A				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: 170818_J3_V1.j9
 Path: A:\Projects\60445024 Kier-SCC DC Input\M001.009 Mid Suffolk Cumulative Study\Calculations\Modelling\J3 Fishwick_Corner Crd\Thurston Part 2
 Report generation date: 05/09/2017 13:51:11

- »Existing Layout - 2017, AM
- »Existing Layout - 2017, PM
- »Existing Layout - 2021, AM
- »Existing Layout - 2021, PM
- »Existing Layout - 2021 with Development (689 dwellings), AM
- »Existing Layout - 2021 with Development (689 dwellings), PM
- »Existing Layout - 2021 with Development (827 dwellings), AM
- »Existing Layout - 2021 with Development (827 dwellings), PM

Summary of junction performance

	AM					PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
Existing Layout - 2017												
Stream B-ACD	5.9	59.43	0.88	F	25.43	-10 %	0.8	15.54	0.45	C	4.39	47 %
Stream A-BCD	0.0	6.77	0.03	A			0.0	4.52	0.03	A		
Stream D-ABC	0.2	9.68	0.13	A			0.1	8.13	0.09	A		
Stream C-ABD	0.0	6.03	0.01	A			0.0	6.35	0.00	A		
Existing Layout - 2021												
Stream B-ACD	7.0	68.88	0.91	F	29.30	-12 %	0.8	15.89	0.46	C	4.48	44 %
Stream A-BCD	0.0	6.76	0.03	A			0.0	4.50	0.03	A		
Stream D-ABC	0.2	9.76	0.14	A			0.1	8.18	0.09	A		
Stream C-ABD	0.0	5.99	0.01	A			0.0	6.36	0.00	A		
Existing Layout - 2021 with Development (689 dwellings)												
Stream B-ACD	40.1	296.83	1.15	F	133.98	-28 %	1.3	20.82	0.57	C	6.11	23 %
Stream A-BCD	0.0	6.74	0.03	A			0.0	4.42	0.03	A		
Stream D-ABC	0.2	10.22	0.14	B			0.1	8.37	0.09	A		
Stream C-ABD	0.0	5.85	0.01	A			0.0	6.36	0.00	A		
Existing Layout - 2021 with Development (827 dwellings)												
Stream B-ACD	54.7	431.11	1.21	F	199.56	-31 %	1.5	22.28	0.60	C	6.72	18 %
Stream A-BCD	0.0	6.73	0.03	A			0.0	4.40	0.03	A		
Stream D-ABC	0.2	10.34	0.14	B			0.1	8.41	0.09	A		
Stream C-ABD	0.0	5.85	0.01	A			0.0	6.38	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. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	18/08/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EUITheodore.Jones
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	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentages	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15
D2	2017	PM	ONE HOUR	16:45	18:15	15
D3	2021	AM	ONE HOUR	07:45	09:15	15
D4	2021	PM	ONE HOUR	16:45	18:15	15
D5	2021 with Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15
D6	2021 with Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15
D7	2021 with Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15
D8	2021 with Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - 2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	25.43	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	Stream B-ACD

Arms

Arms

Arm	Name	Description	Arm type
A	Mount Road West		Major
B	Barton Road North		Minor
C	Mount Road East		Major
D	Rougham Road South		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Mount Road West	6.00			250.0	✓	0.00
C - Mount Road East	6.00			130.0	✓	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 - Barton Road North	One lane	4.78	20	37
D - Rougham Road South	One lane	5.00	31	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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	719	-	-	-	-	-	-	0.278	0.398	0.278	-	-	-
1	B-A	592	0.108	0.272	0.272	-	-	-	0.171	0.389	-	0.272	0.272	0.136
1	B-C	763	0.117	0.295	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	592	0.108	0.272	0.272	-	-	-	0.171	0.389	0.171	-	-	-
1	B-D, offside lane	592	0.108	0.272	0.272	-	-	-	0.171	0.389	0.171	-	-	-
1	C-B	649	0.252	0.252	0.359	-	-	-	-	-	-	-	-	-
1	D-A	765	-	-	-	-	-	-	0.297	-	0.117	-	-	-
1	D-B, nearside lane	598	0.173	0.173	0.393	-	-	-	0.275	0.275	0.109	-	-	-
1	D-B, offside lane	598	0.173	0.173	0.393	-	-	-	0.275	0.275	0.109	-	-	-
1	D-C	598	-	0.173	0.393	0.138	0.275	0.275	0.275	0.109	-	-	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	170	100.000
B - Barton Road North		✓	350	100.000
C - Mount Road East		✓	266	100.000
D - Rougham Road South		✓	51	100.000

Origin-Destination Data

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
From	A - Mount Road West	0	121	40	9
	B - Barton Road North	231	0	2	117
	C - Mount Road East	191	3	0	72
	D - Rougham Road South	18	25	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
From	A - Mount Road West	0	20	30	44
	B - Barton Road North	16	0	0	10
	C - Mount Road East	10	33	0	6
	D - Rougham Road South	17	20	38	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.88	59.43	5.9	F
A-BCD	0.03	6.77	0.0	A
A-B				
A-C				
D-ABC	0.13	9.68	0.2	A
C-ABD	0.01	6.03	0.0	A
C-D				
C-A				

Existing Layout - 2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	4.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	461	100.000
B - Barton Road North		✓	170	100.000
C - Mount Road East		✓	72	100.000
D - Rougham Road South		✓	39	100.000

Origin-Destination Data

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
From	A - Mount Road West	0	295	156	10
	B - Barton Road North	110	0	4	56
	C - Mount Road East	51	1	0	20
	D - Rougham Road South	7	23	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
From	A - Mount Road West	0	5	6	20
	B - Barton Road North	7	0	0	35
	C - Mount Road East	4	0	0	0
	D - Rougham Road South	14	0	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.45	15.54	0.8	C
A-BCD	0.03	4.52	0.0	A
A-B				
A-C				
D-ABC	0.09	8.13	0.1	A
C-ABD	0.00	6.35	0.0	A
C-D				
C-A				

Existing Layout - 2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	28.30	D

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	174	100.000
B - Barton Road North		✓	358	100.000
C - Mount Road East		✓	273	100.000
D - Rougham Road South		✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	124	41	9
	B - Barton Road North	236	0	2	120
	C - Mount Road East	196	3	0	74
	D - Rougham Road South	19	26	8	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	20	30	44
	B - Barton Road North	16	0	0	10
	C - Mount Road East	10	33	0	6
	D - Rougham Road South	17	20	38	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.91	68.88	7.0	F
A-BCD	0.03	6.76	0.0	A
A-B				
A-C				
D-ABC	0.14	9.76	0.2	A
C-ABD	0.01	5.99	0.0	A
C-D				
C-A				

Existing Layout - 2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	4.48	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	44	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2021	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	469	100.000
B - Barton Road North		✓	173	100.000
C - Mount Road East		✓	74	100.000
D - Rougham Road South		✓	40	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	300	159	10
	B - Barton Road North	112	0	4	57
	C - Mount Road East	52	1	0	21
	D - Rougham Road South	7	24	9	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	5	6	20
	B - Barton Road North	7	0	0	35
	C - Mount Road East	4	0	0	0
	D - Rougham Road South	14	0	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.46	15.89	0.8	C
A-BCD	0.03	4.50	0.0	A
A-B				
A-C				
D-ABC	0.09	8.18	0.1	A
C-ABD	0.00	6.36	0.0	A
C-D				
C-A				

Existing Layout - 2021 with Development (689 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	133.98	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-28	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2021 with Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	186	100.000
B - Barton Road North		✓	449	100.000
C - Mount Road East		✓	304	100.000
D - Rougham Road South		✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	133	44	9
	B - Barton Road North	265	0	2	182
	C - Mount Road East	206	3	0	95
	D - Rougham Road South	19	26	8	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	20	30	44
	B - Barton Road North	16	0	0	10
	C - Mount Road East	10	33	0	6
	D - Rougham Road South	17	20	38	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	1.15	296.83	40.1	F
A-BCD	0.03	6.74	0.0	A
A-B				
A-C				
D-ABC	0.14	10.22	0.2	B
C-ABD	0.01	5.85	0.0	A
C-D				
C-A				

Existing Layout - 2021 with Development (689 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	6.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2021 with Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	503	100.000
B - Barton Road North		✓	209	100.000
C - Mount Road East		✓	86	100.000
D - Rougham Road South		✓	40	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	325	168	10
	B - Barton Road North	123	0	4	82
	C - Mount Road East	56	1	0	29
	D - Rougham Road South	7	24	9	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	5	6	20
	B - Barton Road North	7	0	0	35
	C - Mount Road East	4	0	0	0
	D - Rougham Road South	14	0	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.57	20.62	1.3	C
A-BCD	0.03	4.42	0.0	A
A-B				
A-C				
D-ABC	0.09	8.37	0.1	A
C-ABD	0.00	6.36	0.0	A
C-D				
C-A				

Existing Layout - 2021 with Development (827 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	199.56	F

Junction Network Options

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2021 with Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	188	100.000
B - Barton Road North		✓	474	100.000
C - Mount Road East		✓	304	100.000
D - Rougham Road South		✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	135	44	9
	B - Barton Road North	273	0	2	199
	C - Mount Road East	206	3	0	95
	D - Rougham Road South	19	26	8	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	20	30	44
	B - Barton Road North	16	0	0	10
	C - Mount Road East	10	33	0	6
	D - Rougham Road South	17	20	38	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	1.21	431.11	54.7	F
A-BCD	0.03	6.73	0.0	A
A-B				
A-C				
D-ABC	0.14	10.34	0.2	B
C-ABD	0.01	5.85	0.0	A
C-D				
C-A				

Existing Layout - 2021 with Development (827 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Fishwick Corner	Crossroads	Two-way	6.72	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2021 with Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Mount Road West		✓	510	100.000
B - Barton Road North		✓	219	100.000
C - Mount Road East		✓	86	100.000
D - Rougham Road South		✓	40	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	332	168	10
	B - Barton Road North	126	0	4	89
	C - Mount Road East	56	1	0	29
	D - Rougham Road South	7	24	9	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East	D - Rougham Road South
	A - Mount Road West	0	5	6	20
	B - Barton Road North	7	0	0	35
	C - Mount Road East	4	0	0	0
	D - Rougham Road South	14	0	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.60	22.28	1.5	C
A-BCD	0.03	4.40	0.0	A
A-B				
A-C				
D-ABC	0.09	8.41	0.1	A
C-ABD	0.00	6.38	0.0	A
C-D				
C-A				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646]
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Filename: 170822_J4_V1.j9
 Path: A:\Projects\60445024 Kier-SCC DC Input\M001.009 Mid Suffolk Cumulative Study\Calculations\Modelling\J4 Ixworth_Norton Crds\Thurston Part 2
 Report generation date: 05/09/2017 13:52:16

- »Existing Layout - 2017, AM
- »Existing Layout - 2017, PM
- »Existing Layout - 2021 Base, AM
- »Existing Layout - 2021 Base, PM
- »Existing Layout - 2021 with Development (689 dwellings), AM
- »Existing Layout - 2021 with Development (689 dwellings), PM
- »Existing Layout - 2021 with Development (827 dwellings), AM
- »Existing Layout - 2021 with Development (827 dwellings), PM

Summary of junction performance

	AM					PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	
Existing Layout - 2017												
Stream B-ACD	0.5	9.56	0.32	A	4.41	99 %	0.1	6.24	0.11	A	2.72	227 % [Stream CD-AB]
Stream AB-CD	0.5	7.35	0.26	A		0.1	6.39	0.09	A			
Stream D-ABC	0.5	9.44	0.31	A		0.1	6.12	0.11	A			
Stream CD-AB	0.5	8.18	0.28	A	0.3	6.81	0.21	A				
Existing Layout - 2021 Base												
Stream B-ACD	0.5	9.73	0.33	A	4.49	93 %	0.1	6.26	0.12	A	2.74	221 % [Stream CD-AB]
Stream AB-CD	0.5	7.41	0.27	A		0.1	6.40	0.10	A			
Stream D-ABC	0.5	9.65	0.32	A		0.1	6.14	0.12	A			
Stream CD-AB	0.5	8.26	0.29	A	0.3	6.84	0.21	A				
Existing Layout - 2021 with Development (689 dwellings)												
Stream B-ACD	1.2	14.81	0.55	B	5.78	34 %	0.2	7.03	0.19	A	3.19	105 % [Stream CD-AB]
Stream AB-CD	1.1	8.29	0.43	A		0.2	6.58	0.15	A			
Stream D-ABC	0.6	11.02	0.37	B		0.2	6.91	0.19	A			
Stream CD-AB	0.7	9.09	0.36	A	0.7	7.73	0.35	A				
Existing Layout - 2021 with Development (827 dwellings)												
Stream B-ACD	1.2	14.81	0.55	B	5.78	34 %	0.2	7.03	0.19	A	3.19	105 % [Stream CD-AB]
Stream AB-CD	1.1	8.29	0.43	A		0.2	6.58	0.15	A			
Stream D-ABC	0.6	11.02	0.37	B		0.2	6.91	0.19	A			
Stream CD-AB	0.7	9.09	0.36	A	0.7	7.73	0.35	A				

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	22/08/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EUITheodore.Jones
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	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15
D2	2017	PM	ONE HOUR	16:45	18:15	15
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15
D5	2021 with Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15
D6	2021 with Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15
D7	2021 with Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15
D8	2021 with Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - 2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	4.41	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	99	Stream B-ACD

Arms

Arm	Name	Description	Arm type
A	Ixworth Road North		Major
B	Norton Road East		Minor
C	Station Hill South		Major
D	Norton Road West		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Ixworth Road North	6.00			77.7	✓	0.00
C - Station Hill South	6.00			69.9	✓	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 - Norton Road East	One lane	4.38	21	20
D - Norton Road West	One lane	4.90	87	41

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	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
1	AB-D	619	-	-	-	-	-	0.240	0.240	0.240	-	-
1	B-A	563	0.102	0.259	0.259	-	-	0.163	0.370	-	0.163	0.370
1	B-CD	725	0.111	0.281	0.281	-	-	-	-	-	-	-
1	CD-B	614	0.238	0.238	0.238	-	-	-	-	-	-	-
1	D-AB	773	-	-	-	-	-	0.300	0.300	0.119	-	-
1	D-C	626	-	0.181	0.412	0.181	0.412	0.288	0.288	0.114	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	207	100.000
B - Norton Road East		✓	164	100.000
C - Station Hill South		✓	189	100.000
D - Norton Road West		✓	158	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
	A - Ixworth Road North	0	29	149	29
	B - Norton Road East	44	0	41	79
	C - Station Hill South	90	44	0	55
	D - Norton Road West	20	83	55	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
	A - Ixworth Road North	0	0	1	10
	B - Norton Road East	0	0	0	10
	C - Station Hill South	0	5	0	11
	D - Norton Road West	0	6	18	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.32	9.56	0.5	A
A-B				
A-C				
A-D				
AB-CD	0.26	7.35	0.5	A
AB-C				
D-ABC	0.31	9.44	0.5	A
C-D				
C-A				
C-B				
CD-AB	0.28	8.18	0.5	A
CD-A				

Existing Layout - 2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	2.72	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	227	Stream CD-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	86	100.000
B - Norton Road East		✓	67	100.000
C - Station Hill South		✓	177	100.000
D - Norton Road West		✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
	A - Ixworth Road North	0	17	57	12
	B - Norton Road East	9	0	25	33
	C - Station Hill South	100	53	0	24
	D - Norton Road West	6	49	14	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
	A - Ixworth Road North	0	0	2	0
	B - Norton Road East	0	0	0	3
	C - Station Hill South	0	0	0	0
	D - Norton Road West	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.11	6.24	0.1	A
A-B				
A-C				
A-D				
AB-CD	0.09	6.39	0.1	A
AB-C				
D-ABC	0.11	6.12	0.1	A
C-D				
C-A				
C-B				
CD-AB	0.21	6.81	0.3	A
CD-A				

Existing Layout - 2021 Base, AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	4.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	93	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	213	100.000
B - Norton Road East		✓	168	100.000
C - Station Hill South		✓	194	100.000
D - Norton Road West		✓	163	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
A - Ixworth Road North		0	30	153	30
B - Norton Road East		45	0	42	81
C - Station Hill South		92	45	0	57
D - Norton Road West		21	85	57	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
A - Ixworth Road North		0	0	1	10
B - Norton Road East		0	0	0	10
C - Station Hill South		0	5	0	11
D - Norton Road West		0	6	18	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.33	9.73	0.5	A
A-B				
A-C				
A-D				
AB-CD	0.27	7.41	0.5	A
AB-C				
D-ABC	0.32	9.65	0.5	A
C-D				
C-A				
C-B				
CD-AB	0.29	8.26	0.5	A
CD-A				

Existing Layout - 2021 Base, PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	2.74	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	221	Stream CD-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	87	100.000
B - Norton Road East		✓	69	100.000
C - Station Hill South		✓	181	100.000
D - Norton Road West		✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
A - Ixworth Road North		0	17	58	12
B - Norton Road East		9	0	26	34
C - Station Hill South		102	54	0	25
D - Norton Road West		6	50	14	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
A - Ixworth Road North		0	0	2	0
B - Norton Road East		0	0	0	3
C - Station Hill South		0	0	0	0
D - Norton Road West		0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.12	6.26	0.1	A
A-B				
A-C				
A-D				
AB-CD	0.10	6.40	0.1	A
AB-C				
D-ABC	0.12	6.14	0.1	A
C-D				
C-A				
C-B				
CD-AB	0.21	6.84	0.3	A
CD-A				

Existing Layout - 2021 with Development (689 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	5.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2021 with Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	304	100.000
B - Norton Road East		✓	271	100.000
C - Station Hill South		✓	226	100.000
D - Norton Road West		✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	32	242	30
	B - Norton Road East	54	0	89	128
	C - Station Hill South	119	50	0	57
	D - Norton Road West	21	99	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	0	1	10
	B - Norton Road East	0	0	0	10
	C - Station Hill South	0	5	0	11
	D - Norton Road West	0	6	18	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.55	14.81	1.2	B
A-B				
A-C				
A-D				
AB-CD	0.43	8.29	1.1	A
AB-C				
D-ABC	0.37	11.02	0.6	B
C-D				
C-A				
C-B				
CD-AB	0.36	9.09	0.7	A
CD-A				

Existing Layout - 2021 with Development (689 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	3.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	105	Stream CD-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2021 with Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	132	100.000
B - Norton Road East		✓	111	100.000
C - Station Hill South		✓	272	100.000
D - Norton Road West		✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	25	95	12
	B - Norton Road East	13	0	45	53
	C - Station Hill South	180	67	0	25
	D - Norton Road West	6	92	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	0	2	0
	B - Norton Road East	0	0	0	3
	C - Station Hill South	0	0	0	0
	D - Norton Road West	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.19	7.03	0.2	A
A-B				
A-C				
A-D				
AB-CD	0.15	6.58	0.2	A
AB-C				
D-ABC	0.19	6.91	0.2	A
C-D				
C-A				
C-B				
CD-AB	0.35	7.73	0.7	A
CD-A				

Existing Layout - 2021 with Development (827 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	5.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	Stream B-ACD

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2021 with Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	304	100.000
B - Norton Road East		✓	271	100.000
C - Station Hill South		✓	226	100.000
D - Norton Road West		✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	32	242	30
	B - Norton Road East	54	0	89	128
	C - Station Hill South	119	50	0	57
	D - Norton Road West	21	99	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	0	1	10
	B - Norton Road East	0	0	0	10
	C - Station Hill South	0	5	0	11
	D - Norton Road West	0	6	18	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.55	14.81	1.2	B
A-B				
A-C				
A-D				
AB-CD	0.43	8.29	1.1	A
AB-C				
D-ABC	0.37	11.02	0.6	B
C-D				
C-A				
C-B				
CD-AB	0.36	9.09	0.7	A
CD-A				

Existing Layout - 2021 with Development (827 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Ixworth Norton	Left-Right Stagger	Two-way	3.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	105	Stream CD-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2021 with Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Ixworth Road North		✓	132	100.000
B - Norton Road East		✓	111	100.000
C - Station Hill South		✓	272	100.000
D - Norton Road West		✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	25	95	12
	B - Norton Road East	13	0	45	53
	C - Station Hill South	180	67	0	25
	D - Norton Road West	6	92	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Ixworth Road North	B - Norton Road East	C - Station Hill South	D - Norton Road West
From	A - Ixworth Road North	0	0	2	0
	B - Norton Road East	0	0	0	3
	C - Station Hill South	0	0	0	0
	D - Norton Road West	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.19	7.03	0.2	A
A-B				
A-C				
A-D				
AB-CD	0.15	6.58	0.2	A
AB-C				
D-ABC	0.19	6.91	0.2	A
C-D				
C-A				
C-B				
CD-AB	0.35	7.73	0.7	A
CD-A				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646]
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Filename: 170818_J5_V1.j9
 Path: A:\Projects\60445024 Kier-SCC DC Input\M001.009 Mid Suffolk Cumulative Study\Calculations\Modelling\J5 Barton_Norton T Jct\Thurston Part 2
 Report generation date: 05/09/2017 13:53:35

- »Existing Layout - 2017, AM
- »Existing Layout - 2017, PM
- »Existing Layout - 2021 Base, AM
- »Existing Layout - 2021 Base, PM
- »Existing Layout - 2021 with Development (689 dwellings), AM
- »Existing Layout - 2021 with Development (689 dwellings), PM
- »Existing Layout - 2021 with Development (827 dwellings), AM
- »Existing Layout - 2021 with Development (827 dwellings), PM

Summary of junction performance

	AM				Junction Delay (s)	Network Residual Capacity	PM				Junction Delay (s)	Network Residual Capacity
	Queue (Veh)	Delay (s)	RFC	LOS			Queue (Veh)	Delay (s)	RFC	LOS		
Existing Layout - 2017												
Stream B-AC	0.5	10.10	0.35	B	3.61	88 %	0.2	7.34	0.16	A	2.20	202 %
Stream C-AB	0.1	5.70	0.11	A		[Stream B-AC]	0.2	5.42	0.11	A		[Stream B-AC]
Existing Layout - 2021 Base												
Stream B-AC	0.6	10.26	0.36	B	3.65	85 %	0.2	7.40	0.17	A	2.24	196 %
Stream C-AB	0.2	5.73	0.11	A		[Stream B-AC]	0.2	5.44	0.12	A		[Stream B-AC]
Existing Layout - 2021 with Development (689 dwellings)												
Stream B-AC	0.9	13.60	0.48	B	5.23	47 %	0.3	8.16	0.22	A	2.43	151 %
Stream C-AB	0.2	5.77	0.11	A		[Stream B-AC]	0.2	5.54	0.12	A		[Stream B-AC]
Existing Layout - 2021 with Development (827 dwellings)												
Stream B-AC	1.0	14.56	0.50	B	5.11	40 %	0.3	8.42	0.22	A	2.25	136 %
Stream C-AB	0.2	5.83	0.12	A		[Stream B-AC]	0.2	5.39	0.12	A		[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	18/08/2017
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	EUTheodore.Jones
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	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15
D2	2017	PM	ONE HOUR	16:45	18:15	15
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15
D5	2021 with Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15
D6	2021 with Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15
D7	2021 with Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15
D8	2021 with Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - 2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	3.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	88	Stream B-AC

Arms

Arm	Name	Description	Arm type
A	Barton Road North		Major
B	Norton Road East		Minor
C	Barton Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			250.0	✓	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	One lane	4.88	33	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	612	0.112	0.282	0.177	0.403
1	B-C	783	0.120	0.303	-	-
1	C-B	719	0.278	0.278	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	249	100.000
B		✓	175	100.000
C		✓	173	100.000

Origin-Destination Data

		To		
		A	B	C
From	A	0	72	177
	B	76	0	99
	C	117	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	13	5
	B	16	0	1
	C	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.35	10.10	0.5	B
C-AB	0.11	5.70	0.1	A
C-A				
A-B				
A-C				

Existing Layout - 2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	2.20	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	202	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	192	100.000
B		✓	88	100.000
C		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	58	134
B	46	0	42
C	131	62	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	3
B	2	0	0
C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	7.34	0.2	A
C-AB	0.11	5.42	0.2	A
C-A				
A-B				
A-C				

Existing Layout - 2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	3.65	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	85	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2021 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	255	100.000
B		✓	178	100.000
C		✓	178	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	73	182
B	77	0	101
C	120	58	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	13	5
B	16	0	1
C	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.36	10.26	0.6	B
C-AB	0.11	5.73	0.2	A
C-A				
A-B				
A-C				

Existing Layout - 2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	2.24	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	196	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2021 Base	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	195	100.000
B		✓	90	100.000
C		✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To		
		A	B	C
A	0	59	136	
B	47	0	43	
C	133	64	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To		
		A	B	C
A	0	0	3	
B	2	0	0	
C	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	7.40	0.2	A
C-AB	0.12	5.44	0.2	A
C-A				
A-B				
A-C				

Existing Layout - 2021 with Development (689 dwellings), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	5.23	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2021 with Development (689 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	270	100.000
B		✓	226	100.000
C		✓	178	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To		
		A	B	C
A	0	88	182	
B	125	0	101	
C	120	58	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To		
		A	B	C
A	0	13	5	
B	16	0	1	
C	3	2	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.48	13.60	0.9	B
C-AB	0.11	5.77	0.2	A
C-A				
A-B				
A-C				

Existing Layout - 2021 with Development (689 dwellings), PM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	2.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	151	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2021 with Development (689 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	237	100.000
B		✓	110	100.000
C		✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	101	136
B	67	0	43
C	133	64	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	3
B	2	0	0
C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.22	8.16	0.3	A
C-AB	0.12	5.54	0.2	A
C-A				
A-B				
A-C				

Existing Layout - 2021 with Development (827 dwellings), AM

Data Errors and Warnings
No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	5.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	40	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2021 with Development (827 dwellings)	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	319	100.000
B		✓	226	100.000
C		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	88	231
B	125	0	101
C	135	58	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	13	5
B	16	0	1
C	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.50	14.56	1.0	B
C-AB	0.12	5.83	0.2	A
C-A				
A-B				
A-C				

Existing Layout - 2021 with Development (827 dwellings), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Barton Norton	T-Junction	Two-way	2.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	136	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2021 with Development (827 dwellings)	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	257	100.000
B		✓	110	100.000
C		✓	240	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A	B	C
A	0	101	156
B	67	0	43
C	176	64	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
A	0	0	3
B	2	0	0
C	1	0	0

Results

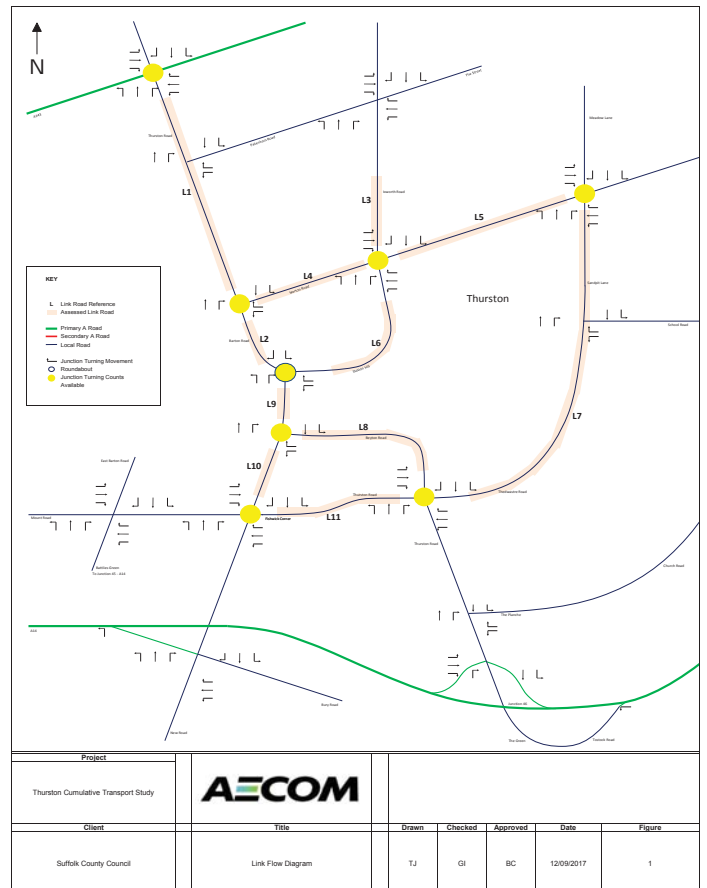
Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.22	8.42	0.3	A
C-AB	0.12	5.39	0.2	A
C-A				
A-B				
A-C				

Technical Note



Appendix E: Link Location Plan



Our Ref: 570/CON/2797/16 (Hopkins Homes)
570/CON/4386/16 (Bovis Homes)
570/CON/4942/16 (Lawrence Homes)
570/CON/4963/16 (Persimmon Homes)
570/CON/5070/16 (Pigeon IML)



Date: 10th March 2017
Enquiries to: Steve Merry
Tel: 01473 341497
Email: steven.merry@suffolk.gov.uk

Bovis Homes
Hopkins Homes
Lawrence Homes
Persimmon Homes
Pigeon IML

Dear Sirs,

Cumulative Development in Thurston

This letter sets out Suffolk County Council's (SCC) response to the effect on the highway infrastructure arising from five planning applications that have been submitted to Mid Suffolk District Council (MSDC) in the past nine months. This response has been prepared to support the Local Planning Authority, Mid Suffolk District Council in making their recommendations for these planning applications.

The applications considered in this letter are;

- 2797/16 for 175 dwellings on for land south of Norton Road by Hopkins Homes
- 4386/16 for 138 dwellings to the west of Barton Road by Bovis Homes
- 4942/16 for 64 dwellings to the west of Meadow Lane and north of Norton Road by Lawrence Homes
- 4963/16 for 250 dwellings, land for Thurston Community College and potentially for a new primary school on land west of Ixworth Road by Persimmon Homes
- 5070/16 for 200 dwellings and a potential primary school on land to the north of Norton Road by Pigeon IML

The Transport Assessments provided for the individual proposed developments show varying degrees of impact on the highway infrastructure. To date none have shown the cumulative impact of all five developments but at some locations SCC considers this may be severe, particularly where the network is already close to or exceeding capacity. Paragraph 21 of the National Planning Policy Framework (NPPF) states that planning policies should recognise and seek to address potential barriers to investment, including any lack of infrastructure and identify priority areas for infrastructure provision. Both SCC and MSDC are aware that paragraph 32 of the NPPF states that development should only be prevented on transport grounds where residual impacts of development as severe. The same statement allows decisions to be made taking account of whether improvements can be undertaken within the transport network that cost effectively limit the significant impacts of development.

On this occasion, we consider that by taking a co-operative approach for all five developments there is an opportunity that the planning process can provide improvements to both mitigate against any severe impacts and any lack of transport infrastructure.

When preparing this response, the three tests stated in NPPF clause 204 have been applied to the proposed planning obligations.

Highway Infrastructure (Congestion)

The initial data and modelling provided in Transport Assessments indicates that the road network will experience additional traffic through growth and development and at some locations this will exceed the theoretical junction capacity. The information available from the Transport Assessments is summarised in Table 1. Those junctions that are or may exceed capacity are discussed below.

Junction		Baseline (2016)										Individual Developments (growth plus development)											
		SCC		Hopkins Homes		Bovis Homes		Lawrence Homes		Persimmon		Pigeon		Hopkins Homes		Bovis Homes		Lawrence Homes		Persimmon		Pigeon	
		AM	PM	2797/16	4386/16	4942/16	4963/16	5070/16	2797/16	4386/16	4942/16	4963/16	5070/16	2797/16	4386/16	4942/16	4963/16	5070/16	2797/16	4386/16	4942/16	4963/16	5070/16
A143 Bury Road / C691 Thurston Road/ C649 Brand Road	4 way priority	Yellow	Red	Grey	Grey	Yellow	Red	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Red	Red	Grey	Grey	Grey	Grey	Grey	Grey
C691 Barton Road / C559 Norton Road	3 way priority	Grey	Grey	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
C691 Barton Road / C562 Station Hill	small roundabout	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
C560 Beyton Road / C691 Barton Road / C693 Thuston Road	3 way priority	Grey	Grey	Grey	Grey	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
C693 Thurston Road / C692 Thurston Road	4 way priority. Fishwick Corner	Yellow	Green	Grey	Grey	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green
C559 Norton Road / C562 Ixworth Road / C562 Station Hill	4 way priority (staggered)	Grey	Grey	Grey	Grey	Grey	Grey	Design and Access Statement Only	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Design and Access Statement Only	Green	Green	Green	Green
U4921 Meadow Lane / C559 Norton Road / U4920 Sandpit Road	4 way priority	Grey	Grey	Green	Green	Green	Green	Design and Access Statement Only	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Design and Access Statement Only	Green	Green	Green	Green
U4920 Thedwastre Road / Sandpit Lane / U4918 School Road	3 way priority	Green	Green	Grey	Grey	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
C560 Beyton Road / C592 Thurston Road / U4920 Thedwastre Road	4 way priority.	Grey	Grey	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
U4908 Church Road / C559 Norton Road / U4917 Pakenham Road	4 way priority	Grey	Grey	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
U4908 Church Road / U4913 Stoney Lane / U4918 School Road	4 way priority	Grey	Grey	Grey	Grey	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

Table 1: Junction Capacity.

A143 Bury Road / C691 Thurston Road/ C649 Brand Road

Modelling shows that this junction is already close to theoretical capacity in the AM peak with northbound traffic waiting to turn onto the A143 queueing on Barton Road and at capacity in the PM peak with Thurston bound traffic waiting right from the A143 into Barton Road. The additional traffic from the proposed developments in Thurston will exacerbate these problems; in particular, modelling shows the queueing traffic on Barton Road will exceed capacity in the AM peak.

C693 Thurston Road / C692 Thurston Road / C693 New Road (Fishwick Corner)

Modelling indicates that the southbound approach to the junction is currently close to capacity in the morning peak and that its capacity will be exceeded before all five developments could be delivered. However, in the PM peak the junction has the capacity for the predicted traffic for all developments.

C560 Beyton Road / C592 Thurston Road / U4920 Thedwastre Road

The modelling of this junction shows some inconsistencies with one study indicating it will be close to capacity southbound on Thedwastre Road in the AM peak due to traffic from one specific development but other modelling showing it would have capacity for the traffic generated by the developments.

Highway Infrastructure (Road Safety)

A143 Bury Road / C691 Thurston Road/ C649 Brand Road

There have been three recorded crashes resulting in slight injuries and one involving serious injury at this junction in the last 5 years for which data is available (2012-2016).

C560 Beyton Road / C592 Thurston Road / U4920 Thedwastre Road

There have been two crashes resulting in slight injuries at this junction in the past 5 years

C693 Thurston Road / C692 Thurston Road / C693 New Road (Fishwick Corner)

At this junction there have been 9 crashes resulting in slight injuries and one resulting in a serious injury in the past 5 years.

The frequency of injury related crashes at the C693 Thurston Road / C692 Thurston Road / C693 New Road (Fishwick Corner) junction would, in the opinion of SCC, necessitates some work to improve road safety. Although the frequency of crashes at the A143 Bury Road / C691 Thurston Road/ C649 Brand Road does not justify significant road safety improvements it is a factor that should be considered in any future mitigation measures.

Suggested Mitigation Measures

A143 Bury Road / C691 Thurston Road/ C649 Brand Road

An assumption has been made that the junction can be signalised and that this will reduce congestion and improve road safety. Although there is a generous width of highway verge in the vicinity of the junction the geography of the site may place constraints on the design and further work is required to confirm that a solution is possible or beneficial. The proposed junction improvements would be delivered through a jointly funded S106 contribution.

C693 Thurston Road / C692 Thurston Road / C693 New Road (Fishwick Corner)

The issue of congestion on the southbound approach is difficult to mitigate as there is insufficient land within the highway boundary to provide a meaningful solution. It is noted that the road network around Thurston is relatively permeable and an option exists for traffic to avoid this by diverting onto Beyton Road and then turning right to approach this junction from the east.

Several minor traffic management features such as improved signing, marker posts and high friction surfacing have been used at this junction in the past as crash reduction measures. Despite this, crashes causing injury continue to occur. To reduce the severity of these crashes it is proposed to restrict the road to 40mph and undertake local safety improvements such as enhanced road signs and markings. This would be delivered through a jointly funded S106 contribution.

A longer term solution would be to remodel the junction or drastically remodel the road network. It is recommended these matters should be addressed in any future revisions to the Local Plan.

C560 Beyton Road / C592 Thurston Road / U4920 Thedwastre Road

The highway boundary constrains any improvements in this location and thus there does not appear to be any viable mitigation to increase capacity on the southbound Thedwastre Road approach. The relatively low number of crashes suggests that the issue of road safety is not as important as it is for the other two junctions and mitigation measures would only comprise low cost work, such as road signs and markings.

Speed Limits

It is noted that a number of proposed access roads are located close to or beyond the existing 30mph speed limit in Thurston. In some cases, assumptions have been made when determining visibility for these junctions that the 85%ile speed limits are or will be close to 30mph. Developers are advised that the visibility requirements shall be designed for the measured 85%ile speed adjacent to the junction and not the posted or proposed future speed limit. A legal process must be followed to change or extend a speed limit and during this process objections can be made which can delay or stop creation of the necessary legal order. For this reason, Suffolk County Council cannot accept visibility splays based on changes to speed limits unless there is confidence that no significant objections to the traffic regulation order are likely.

Based on the available details of the five proposed developments the following changes to speed limits are suggested;

- Extend the 30mph speed limit north on Ixworth Road to Thurston Rugby Club
- Extend the 30mph speed limit on Norton Road towards and beyond Church Road
- Extend of 30mph speed limit on Barton Road west of Mill Lane
- Create a new 40mph speed limit between and including the C693 Thurston Road / C692 Thurston Road / C693 New Road and the C560 Beyton Road / C592 Thurston Road / U4920 Thedwastre Road for road safety reasons.

The necessary Traffic Regulation Orders (TRO) could be raised individually or preferably as a single order. The latter is preferred as it reduces cost and administration. This can be delivered through site specific or joint S106 contributions. As stated above implementation of an order cannot be guaranteed and if a TRO is required to justify reduced visibility splay lengths then the order would need to be substantially complete before such a reduction would be accepted. If a process can be agreed between the parties initial consultation can be undertaken in advance of determination of the planning applications.

Pedestrian and Cycling Infrastructure

The benefit of considering all five applications together is that a coherent system of footways and pedestrian crossings can be delivered in Thurston. The proposed footways are intended to provide good, direct pedestrian access both to the main village and schools. The proposed improvements, most of which have already been proposed by individual applications, are listed below:

- An uncontrolled pedestrian crossing on Norton Road between Meadow Lane and Station Hill / Ixworth Road.
- A footway on west side of Ixworth Road between Norton Road and the entrance to Persimmon's site
- A footway link on Ixworth Road between the entrance to the Persimmon development and the entrance to the Thurston Rugby Club.
- A controlled pedestrian crossing facility (e.g. a raised table junction with zebra crossing) if practicable at or adjacent to the Norton Road / Station Hill / Ixworth Road junction. Pooled contributions from all 5 developments are required for the County Council to deliver this.
- A footway on the north side of Norton Road from Meadow Lane east towards Church Lane as far as the site boundary allows. This could be within the development and or on the highway verge.
- An uncontrolled pedestrian on Norton Road crossing linking the Hopkins Homes and Pigeon sites
- Meadow Lane resurfaced to improve cycle / pedestrian facilities (and maintain access to properties)
- Provide a metalled footway on Church Road between Footpath 006 and the footpath link to School Lane. This will include provision of street lighting along this short section of footpath.
- Provide two uncontrolled pedestrian crossings on Sandpit Lane to link the Hopkins Homes development to the main village

With the exception of the pedestrian crossing facility at the junction of Ixworth Road, Station Hill and Norton Road, the above are expected to be secured by conditions or S106 obligations as appropriate and delivered by the relevant development with S278 (improvements to existing highway) or S38 agreements (if adoption as highway maintainable at public expense is desired) as appropriate. All the footways are expected to be metalled and where verge space allows provision for cyclists should also be considered.

Public Rights of Way (PRoW)

It is proposed that a small number of PRoW are improved to provide alternative pedestrian links between the proposed developments and current and future school sites. These are improvements to:

- Thurston Footpath 001 between Ixworth Road and Meadow Lane. It is proposed that this is to an all-weather standard, preferably a bituminous surface.
- Thurston Footpath 018 between Ixworth Road and Mill Lane. This lies within the development site and the works can be secured by condition.

- Thurston Footpath 006 between Norton Road and Church Road. This lies within the development site and the works can be secured by condition. It is proposed that this is to an all-weather standard; preferably a bituminous surface as far as it is a safe pedestrian route to the site north of Norton Road
- New PROW link along southern boundary of the Bovis Homes site to join Barton Road
- New PROW link from the site west of Barton Road to Heath Road, linking with Cycle Route 51.
- Improve PROW 007 North of Meadow Lane (un metalled)

If diversion of a PRoW is likely it is recommended that discussions are held with the relevant SCC officer at an early state.

Public Transport

Improvements to public transport infrastructure will be limited to any site-specific works necessary as a result of each development through S106. All other public transport improvements are included in the CIL.

Cumulative Modelling

Suffolk County Council has commissioned AECOM, to review the cumulative effect of the five proposals. This is to validate the submitted transport assessments and provide a single uniform source of information for the highway network.

Future Developments

The proposals in this letter are specific to the named five developments. Further studies are being undertaken to assess the effects of further developments on the highway infrastructure.

I would welcome your comments on these proposals. In particular I would welcome suggestions on how the practicality and benefits of a signalised junction can be assessed within the timescales desired for the determination of the five planning applications.

I will also be contacting you each in the next week with our comments on site-specific highway issues where necessary.

Yours sincerely,



Steve Merry
Transport Policy and Development Manager
Directorate Resource Management

Attached

2017-03-09 Highway Infrastructure List: excel spreadsheet

2017-03-09 Thurston - A143 Junction: PDF plan

2017-03-09 Thurston - Strategic Highway Network: PDF Plan

2017-03-09 Thurston - Footway Improvements: PDF Plan

Our Ref: 5070/16, 4942/16, 2797/16, 5010/16, 4386/16 & 4963/16

Date: 13th October 2017

Enquiries to: Steve Merry

Tel: 01473 341497

Email: steven.merry@suffolk.gov.uk

The Planning Officer
Mid Suffolk District Council
Council Offices
131 High Street
Ipswich
Suffolk
IP6 8DL

For the Attention of: Ben Elvin

Dear Ben

Cumulative Development in Thurston

This letter updates Suffolk County Council's position as the Highways Authority on the five planning applications that were presented to the Mid Suffolk District Council Planning Committee on the 12th July 2017.

Of the five applications four were granted minded to approve and one minded to not approve decisions by the Planning Committee. The main reason for the minded to decisions was the committee's requirement for further transport studies to be undertaken to demonstrate that the cumulative development did not create a severe impact on the highway network.

Suffolk County Council, as Highways Authority commissioned AECOM to undertake further studies. The additional study formed two parts

- Investigation of the proposed mitigation at the A143 Bury Road / Thurston Road 'Bundbury Arms' junction to determine if the proposed scheme is deliverable and can deliver the necessary additional capacity
- To add further detail to the study of individual junctions and roads within the village of Thurston.

The collaborative partnership between the Applicants, Mid Suffolk District Council and Suffolk County Council that was developed during the planning process was continued with all parties contributing to the cost of this independent study.

A143 Bury Road / C691 Thurston Road/ C649 Brand Road

The main issue at this junction indicated by early studies was the lack of capacity. Queueing occurs on Thurston Road approaching the A143 in the morning and on the A143 in the evening due to vehicles from Bury St Edmunds turning into Thurston Road. The proposed mitigation is to introduce right hand turn lanes with traffic signals to control the junction.

Drawing ref 60445024-SKCC_004-A (Fig 1 below) shows the indicative layout. A reduction in vehicle speeds is required due to the narrow lanes which in turn are restricted by the available highway land. During the detailed design, every effort will be made to increase the width of the lanes although the requirement for the reduced speed limit will remain

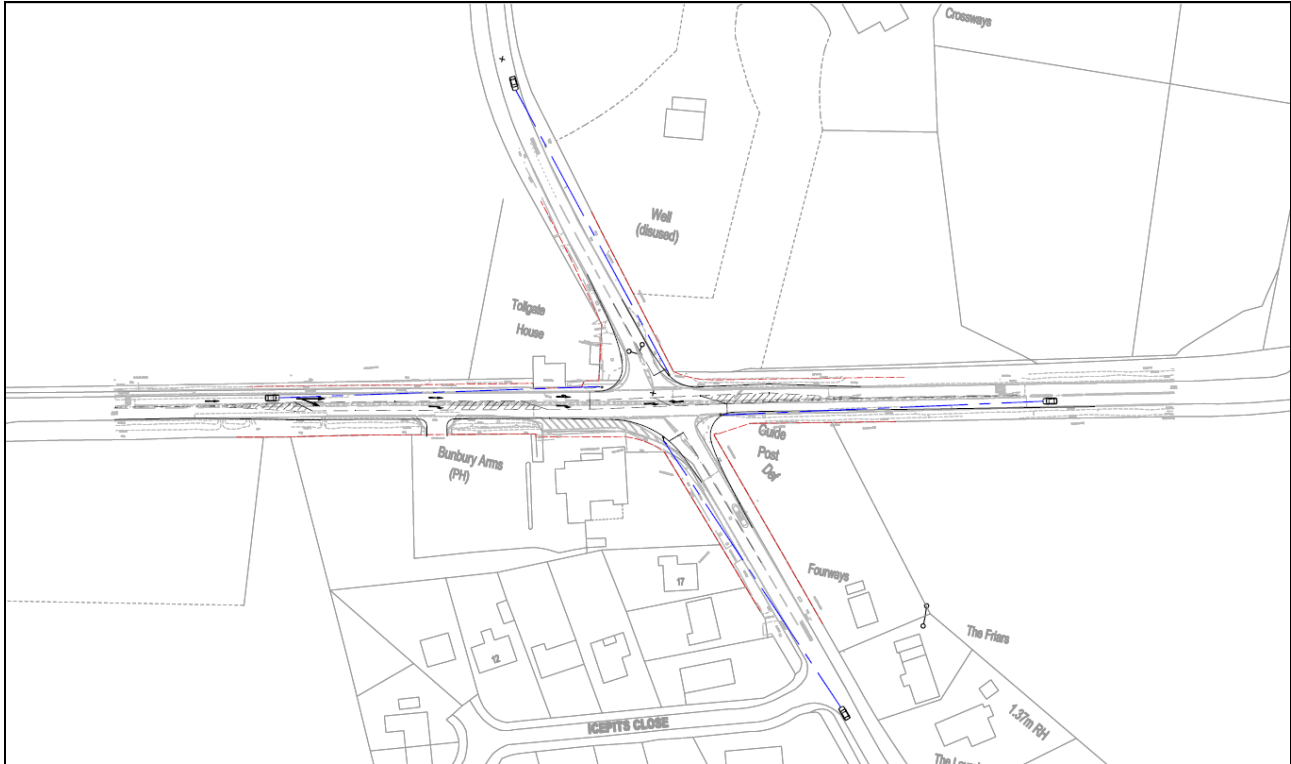


Fig 1: AECOM Drawing ref: 60445024-SKCC_004-A

			Base + growth (2021)		Base + growth + 629 dev (2021)		Base + growth + 827 dev (2021)	
Dwellings considered (year)			0		689		827	
Ref	Junction		AM	PM	AM	PM	AM	PM
1	A143 Bury Road / C691 Thurston Road/ C649 Brand Road	4 way priority					1.38	1.20
1a	A143 Bury Road / C691 Thurston Road/ C649 Brand Road	4 way signalised junction (DoS)	92	80	97	86	98	87

Fig 2: A143/ Thurston Road Junction capacity

Without any highway improvements and with the proposed development the junction will be operating at considerable over capacity. Junction modelling indicates that the proposed traffic signal option will increase capacity although with the proposed development the junction will be close to the theoretical capacity in 2021.

As part of the study a Road Safety Audit was undertaken. Although this has raised a number of design issues it is considered that these can be addressed during the design process.

Transport study of roads in Thurston

The AECOM technical note 60445024 'Thurston Cumulative Impact Assessment Part 2' summarises the traffic impact of the development in terms of

- 2017 base
- 2021 baseline traffic (ie growth but no development)
- 2021 baseline traffic (including growth) plus 689 dwellings (four minded to developments)
- 2021 baseline traffic (including growth) plus 827 dwellings (all five developments)

Table 10 in the report summarised the junction data and this is replicated as Fig 3.

- **Red:** Over capacity (above 1 RFC)
- **Orange:** Operating close to capacity (above 0.85 RFC)
- **Green:** Operating under capacity (below 0.85 RFC)

Table 10: Summary of Junction Capacity Assessments 2021 scenarios

Junction	AM Peak Max RFC				PM Peak Max RFC			
	2017 Base	2021 Base	2021 with Dev (689)	2021 with Dev (827)	2017 Base	2021 Base	2021 with Dev (689)	2021 with Dev (827)
C691 Barton Road / C562 Station Hill Three Arm Mini Roundabout	0.46	0.47	0.65	0.69	0.58	0.60	0.72	0.78
C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road Crossroads (Pokeridge Corner)	0.52	0.54	0.84	0.86	0.45	0.46	0.56	0.58
C693 Thurston Road / C692 Thurston Road Crossroads Fishwick Corner	0.88	0.91	1.15	1.21	0.45	0.46	0.57	0.60
C559 Norton Road / C562 Ixworth Road / C562 Station Hill staggered Crossroads	0.32	0.33	0.55	0.55	0.21	0.21	0.35	0.35
C691 Barton Road / C559 Norton Road 'T' Junction	0.35	0.36	0.48	0.50	0.16	0.17	0.22	0.22

Fig 3: Summary of Junction Capacities

The C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road (Pokeridge Corner) junction with full development is close to capacity in 2021. This results in a maximum queue length of 5 vehicles in the am peak. This is not considered to be severe impact.

The C692 / C693 Thurston Road (Fishwick Corner) junction is operating close to capacity in 2017 and 2021 without any development. With either studied scale of development the junction will be operating significantly over capacity in the morning peak with queues of 40 (689 dwellings) and 54 (829 dwellings) vehicles. This degree of congestion caused concern to the Highways Authority and further work was undertaken to identify any potential mitigation to reduce this (see below).

The C691 Barton Road under the railway bridge is operating above capacity in the am peak. No mitigation has been identified that may alleviate this. There is a degree of uncertainty in the calculation of theoretical capacity as future growth may vary from current assumptions. For example, robust travel plans may encourage modal shift away from car use thus reducing demand. The link is very short (@50m) and the duration of any congestion is likely to be short lived being restricted to the morning peak. Under these circumstances it is considered that the localised congestion is not considered to represent a severe impact by the Highways Authority.

C692 / C693 Fishwick Corner: Mitigation Measures

As this junction was shown by the initial study to be operating over-capacity the Applicants were challenged to suggest possible mitigation measures. Following these discussions, a proposed scheme to change the priorities at the junction was selected for further study. This change provides two benefits

- An increase in capacity by prioritising those arms of the junction with the heaviest traffic
- By reducing speeds and providing stop lines rather than give way road safety can be improved.

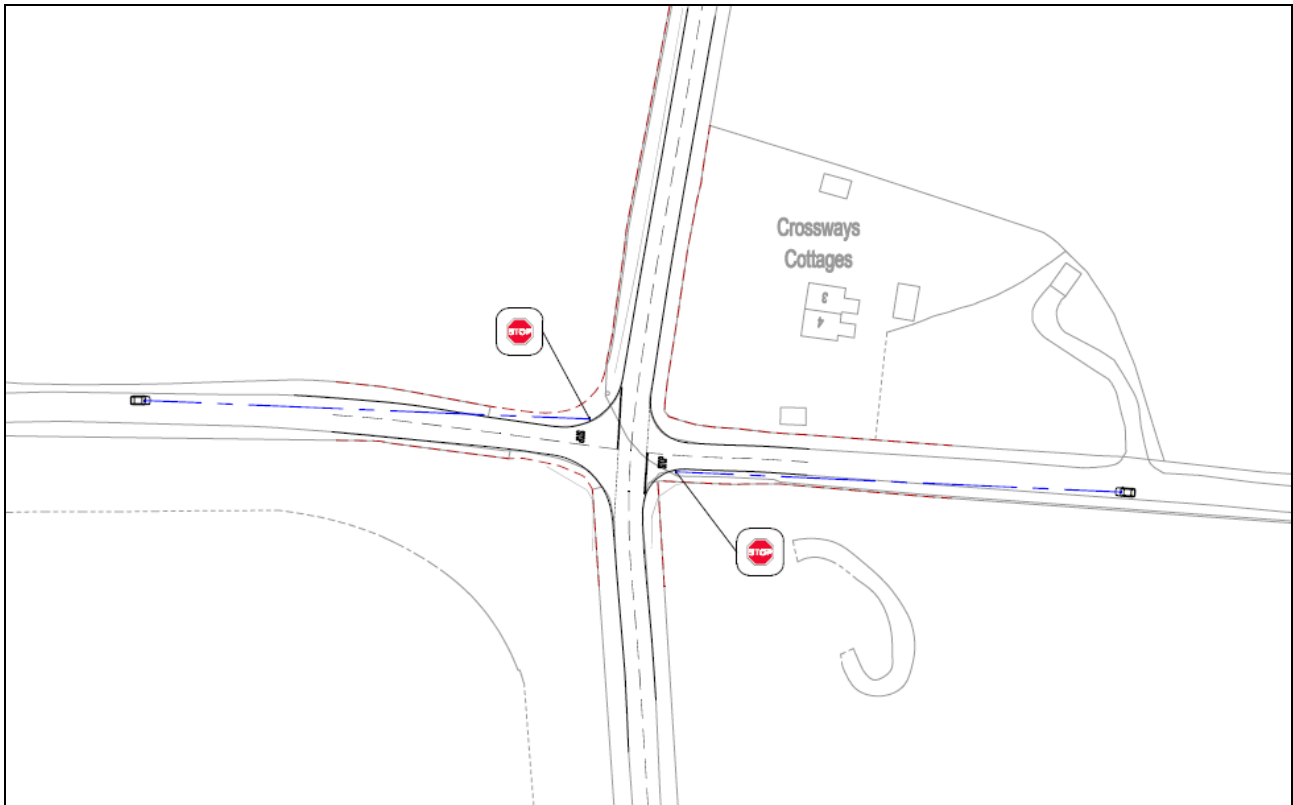


Fig 4: Proposed modified junction layout AECOM drawing 60445024-SKE-C-008-A

To confirm that these assumptions are correct indicative drawings have been prepared to make sure large vehicles can use the revised junction. In addition, modelling has been undertaken to confirm that the capacity can be improved and a road safety audit to identify any safety concerns. The modelling shown in Fig 5 shows that the capacity can be increased

			Base (2017)		Base + growth (2021)		Base + growth + 629 dev (2021)		Base + growth + 827 dev (2021)	
			0		0		689		827	
Dwellings considered (year)			AM	PM	AM	PM	AM	PM	AM	PM
5	C693 Thurston Road / C692 Thurston Road	4 way priority. (Fishwick Corner)	0.88	0.45	0.91	0.46	1.15	0.57	1.21	0.60
5a	C693 Thurston Road / C692 Thurston Road	Revised 4 way priority. (Fishwick Corner)	0.67	0.83	0.69	0.85	0.80	0.92	0.82	0.93

Fig 5: Modelling data for Fishwick Corner

The road safety audit identified vegetation and vehicle speeds as two potential issues. The designers' response considers that both can be addressed during the detailed design process.

Future Development

The studies show that the proposed five developments can be accommodated by the existing highway network with appropriate mitigation. While capacity is one factor considered when assessing if the impacts of development are severe as required in the National Planning Policy Framework it is not the only factor. Road safety and sustainability are also considered.

Any future development in Thurston must, in the Highway Authorities opinion, address the following constraints;

- No further capacity can be provided at the A143 Bury Road / Thurston junction within the existing highway boundary for traffic traveling to / from the Thurston area.
- The C692 / C693 Thurston Road (Fishwick Corner) cannot be improved further in terms of either road safety or capacity due to the highway boundary constraints.
- Any significant future development is likely result in the C560 Beyton Road / C692 Thurston Road / U4920 Thedwastre Road (Pokeridge Corner) junction reaching its theoretical capacity. This work has not investigated the potential for mitigation but the site has similar highway boundary constraints as the other junctions.
- The C291 Barton Road under the rail bridge is at capacity and without mitigation this may restrict future development in the area. Monitoring of traffic generated by the proposed developments will be important in assessing the actual compared to theoretical impact of the additional traffic.

As Highways Authority Suffolk County Council recommends that future Local Plans recognise these constraints and that the planning process is used to seek opportunities to remove these.

Yours sincerely

Name **Steve Merry**
Job Title **Transport Policy and Development Manager**
Directorate Resource Management

Appendix C

All planning enquiries should be sent to the Local Planning Authority.

Email: planning@babberghmidsuffolk.gov.uk

The Planning Department
Babergh District Council
1st Floor
Endeavour House
8 Russell Road
Ipswich
Suffolk
IP1 1BX

For the attention of: Vincent Pearce

Dear Vincent

**TOWN AND COUNTRY PLANNING ACT 1990
CONSULTATION RETURN:**

PROPOSAL: Pre-app meeting request for Large scale development

LOCATION: Land South West of Beyton Road Thurston Suffolk

Thank you for the letter of invitation to make further comment on this site. Following the meeting with the developer, for the proposals to be acceptable by the Highway Authority please find our comments:

Traffic Assessment

The applicant must adequately consider the impacts of the additional traffic generated by the development, therefore a Transport Assessment (TA) will be required for the formal planning permission consultation. The TA should include junction analysis at the following locations:

- A143/C691 junction
- C691 Barton Road/C562 Station Hill mini roundabout
- Beyton Road/New Road junction
- New Road/Mount Road crossroads (Fishwick Corner)
- Beyton Road/The wastre Road crossroads (Pokeriage Corner)
- Station Hill/Norton Road junction

The scope of the Transport Assessment including the methodology for accessing background growth, trip calculation and committed development shall be agreed with the LHA in consultation with the LPA. Trip generation will need to be calculated and is generally reliant on an external database such as TRICS or similar approved. Please ensure 'edge of village' trip rate is used in this location. The assessment is also to take on board all other committed developments in the area. The traffic will reduce developments are to be taken into consideration when calculating the traffic impact from this development. If the data is older, TEMPRO is to be used to cater for the background growth over the years and include any sites that have arisen in the area over this time period.

Access (Vehicular)

Beyton Road and Mount Road are 'C' classified roads. The proposed vehicular access onto Beyton Road is within 30mph speed limit although as a movement dominated road we expect designs to comply

with DMRB rather than MfS. To allow safe entry onto the public highway, the required minimum visibility splays are 90m (y distance) from a setback of 2.4m (x distance) as shown in Design Manual for Roads and Bridges (DMRB). Mount Road is derestricted so the y distance is 215m. If these dimensions cannot be achieved, a speed survey is acceptable evidence to show actual vehicle speeds which may enable a lower standard of visibility.

NOTE - We suggest that the existing speed limit on Mount Road is reconsidered and if necessary extend the 30mph speed limit at Pokeriage Corner to include Fishwick Corner junction.

Access (Sustainable)

To promote, encourage and support the principles of sustainable transport as outlined in the National Planning Policy Framework, safe and suitable access is required for bus services, pedestrians and cyclists to and from the site. There needs to be sufficient pedestrian links from the site to the footway network:

- Rail bridge – there are 2 footways under the rail bridge – there is a pinch point on the west side and tapers to nothing so not considered a safe route for pedestrians, nor does it connect to the wider footway network. The footway on the east is approx. 1.2m wide at it's narrowest point and will require improvements. This is considered the main route for pedestrians travelling north-west accessing the retail premises and high school (0,6miles) to the north and is **not considered to be safe and suitable** for this scale of development. Any improvements here for pedestrians is the will require narrowing of the existing carriageway and this will affect use of the road by high sided vehicles. Narrowing of the road will reduce the capacity here, a matter that the LHA considers critical when assessing this development. Full analysis of any proposals will be required.
- Beyton Road only has one footway on the north side – additional footway is required within the site or along the frontage to link to existing footway network towards the rail bridge and Thedwastre Road. Consideration shall be given to providing safe crossing points for pedestrians.
- Thredwastre Road is the main access route towards the east of the village (0.75 miles), specifically the primary school and church. Full consideration shall be given in the TA to its suitability as a safe route to the locations in view of its use by vulnerable road users.
- There are no records of PROW in the area of the development but there is cycle provision in the Thurston Area, specifically cycle route 51, and links to the facilities are to be considered.

Road Safety

The impact the development on safety highway is to be considered at Fishwick and Pokeriage junctions on as there have been 10 and 3 accidents respectively so a full analysis is required. The Applicants attention is drawn to the fact that the improvements planned for delivery via the S106 process for the permitted developments north of the railway line were only to a level to mitigate their harm and had little, if any, residual capacity in terms of congestion and road safety.

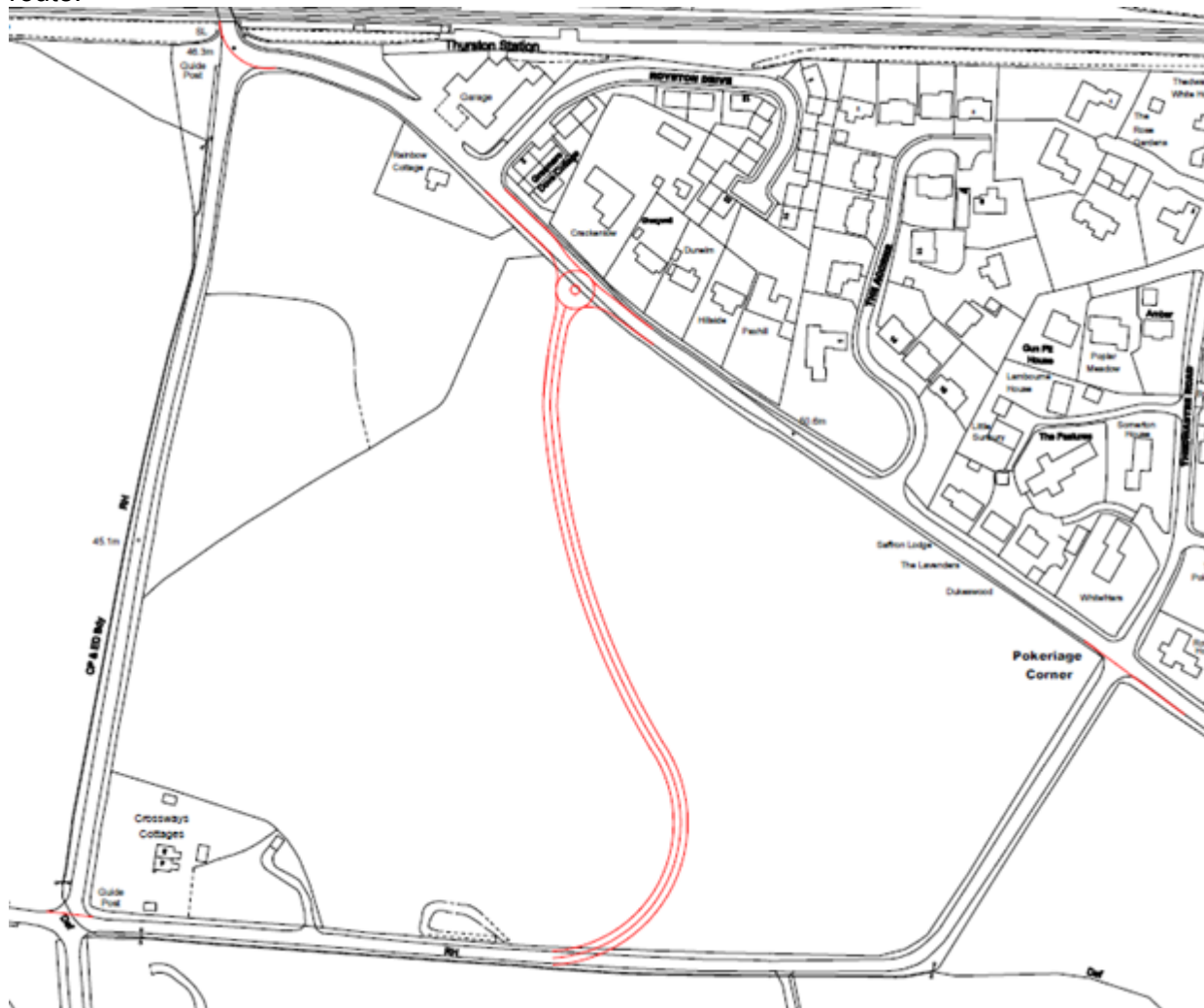
Transport Infrastructure (Cumulative Impact)

A highway infrastructure list was created for highway improvements in the area following the communitive impact assessment completed by Aecom for the 5 developments in 2017. This included improvements to Fishwick Corner with an introduction of a 40mph speed limit and change to the junction priority. The suite of improvements, in the opinion of the LHA, mitigated the harm of the five developments but took the infrastructure to its maximum in terms of capacity and safety. The Applicant will need to provide additional mitigation (if deliverable) or data to show that no further mitigation is required for their development to the satisfaction of the LHA and LPA.

We understand that the applicant has control of some land to the north west of the junction and proposals for improvements have been designed to improve capacity and safety here. The LHA would consider any such proposals that are put forward to resolve this matter.

The Applicant should note that in its response to previous planning applications Network Rail has raised concerns regarding the safety of the pedestrian rail crossing at Thurston Railway Station. These concerns are specifically the increased risk arising from the growth in people crossing the line between platforms. Network Rail have proposed footway improvements under the adjacent rail bridge although the LHA raised concerns about the deliverability of this in terms of land ownership and the increased congestion resulting from reduction of the carriageway to a single lane and four-way traffic signal control.

We would like to suggest the applicant considers the highway network within the site which allows the diversion of traffic from New Road and Mount Road – this should relieve the junctions at the rail-bridge and assist in the safety aspect at Fishwick and Pokeridge junctions. This would also allow buses to potentially travel through the site (see public transport below). The sketch below shows our suggested route.



Travel Plan

For a development of this size we require the following Travel Plan contributions:

- Travel Plan Evaluation and Support Contribution of £1,000 per annum from occupation of the 100th dwelling for a minimum of five years, or one year after occupation of the final dwelling, whichever is the longest duration.
- A Travel Plan Target Bond may be required to fund any remedial highway mitigation in the event there is a direct overarch between the Travel Plan and the highway modelling identified in the supporting Transport Assessment. As no documents have been submitted this requirement cannot be confirmed
- An optional contribution for SCC to design and produce Resident Travel Packs on behalf of the applicant.

Public Transport

Neither Beyton Road and Mount Road have any bus services at present; there are only routes going down New Road. The nearest existing stops to the site are at the Fox and Hounds Public House. Again, there isn't a reasonable footway link under the rail-bridge so we propose bus stops be introduced on New Road with pedestrian links to the site. These would again preferably be a 278 condition; approx. cost £6000.

However, if the site was fully accessible to buses, it is possible that the current routes could be diverted through rather than going straight up and down New Road and new residents will have a good transport infrastructure on their doorstep, therefore not heavily reliant on the private car. These routes are mostly commercially operated by Galloways (we contribute to the school time trips) so the first suggestion

would be for the developer to negotiate directly with them. For 200 homes, we would expect a contribution of around £200,000 to go towards service improvements.

If buses can go through the site then we would be needing at least one pair of stops with good walking access to the whole area. These would be to the usual standard of raised kerbs, shelters and screens (Total £40,000 to retro-fit).

Adoption of Roads as Public Highway

The Local Planning Authority recommends that developers of housing estates should enter into formal agreement with the Highway Authority under Section 38 of the Highways Act 1980 relating to the construction if it is proposed the development roads are to be considered for adoption by the highway authority. Also, we recommend that developers should enter into formal agreement under Section 278 for any works on the highway that are associated with the development.

Parking

Suffolk Guidance for Parking 2015 (SGP) provides the best practice guidance giving greater parking control on new developments and conforms to national policy. The main items to consider are:

dwellings of 2 or 3 bedrooms, a minimum of 2 car parking spaces

dwellings of 4+ bedrooms, a minimum of 3 car parking spaces

all should be provided with secure cycle spaces

More details can be found on Suffolk County Council website under planning and development advice.

Please note, guidance states that tandem parking is acceptable but 'allowance must be made for vehicle manoeuvring, in terms of space and highway safety, if tandem parking is proposed'. Therefore, if a tandem layout is proposed in front of a garage on a 4-bedroom dwelling, this is not acceptable.

Other points to be considered:

- Any means of frontage enclosure should be restricted to a height of 0.6m.
- For the gradient of any access to not be steeper than 1 in 20 for the first 5 metres, and then not steeper than 1 in 8 thereafter.
- The applicant should provide areas for the storage and presentation of bins.
- The applicant is reminded to ensure discharge of surface water from the development does not enter onto the highway. If permeable paving is proposed on this development, this type of road construction will not be adopted by SCC and sustainable drainage is to be provided to prevent the discharge of surface water from the private dwellings onto the highway.
- The Construction Management Plan is required to ensure safe working, minimal disturbance to the existing residents in the area and adverse impact on the public highway during the construction phase.

Conclusion

As the applicant is aware, there is strong local resistance to any further development in Thurston; especially regarding the capacity and safety of existing highway infrastructure and the concern on affect the approved 5 sites had will have on the existing facilities. If the applicant wishes to proceed with the application, we suggest that the modelling is very thorough, all the committed developments are considered. Early involvement with local politicians and the Parish Council would be encouraged and that the applicant considers the emerging Neighbourhood Plan

<https://www.midsuffolk.gov.uk/assets/Neighbourhood-Planning/Thurston-NP-Sub-Dec18.pdf>.

We are happy to discuss the items above further with the applicant to ensure all of the concerns are understood and workshop through any ideas/proposals.

The above informal advice is based on the information readily available and does not bind Suffolk County Council on its response to any future planning applications.

Yours Sincerely

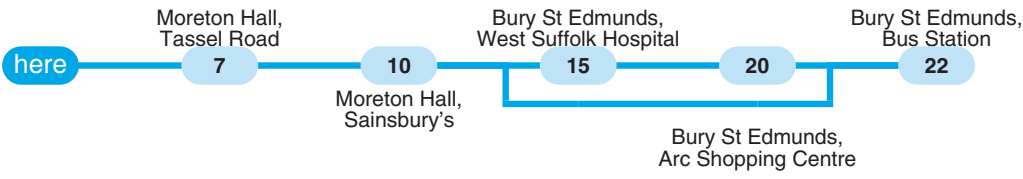
Samantha Harvey
Senior Development Management Engineer
Growth, Highways and Infrastructure

Appendix D

384 Stowmarket - Woolpit - Beyton - Thurston - Bury St Edmunds Galloway



385 Stowmarket - Woolpit - Norton - Thurston - Bury St Edmunds Galloway



The numbers circled indicate approximate timings in minutes from Thurston, Fox and Hounds

Mondays to Fridays Bus times as at 16th May 2019

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0709	385	1	0759	384	NSch	1059	384		1359	384	
0759	384	Sch	0939	385		1229	385		1529	385	2
									1659	384	Sch
									1814	384	1

Saturdays Bus times as at 18th May 2019

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0709	385	1	0939	385		1229	385		1529	385	2
0759	384		1059	384		1359	384		1659	384	
									1814	384	1

Sundays

No Service

Notes: NSch - Not Schooldays 1 - Sponsored by Suffolk County Council
 Sch - Schooldays only 2 - does not serve from Bury St Edmunds, West Suffolk Hospital to Bury St Edmunds, Arc Shopping Centre
 Times shown in italics are approximate times



Next bus times on your phone

the code for this stop is **sufgajga**

Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

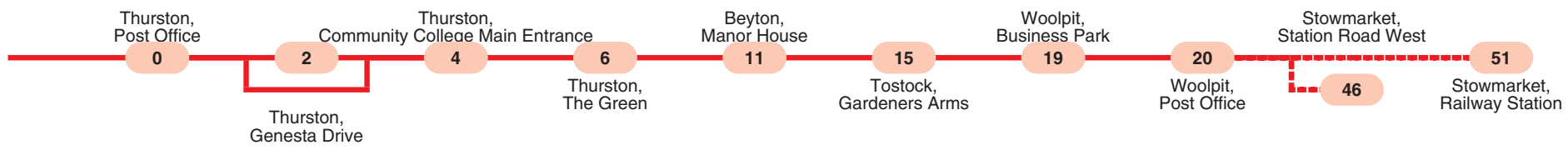
By SMS: text the stop code to 84268. Add a space and service number for just that service.

Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

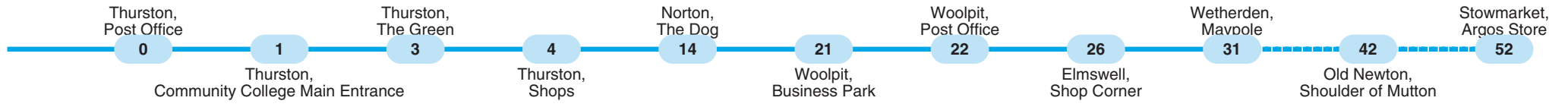
Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).

Bus departures from this stop Thurston opp Fox and Hounds

384 Bury St Edmunds - Thurston - Beyton - Woolpit - Stowmarket Galloway



385 Bury St Edmunds - Thurston - Norton - Woolpit - Stowmarket Galloway



The numbers circled indicate approximate timings in minutes from Thurston, Fox and Hounds

Mondays to Fridays Bus times as at 16th November 2018

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0823	384	2,3	1023	384		1153	385		1323	384	
									1453	385	
									1623	384	
									1753	384	5
									1858	385	1,4

Saturdays Bus times as at 17th November 2018

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
1023	384		1153	385		1323	384		1453	385	
									1623	384	
									1753	384	5
									1858	385	1,4

Sundays

No Service

Notes: 1 - Sponsored by Suffolk County Council
 2 - does not serve Thurston, Genesta Drive
 3 - terminates at Beyton, Manor House
 4 - terminates at Old Newton, Shoulder of Mutton
 5 - terminates at Stowmarket, Station Road West
 Times shown in italics are approximate times



Next bus times on your phone

the code for this stop is **sufgajdw**

Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

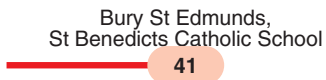
By SMS: text the stop code to 84268. Add a space and service number for just that service.

Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).

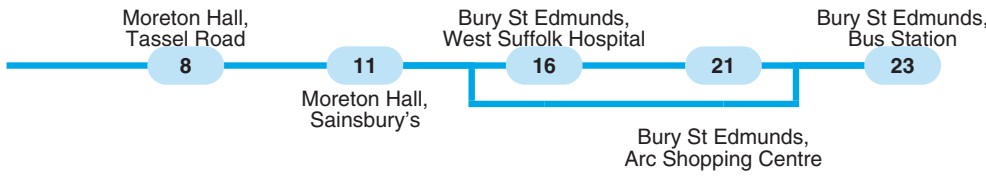
384 Stowmarket - Woolpit - Beyton - Thurston - Bury St Edmunds

Galloway



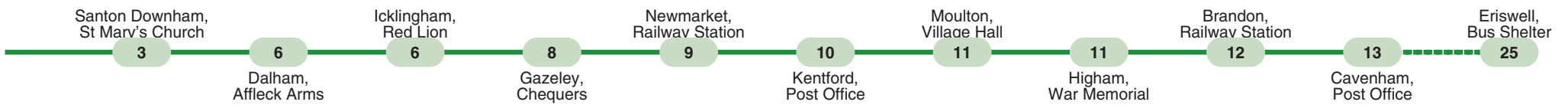
385 Stowmarket - Woolpit - Norton - Thurston - Bury St Edmunds

Galloway



FH1 Connecting Communities Forest Heath

The Voluntary Network



The numbers circled indicate approximate timings in minutes from Thurston, Post Office

Mondays to Fridays

Bus times as at 16th November 2018

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0700	FH1	B,D12,D13	0800	FH1	B,D12,D13	1000	FH1	B,D12,D13	1200	FH1	B,D12,D13	1359	384		1529	385	2	1700	FH1	B,D12,D13
0709	385	1	0900	FH1	B,D12,D13	1059	384		1229	385		1400	FH1	B,D12,D13	1600	FH1	B,D12,D13	1800	FH1	B,D12,D13
0759	384		0939	385		1100	FH1	B,D12,D13	1300	FH1	B,D12,D13	1500	FH1	B,D12,D13	1659	384		1814	384	1

Saturdays

Bus times as at 17th November 2018

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0700	FH1	B,D12,D13	0800	FH1	B,D12,D13	1000	FH1	B,D12,D13	1200	FH1	B,D12,D13	1359	384		1529	385	2	1700	FH1	B,D12,D13
0709	385	1	0900	FH1	B,D12,D13	1059	384		1229	385		1400	FH1	B,D12,D13	1600	FH1	B,D12,D13	1800	FH1	B,D12,D13
0759	384		0939	385		1100	FH1	B,D12,D13	1300	FH1	B,D12,D13	1500	FH1	B,D12,D13	1659	384		1814	384	1

Sundays

No Service

- Notes:** D12-Booking line open Monday - Friday 08:00 - 16:00.
 D13-Journeys must be booked in advance. Call 01638 664304.
 1 - Sponsored by Suffolk County Council
 B - Times are indicative only, actual journey time confirmed when booking.
 2 - does not serve from Bury St Edmunds, West Suffolk Hospital to Bury St Edmunds, Arc Shopping Centre



Next bus times on your phone

the code for this stop is **sufgajgj**

Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

By SMS: text the stop code to 84268. Add a space and service number for just that service.

Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

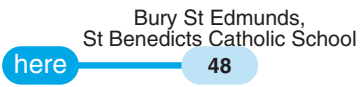
Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).

Bus departures from this stop Thurston opp Community College Main Entrance

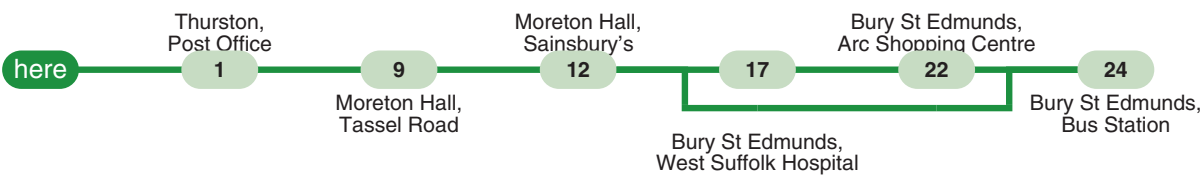
304 Diss - Stanton - Bury St Edmunds Simonds



384 Stowmarket - Woolpit - Beyton - Thurston - Bury St Edmunds Galloway



385 Stowmarket - Woolpit - Norton - Thurston - Bury St Edmunds Galloway



The numbers circled indicate approximate timings in minutes from Thurston, Community College Main Entrance

Mondays to Fridays Bus times as at 20th May 2019

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0708	385	1	0752	384	NSch	1052	384		1352	384	
0752	384	Sch	0938	385		1228	385		1528	385	2
									1652	384	Sch
									1807	384	1

Saturdays Bus times as at 25th May 2019

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0708	385	1	0938	385		1228	385		1528	385	2
0752	384		1052	384		1352	384		1652	384	
									1807	384	1

Sundays

No Service

Notes: NSch - Not Schooldays 1 - Sponsored by Suffolk County Council
 Sch - Schooldays only 2 - does not serve from Bury St Edmunds, West Suffolk Hospital to Bury St Edmunds, Arc Shopping Centre
 Times shown in italics are approximate times



Next bus times on your phone

the code for this stop is **sufgajpd**

Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

By SMS: text the stop code to 84268. Add a space and service number for just that service.

Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).



Late Transport Timetable and Operating Instructions

Route No: Bus 1 – Revised September 2014

Days: Tuesdays, Wednesdays and Thursdays

1650 Thurston Community College, Beyton Sixth Campus

1700 Thurston Community College

As required to the following villages:

Great Barton, Conyers Green Crossroads
Livermere, Council Houses
Ampton, (stop on request)
Timworth, (stop on request)
Ingham, Cadogen Arms PH
Gt Livermere, (stop on request)
Barnham, Bus Shelter and Barnham RAF Houses
Euston, Long Spinney
Fakenham Magna, Bus Stop
Sapiston, Bus Shelter
Honnington, The Fox PH
Ixworth Thorpe, Bus Shelter (turn around)
RAF Honington, Post Office
Troston, The Bull PH



Late Transport Timetable and Operating Instructions

Route No: Bus 2 – Revised September 2018

Days: Tuesdays, Wednesdays and Thursdays

1650 Thurston Community College, Beyton Sixth Campus

1700 Thurston Community College

As required to the following villages:

Ixworth, Post Office

Bardwell, The Green

Stanton, Memorial

Barningham, Post Office (Shop)

Coney Weston, The Swan PH

Hopton, Crossroads, Shop Corner

Thelnetham, The Church

Botesdale, The Church

Market Weston, The Church

Hepworth, Bus Shelter

Hindercley, The Church

Wattisfield, The Church

Walsham Le Willows, Town House Lane and The Primary School

Langham, (stop on request)

Badwell Ash, Primary School

Hunston, Telephone Box

Stowlangtoft, The Street, Kiln Lane



Late Transport Timetable and Operating Instructions

Route No: Bus 3 – Revised January 2015

Days: Tuesdays, Wednesdays and Thursdays

1700 Thurston Community College

As required to the following villages:

Beyton, The Green, Bus Shelter

Beyton Sixth Campus (1710/1715)

Tostock, Gardiners Arms PH

Woolpit, The Church and Primary School

Elmswell, Shop Corner and Cooks Road

Wetherden, Maypole PH

Long Thurlow, Phone Box

Great Ashfield, Council Houses

Norton, Prospect Road and The Dog PH

Stowlongtoft, Spinney Crossroads

Pakenham, Bus Shelter



Late Transport Timetable and Operating Instructions

Route No: Bus 4 – Revised January 2015

Days: Tuesdays, Wednesdays and Thursdays

1650 Thurston Community College, Beyton Sixth Campus

1700 Thurston Community College

As required to the following villages:

Rougham, Mouse Lane and Bennett Arms PH

Hesset, Six Bells PH

Rushbrooke Village, (stop on request)

Whelnetham, (stop on request)

Felsham, The Green

Drinkstone, The Church and Cross Street

Rattlesden, Brewers Arms PH

Buxhall, (stop on request)

Gedding, Bus Shelter

Brettenham, Telephone Box

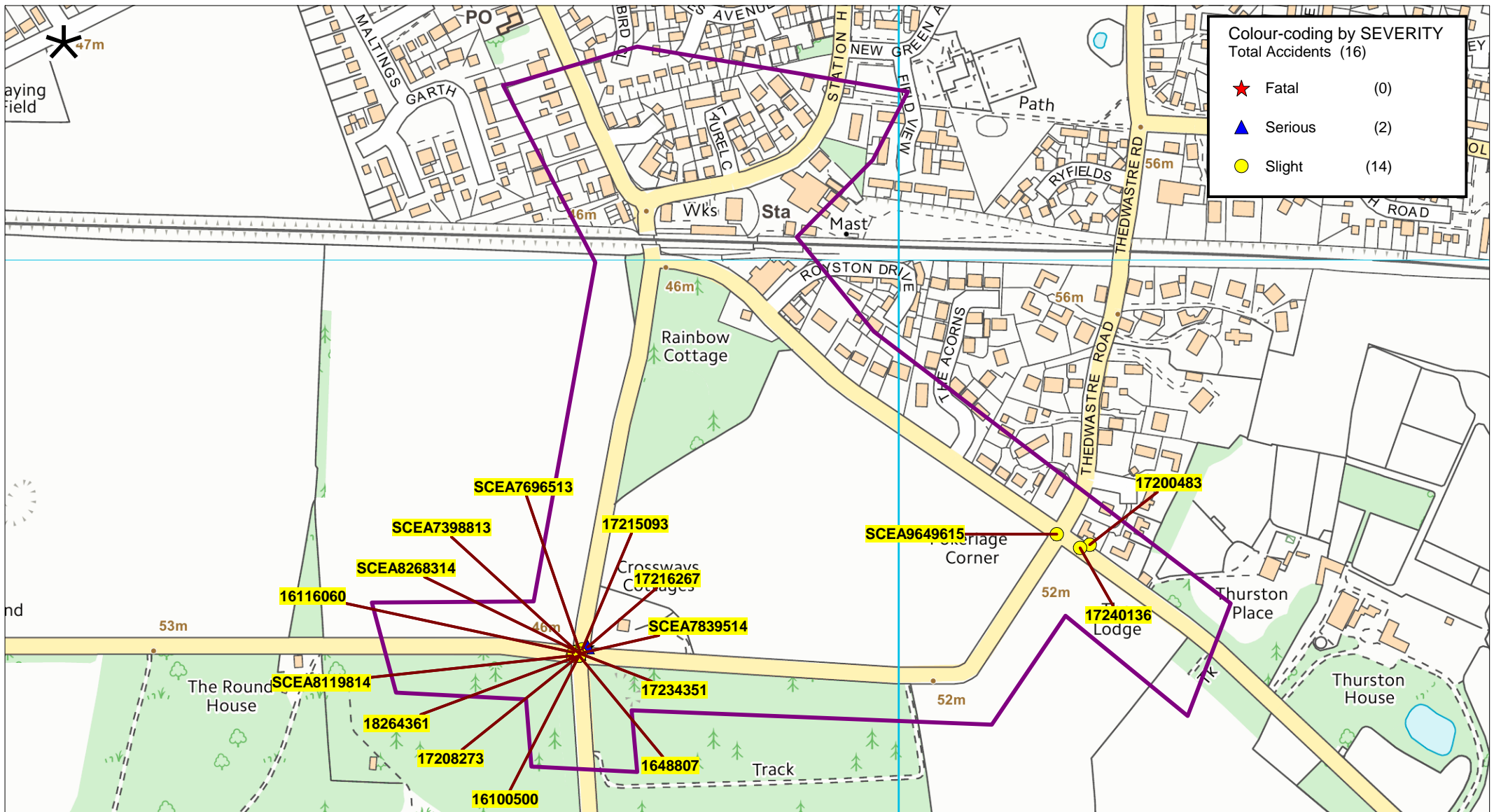
Thorpe Morieux, The Bull PH

Cockfield Green, Great Green

Bradfield St George, Oakley Ley, Holly Bush Corner and The Church

Bradfield St Clare, The Water Tower and Telephone Box

Appendix E



ECase_Thurston_010613-010618_Location Plan

Selected Range of Accidents between dates 01/06/2013 and 01/06/2018
Selected using Manual Selection

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Suffolk County Council Licence No. 100023395

SCALE	1 : 5000
DATE	11/09/2018
DRAWING No.	
DRAWN BY	

Appendix F

High Level Assessment

Sustainability theme/ Objectives	Assessment criteria	Commentary on criteria	13. South of Thurston - south of Beyton Road
			11.79 ha
Availability	Is the site available/has it been put forward by the landowner or a developer?		Yes
1/Env To preserve and enhance the natural beauty of Thurston in terms of its geology, landform, soils, water systems and climate	Is the site at high risk from fluvial flooding?	Sites where at least 75% of the area is in flood zone 3 should be eliminated	No
	Is the site at high risk from surface water flooding?	Sites where at least 75% of the area is at high risk of surface water flooding should be eliminated	No
3/Env To protect the landscape setting of Thurston village through use of land with a low landscape impact and by focusing development on previously developed land	- Is the site in open countryside/will it encroach unacceptably on open countryside? - Will the site have a detrimental impact on the landscape?	Sites that clearly sit in open countryside and are likely to have a detrimental impact on the landscape should be eliminated	Site is well surrounded by mature tree cover on the east, west and south sides so any development would be well screened. Any development would not encroach significantly on the countryside.
6/Env To protect the identity and local distinctiveness of Thurston as a rural settlement and to enhance the village streetscape.	- What is the relationship of the site to the settlement?	Sites that are clearly separate from the settlement boundary will be eliminated	Site is adjacent to settlement boundary

9/Soc To improve safe movement around the parish and to key service centres outside the parish by a range of modes 10/Soc To ensure that the community has adequate access to the key services it needs, including health facilities, convenience shops, and schools	- Does a site, by virtue of its location and scale, have a severe impact on the existing highway network?	Sites that are likely to have a severe detrimental impact on the highway network should be eliminated	Whilst there is likely to be an impact, this is unlikely to be severe
	- Is the site within a desirable or acceptable walking distance of the main shops and services in the village?	Sites that are more than 50% further than the preferred maximum walking distance from shops and services in the village should be eliminated	Yes
Overall assessment			The location is not considered to have any fundamental issues relating to its sustainability so should be subjected to a more detailed assessment

Assessment

Should the Overall Assessment state that there is a fundamental issue preventing sustainable development, the site will not be submitted for detailed assessment and the site will not be considered further.

Notes

* This is based on the following guidance provided by the Institute of Highways and Transportation:

	Facilities, e.g shops, bus stop	Commuting / school	Other
--	---------------------------------	--------------------	-------

	bus stop.		
Desirable	200m	500m	400m
Acceptable	400m	1000m	800m
Preferred maximum	800m	2000m	1200m

Source: Guidelines for Providing for Journeys on Foot (IHT 2000)

Appendix G
(Available on CD upon request)

Appendix H

2018 Base Flows AM

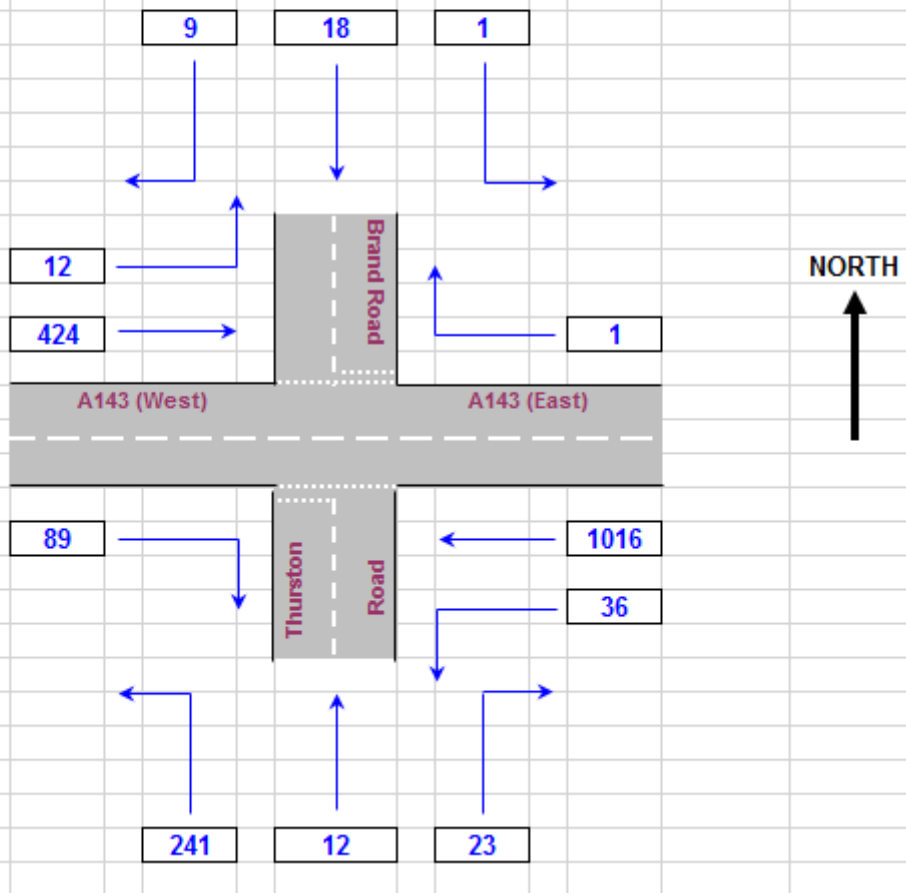
Junction: (8) Brand Road / A143 / Thurston Road

Vehicle Class: ALL CLASSES

Start Time: 1) 0745

End Time: 1) 0845

Peak Hour



2018 Base Flows PM

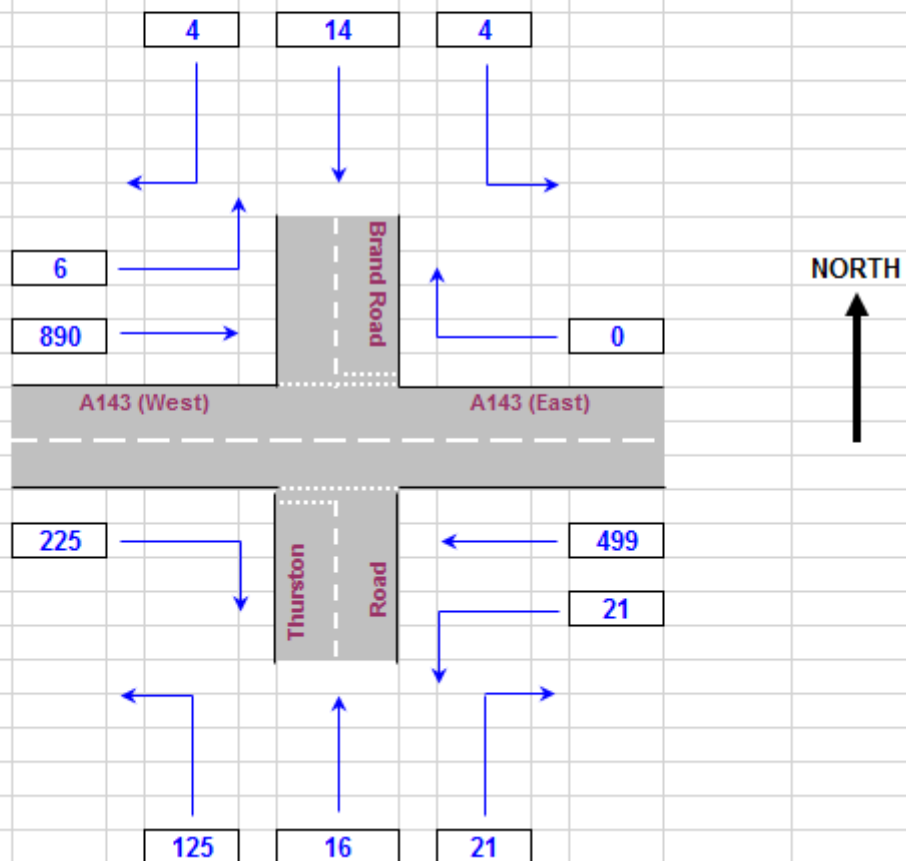
Junction: (8) Brand Road / A143 / Thurston Road

Vehicle Class: ALL CLASSES

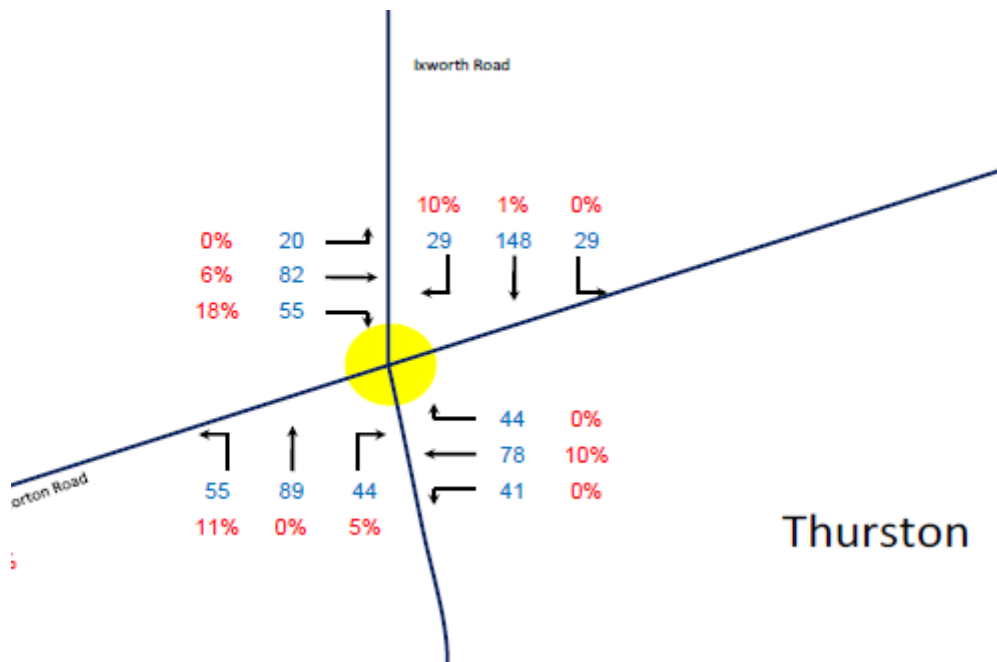
Start Time: 2) 1645

End Time: 2) 1745

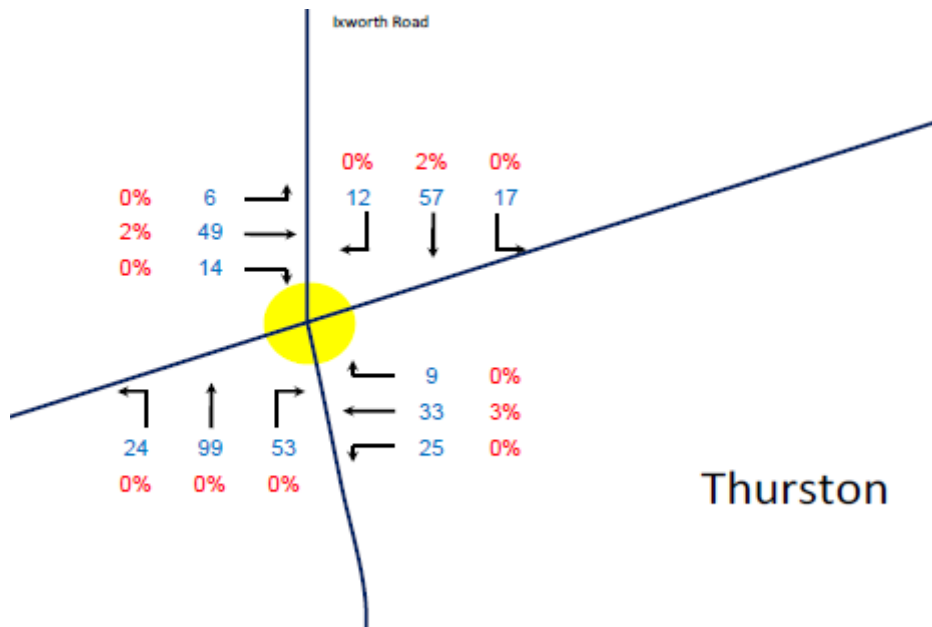
Peak Hour



Station Hill/Norton Road AM 2017



Station Hill/Norton Road PM 2017



Appendix I

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J2 Station Hill (Mini) Existing.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 18/06/2019 09:11:55

- »2024 Base, AM
- »2024 Base, PM
- »2024 Base + Committed, AM
- »2024 Base + Committed , PM
- »2024 Base + Committed + dev, AM
- »2024 Base + Committed + dev, PM
- »2024 Base + Gladman Sensitivity, AM
- »2024 Base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
1 - Barton Road North West	0.8	9.84	0.46	A	0.8	10.74	0.44	B
2 - Station Hill	0.9	10.27	0.47	B	0.4	7.17	0.30	A
3 - New Road South	1.0	9.18	0.50	A	3.9	22.88	0.81	C
2024 Base + Committed								
1 - Barton Road North West	1.2	11.92	0.55	B	1.1	13.84	0.52	B
2 - Station Hill	2.6	21.24	0.73	C	0.6	8.43	0.40	A
3 - New Road South	1.3	10.55	0.57	B	18.3	84.83	0.99	F
2024 Base + Committed + dev								
1 - Barton Road North West	1.2	12.13	0.55	B	1.2	14.42	0.54	B
2 - Station Hill	2.7	21.46	0.74	C	0.7	8.70	0.41	A
3 - New Road South	1.4	11.21	0.59	B	20.1	91.55	1.00	F
2024 Base + Gladman Sensitivity								
1 - Barton Road North West	1.3	12.47	0.56	B	1.2	15.12	0.55	C
2 - Station Hill	4.6	33.30	0.84	D	0.8	9.27	0.44	A
3 - New Road South	1.5	11.70	0.61	B	30.9	128.60	1.04	F

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	Junction 2 Mini Roundabout Existing
Location	Thurston
Site number	J2
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J2
Client	
Jobnumber	X601
Enumerator	CANNON\DWR
Description	Junction geometry based on Aecom generated 5/9/17

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base + Committed	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base + Committed	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + Committed + dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Committed + dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 Base, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	9.72	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Barton Road North West	
2	Station Hill	
3	New Road South	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Barton Road North West	2.80	2.80	3.29	1.2	13.68	12.12	0.0	
2 - Station Hill	2.80	2.80	4.03	3.5	12.93	11.05	0.0	
3 - New Road South	2.60	2.60	3.67	1.9	14.03	12.53	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Barton Road North West	0.596	829
2 - Station Hill	0.608	871
3 - New Road South	0.597	821

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 segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	282	100.000
2 - Station Hill		ONE HOUR	✓	284	100.000
3 - New Road South		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	268
	2 - Station Hill	16	0	268
	3 - New Road South	158	203	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.46	9.84	0.8	A	259	388
2 - Station Hill	0.47	10.27	0.9	B	260	390
3 - New Road South	0.50	9.18	1.0	A	331	497

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	152	720	0.295	210	130	0.0	0.4	7.048	A
2 - Station Hill	214	53	200	719	0.297	212	162	0.0	0.4	7.072	A
3 - New Road South	272	68	12	793	0.343	270	400	0.0	0.5	6.857	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	253	63	182	701	0.361	253	156	0.4	0.6	8.017	A
2 - Station Hill	255	64	240	695	0.367	254	194	0.4	0.6	8.152	A
3 - New Road South	325	81	14	791	0.410	324	481	0.5	0.7	7.688	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	310	78	223	676	0.459	309	191	0.6	0.8	9.771	A
2 - Station Hill	312	78	294	663	0.471	311	238	0.6	0.9	10.186	B
3 - New Road South	397	99	17	790	0.503	396	588	0.7	1.0	9.123	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	310	78	223	676	0.459	310	191	0.8	0.8	9.838	A
2 - Station Hill	312	78	295	663	0.471	312	239	0.9	0.9	10.270	B
3 - New Road South	397	99	17	790	0.503	397	590	1.0	1.0	9.180	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	253	63	183	700	0.362	254	157	0.8	0.6	8.087	A
2 - Station Hill	255	64	242	694	0.367	256	196	0.9	0.6	8.238	A
3 - New Road South	325	81	14	791	0.410	326	484	1.0	0.7	7.751	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	153	719	0.295	213	131	0.6	0.4	7.122	A
2 - Station Hill	214	53	202	718	0.297	214	164	0.6	0.4	7.152	A
3 - New Road South	272	68	12	793	0.343	272	405	0.7	0.5	6.931	A

2024 Base, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	16.98	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	236	100.000
2 - Station Hill		ONE HOUR	✓	199	100.000
3 - New Road South		ONE HOUR	✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	194
	2 - Station Hill	24	0	175
	3 - New Road South	240	347	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.44	10.74	0.8	B	217	325
2 - Station Hill	0.30	7.17	0.4	A	182	273
3 - New Road South	0.81	22.88	3.9	C	539	808

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	178	44	258	668	0.266	176	196	0.0	0.4	7.296	A
2 - Station Hill	149	37	145	762	0.196	148	290	0.0	0.2	5.854	A
3 - New Road South	442	110	18	806	0.548	437	276	0.0	1.2	9.647	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	310	637	0.333	212	236	0.4	0.5	8.446	A
2 - Station Hill	178	45	174	744	0.240	178	348	0.2	0.3	6.357	A
3 - New Road South	528	132	21	804	0.657	525	331	1.2	1.8	12.795	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	260	65	378	597	0.435	259	287	0.5	0.8	10.605	B
2 - Station Hill	219	55	213	721	0.303	218	424	0.3	0.4	7.153	A
3 - New Road South	646	162	26	801	0.807	639	405	1.8	3.7	21.220	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	260	65	382	595	0.437	260	290	0.8	0.8	10.745	B
2 - Station Hill	219	55	214	721	0.303	219	428	0.4	0.4	7.171	A
3 - New Road South	646	162	26	801	0.807	646	406	3.7	3.9	22.883	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	317	634	0.335	213	240	0.8	0.5	8.585	A
2 - Station Hill	178	45	175	743	0.240	179	354	0.4	0.3	6.381	A
3 - New Road South	528	132	21	804	0.657	535	333	3.9	2.0	13.790	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	178	44	263	666	0.267	178	200	0.5	0.4	7.394	A
2 - Station Hill	149	37	147	761	0.197	150	295	0.3	0.2	5.895	A
3 - New Road South	442	110	18	806	0.549	445	279	2.0	1.2	10.058	B

2024 Base + Committed, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	14.85	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base + Committed	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	331	100.000
2 - Station Hill		ONE HOUR	✓	420	100.000
3 - New Road South		ONE HOUR	✓	408	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	317
	2 - Station Hill	16	0	404
	3 - New Road South	190	218	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.55	11.92	1.2	B	304	456
2 - Station Hill	0.73	21.24	2.6	C	385	578
3 - New Road South	0.57	10.55	1.3	B	374	562

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	249	62	163	713	0.349	247	154	0.0	0.5	7.692	A
2 - Station Hill	316	79	237	697	0.453	313	173	0.0	0.8	9.289	A
3 - New Road South	307	77	12	793	0.387	305	538	0.0	0.6	7.330	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	298	74	195	693	0.429	297	184	0.5	0.7	9.060	A
2 - Station Hill	377	94	284	669	0.564	376	208	0.8	1.3	12.201	B
3 - New Road South	367	92	14	792	0.463	366	646	0.6	0.8	8.428	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	364	91	239	667	0.547	363	225	0.7	1.2	11.771	B
2 - Station Hill	462	116	347	631	0.732	457	254	1.3	2.5	20.105	C
3 - New Road South	449	112	17	790	0.568	447	787	0.8	1.3	10.447	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	364	91	240	666	0.547	364	226	1.2	1.2	11.921	B
2 - Station Hill	462	116	349	630	0.733	462	255	2.5	2.6	21.244	C
3 - New Road South	449	112	17	790	0.568	449	793	1.3	1.3	10.551	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	298	74	197	692	0.430	299	186	1.2	0.8	9.197	A
2 - Station Hill	377	94	287	667	0.565	382	210	2.6	1.3	12.857	B
3 - New Road South	367	92	14	792	0.463	368	655	1.3	0.9	8.537	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	249	62	165	712	0.350	250	155	0.8	0.5	7.809	A
2 - Station Hill	316	79	240	695	0.454	318	175	1.3	0.8	9.585	A
3 - New Road South	307	77	12	793	0.387	308	546	0.9	0.6	7.433	A

2024 Base + Committed , 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	54.09	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + Committed	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	256	100.000
2 - Station Hill		ONE HOUR	✓	254	100.000
3 - New Road South		ONE HOUR	✓	721	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	214
	2 - Station Hill	24	0	230
	3 - New Road South	283	438	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.52	13.84	1.1	B	235	352
2 - Station Hill	0.40	8.43	0.6	A	233	350
3 - New Road South	0.99	84.83	18.3	F	662	992

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	193	48	325	628	0.307	191	228	0.0	0.4	8.196	A
2 - Station Hill	191	48	160	752	0.254	190	356	0.0	0.3	6.386	A
3 - New Road South	543	136	18	805	0.674	535	332	0.0	2.0	12.958	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	230	58	389	590	0.390	229	273	0.4	0.6	9.961	A
2 - Station Hill	228	57	192	733	0.311	228	427	0.3	0.4	7.120	A
3 - New Road South	648	162	22	803	0.807	641	398	2.0	3.7	21.263	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	282	70	459	549	0.514	280	323	0.6	1.0	13.339	B
2 - Station Hill	280	70	234	708	0.395	279	505	0.4	0.6	8.380	A
3 - New Road South	794	198	26	800	0.992	755	487	3.7	13.4	54.654	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	282	70	470	542	0.520	282	330	1.0	1.1	13.836	B
2 - Station Hill	280	70	235	707	0.396	280	517	0.6	0.6	8.425	A
3 - New Road South	794	198	26	800	0.992	774	489	13.4	18.3	84.833	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	230	58	426	568	0.405	232	297	1.1	0.7	10.754	B
2 - Station Hill	228	57	194	732	0.312	229	464	0.6	0.5	7.169	A
3 - New Road South	648	162	22	803	0.807	702	401	18.3	4.8	44.649	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	193	48	336	622	0.310	194	235	0.7	0.5	8.428	A
2 - Station Hill	191	48	162	751	0.255	192	368	0.5	0.3	6.444	A
3 - New Road South	543	136	18	805	0.674	553	335	4.8	2.2	14.842	B

2024 Base + Committed + dev, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	15.15	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Committed + dev	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	335	100.000
2 - Station Hill		ONE HOUR	✓	421	100.000
3 - New Road South		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	321
	2 - Station Hill	16	0	405
	3 - New Road South	204	222	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.55	12.13	1.2	B	307	461
2 - Station Hill	0.74	21.46	2.7	C	386	579
3 - New Road South	0.59	11.21	1.4	B	391	586

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	166	713	0.353	250	164	0.0	0.5	7.734	A
2 - Station Hill	317	79	240	697	0.454	313	176	0.0	0.8	9.305	A
3 - New Road South	321	80	12	793	0.404	318	541	0.0	0.7	7.535	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	199	693	0.435	300	197	0.5	0.8	9.145	A
2 - Station Hill	378	95	288	669	0.566	376	212	0.8	1.3	12.246	B
3 - New Road South	383	96	14	792	0.484	382	650	0.7	0.9	8.761	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	243	666	0.554	367	241	0.8	1.2	11.969	B
2 - Station Hill	463	116	352	630	0.735	458	259	1.3	2.6	20.280	C
3 - New Road South	469	117	17	790	0.594	467	793	0.9	1.4	11.073	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	244	665	0.554	369	242	1.2	1.2	12.131	B
2 - Station Hill	463	116	353	629	0.736	463	260	2.6	2.7	21.458	C
3 - New Road South	469	117	17	790	0.594	469	799	1.4	1.4	11.206	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	201	692	0.435	303	199	1.2	0.8	9.292	A
2 - Station Hill	378	95	290	667	0.567	383	213	2.7	1.3	12.921	B
3 - New Road South	383	96	14	792	0.484	385	659	1.4	1.0	8.892	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	168	712	0.354	253	166	0.8	0.6	7.857	A
2 - Station Hill	317	79	243	695	0.455	319	178	1.3	0.9	9.607	A
3 - New Road South	321	80	12	793	0.404	322	549	1.0	0.7	7.658	A

2024 Base + Committed + dev, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	57.77	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Committed + dev	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	268	100.000
2 - Station Hill		ONE HOUR	✓	258	100.000
3 - New Road South		ONE HOUR	✓	728	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	226
	2 - Station Hill	24	0	234
	3 - New Road South	288	440	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.54	14.42	1.2	B	246	369
2 - Station Hill	0.41	8.70	0.7	A	237	355
3 - New Road South	1.00	91.55	20.1	F	668	1002

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	326	630	0.320	200	232	0.0	0.5	8.329	A
2 - Station Hill	194	49	169	745	0.261	193	358	0.0	0.3	6.501	A
3 - New Road South	548	137	18	806	0.680	540	343	0.0	2.0	13.162	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	391	592	0.407	240	277	0.5	0.7	10.213	B
2 - Station Hill	232	58	202	725	0.320	231	429	0.3	0.5	7.287	A
3 - New Road South	654	164	22	804	0.814	647	412	2.0	3.9	21.906	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	459	551	0.535	293	327	0.7	1.1	13.867	B
2 - Station Hill	284	71	247	698	0.407	283	505	0.5	0.7	8.650	A
3 - New Road South	802	200	26	801	1.001	760	504	3.9	14.4	57.490	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	471	544	0.542	295	334	1.1	1.2	14.418	B
2 - Station Hill	284	71	249	698	0.407	284	517	0.7	0.7	8.701	A
3 - New Road South	802	200	26	801	1.001	779	506	14.4	20.1	91.546	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	432	567	0.425	243	304	1.2	0.8	11.136	B
2 - Station Hill	232	58	205	724	0.320	233	470	0.7	0.5	7.341	A
3 - New Road South	654	164	22	804	0.814	714	416	20.1	5.1	50.743	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	338	623	0.324	203	240	0.8	0.5	8.585	A
2 - Station Hill	194	49	171	744	0.261	195	370	0.5	0.4	6.561	A
3 - New Road South	548	137	18	806	0.680	560	348	5.1	2.2	15.253	C

2024 Base + Gladman Sensitivity, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	20.22	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	335	100.000
2 - Station Hill		ONE HOUR	✓	478	100.000
3 - New Road South		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1 - Barton Road North West	2 - Station Hill	3 - New Road South
From			
1 - Barton Road North West	0	14	321
2 - Station Hill	16	0	462
3 - New Road South	204	234	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	1 - Barton Road North West	2 - Station Hill	3 - New Road South
From			
1 - Barton Road North West	0	6	2
2 - Station Hill	0	0	4
3 - New Road South	1	4	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)
1 - Barton Road North West	0.56	12.47	1.3	B	307	461
2 - Station Hill	0.84	33.30	4.6	D	438	658
3 - New Road South	0.61	11.70	1.5	B	402	603

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	175	708	0.356	250	164	0.0	0.5	7.836	A
2 - Station Hill	360	90	240	697	0.516	355	185	0.0	1.0	10.416	B
3 - New Road South	330	82	12	793	0.416	327	583	0.0	0.7	7.683	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	210	687	0.439	300	197	0.5	0.8	9.291	A
2 - Station Hill	429	107	288	668	0.642	427	222	1.0	1.7	14.721	B
3 - New Road South	394	98	14	791	0.498	393	700	0.7	1.0	9.002	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	256	658	0.561	367	241	0.8	1.2	12.291	B
2 - Station Hill	526	131	352	630	0.834	516	272	1.7	4.2	29.155	D
3 - New Road South	482	121	17	790	0.611	480	851	1.0	1.5	11.540	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	258	657	0.561	369	242	1.2	1.3	12.469	B
2 - Station Hill	526	131	353	629	0.836	525	273	4.2	4.6	33.303	D
3 - New Road South	482	121	17	790	0.611	482	861	1.5	1.5	11.699	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	212	685	0.439	303	199	1.3	0.8	9.457	A
2 - Station Hill	429	107	290	667	0.644	440	224	4.6	1.9	16.571	C
3 - New Road South	394	98	14	791	0.498	396	716	1.5	1.0	9.155	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	177	707	0.357	253	166	0.8	0.6	7.954	A
2 - Station Hill	360	90	243	695	0.517	363	187	1.9	1.1	10.928	B
3 - New Road South	330	82	12	793	0.416	331	593	1.0	0.7	7.817	A

2024 Base + Gladman Sensitivity, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	79.31	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	268	100.000
2 - Station Hill		ONE HOUR	✓	281	100.000
3 - New Road South		ONE HOUR	✓	758	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	226
	2 - Station Hill	24	0	257
	3 - New Road South	288	470	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.55	15.12	1.2	C	246	369
2 - Station Hill	0.44	9.27	0.8	A	258	387
3 - New Road South	1.04	128.60	30.9	F	696	1043

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	348	617	0.327	200	231	0.0	0.5	8.585	A
2 - Station Hill	212	53	169	745	0.284	210	379	0.0	0.4	6.709	A
3 - New Road South	571	143	18	806	0.708	561	361	0.0	2.3	14.237	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	416	577	0.418	240	277	0.5	0.7	10.669	B
2 - Station Hill	253	63	202	725	0.348	252	454	0.4	0.5	7.600	A
3 - New Road South	681	170	22	804	0.848	672	433	2.3	4.7	25.432	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	480	539	0.548	293	320	0.7	1.2	14.548	B
2 - Station Hill	309	77	247	698	0.443	308	526	0.5	0.8	9.206	A
3 - New Road South	835	209	26	801	1.042	774	529	4.7	19.9	72.527	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	490	533	0.554	295	327	1.2	1.2	15.125	C
2 - Station Hill	309	77	249	698	0.444	309	536	0.8	0.8	9.273	A
3 - New Road South	835	209	26	801	1.042	791	532	19.9	30.9	128.602	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	480	539	0.447	242	316	1.2	0.8	12.208	B
2 - Station Hill	253	63	204	724	0.349	254	518	0.8	0.5	7.672	A
3 - New Road South	681	170	22	804	0.848	773	436	30.9	7.9	95.602	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	367	606	0.333	203	243	0.8	0.5	8.962	A
2 - Station Hill	212	53	171	744	0.285	212	399	0.5	0.4	6.783	A
3 - New Road South	571	143	18	806	0.708	592	365	7.9	2.6	18.316	C

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: J2 Station Hill (Mini) Proposed Geometry.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 18/06/2019 09:14:20

- »2024 Base, AM
- »2024 Base, PM
- »2024 Base + Committed, AM
- »2024 Base + Committed , PM
- »2024 Base + Committed + dev, AM
- »2024 Base + Committed + dev, PM
- »2024 Base + Gladman Sensitivity, AM
- »2024 Base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
1 - Barton Road North West	0.7	7.96	0.41	A	0.6	8.62	0.38	A
2 - Station Hill	1.0	11.16	0.49	B	0.5	7.59	0.32	A
3 - New Road South	0.7	6.71	0.43	A	2.1	11.91	0.68	B
2024 Base + Committed								
1 - Barton Road North West	0.9	9.28	0.48	A	0.8	10.81	0.46	B
2 - Station Hill	3.1	25.42	0.77	D	0.7	9.01	0.41	A
3 - New Road South	0.9	7.41	0.48	A	4.8	22.88	0.84	C
2024 Base + Committed + dev								
1 - Barton Road North West	1.0	9.40	0.49	A	0.9	11.20	0.48	B
2 - Station Hill	3.2	25.73	0.77	D	0.7	9.33	0.42	A
3 - New Road South	1.0	7.73	0.50	A	5.1	23.88	0.85	C
2024 Base + Gladman Sensitivity								
1 - Barton Road North West	1.0	9.62	0.50	A	1.0	11.95	0.50	B
2 - Station Hill	5.9	43.58	0.88	E	0.8	9.99	0.46	A
3 - New Road South	1.1	7.97	0.52	A	6.5	29.85	0.88	D

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	Junction 2 Mini Roundabout Proposed
Location	Thurston
Site number	J2
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J2
Client	
Jobnumber	X601
Enumerator	CANNON\DWR
Description	Proposed Geomety - bridge improvement drawing opt 2

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base + Committed	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base + Committed	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + Committed + dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Committed + dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 Base, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	8.46	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Barton Road North West	
2	Station Hill	
3	New Road South	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Barton Road North West	3.05	3.05	4.51	5.3	14.89	12.42	0.0	
2 - Station Hill	2.80	2.80	4.82	3.5	14.99	12.59	0.0	
3 - New Road South	3.15	2.90	4.40	10.0	16.60	15.05	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Barton Road North West	0.628	925
2 - Station Hill	0.617	844
3 - New Road South	0.650	970

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 segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	282	100.000
2 - Station Hill		ONE HOUR	✓	284	100.000
3 - New Road South		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	268
	2 - Station Hill	16	0	268
	3 - New Road South	158	203	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.41	7.96	0.7	A	259	388
2 - Station Hill	0.49	11.16	1.0	B	260	390
3 - New Road South	0.43	6.71	0.7	A	331	497

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	152	808	0.262	211	130	0.0	0.4	6.011	A
2 - Station Hill	214	53	200	692	0.309	212	162	0.0	0.4	7.470	A
3 - New Road South	272	68	12	938	0.290	270	401	0.0	0.4	5.381	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	253	63	182	789	0.321	253	156	0.4	0.5	6.709	A
2 - Station Hill	255	64	240	668	0.382	254	195	0.4	0.6	8.695	A
3 - New Road South	325	81	14	936	0.347	324	481	0.4	0.5	5.877	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	310	78	223	763	0.407	309	191	0.5	0.7	7.923	A
2 - Station Hill	312	78	294	635	0.492	311	238	0.6	0.9	11.058	B
3 - New Road South	397	99	17	934	0.426	397	588	0.5	0.7	6.699	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	310	78	223	763	0.407	310	191	0.7	0.7	7.957	A
2 - Station Hill	312	78	295	635	0.492	312	239	0.9	1.0	11.164	B
3 - New Road South	397	99	17	934	0.426	397	590	0.7	0.7	6.709	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	253	63	183	788	0.321	254	157	0.7	0.5	6.745	A
2 - Station Hill	255	64	242	667	0.382	256	195	1.0	0.6	8.795	A
3 - New Road South	325	81	14	936	0.347	325	484	0.7	0.5	5.905	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	153	808	0.263	213	131	0.5	0.4	6.054	A
2 - Station Hill	214	53	202	691	0.309	214	163	0.6	0.5	7.562	A
3 - New Road South	272	68	12	937	0.290	272	405	0.5	0.4	5.417	A

2024 Base, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	10.30	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	236	100.000
2 - Station Hill		ONE HOUR	✓	199	100.000
3 - New Road South		ONE HOUR	✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	194
	2 - Station Hill	24	0	175
	3 - New Road South	240	347	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.38	8.62	0.6	A	217	325
2 - Station Hill	0.32	7.59	0.5	A	182	273
3 - New Road South	0.68	11.91	2.1	B	539	808

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	178	44	259	755	0.235	176	197	0.0	0.3	6.214	A
2 - Station Hill	149	37	145	734	0.203	148	291	0.0	0.3	6.133	A
3 - New Road South	442	110	18	953	0.464	439	276	0.0	0.9	6.948	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	311	722	0.294	212	236	0.3	0.4	7.049	A
2 - Station Hill	178	45	174	717	0.249	178	349	0.3	0.3	6.680	A
3 - New Road South	528	132	21	951	0.555	526	331	0.9	1.2	8.445	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	260	65	380	679	0.383	259	289	0.4	0.6	8.565	A
2 - Station Hill	219	55	213	693	0.315	218	426	0.3	0.5	7.567	A
3 - New Road South	646	162	26	948	0.682	643	405	1.2	2.1	11.671	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	260	65	382	677	0.384	260	290	0.6	0.6	8.619	A
2 - Station Hill	219	55	214	693	0.315	219	428	0.5	0.5	7.588	A
3 - New Road South	646	162	26	948	0.682	646	406	2.1	2.1	11.913	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	212	53	314	720	0.295	213	238	0.6	0.4	7.106	A
2 - Station Hill	178	45	175	716	0.249	179	352	0.5	0.3	6.707	A
3 - New Road South	528	132	21	951	0.555	531	333	2.1	1.3	8.641	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	178	44	262	753	0.236	178	199	0.4	0.3	6.271	A
2 - Station Hill	149	37	146	734	0.204	150	294	0.3	0.3	6.168	A
3 - New Road South	442	110	18	953	0.464	444	278	1.3	0.9	7.087	A

2024 Base + Committed, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	14.52	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base + Committed	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	331	100.000
2 - Station Hill		ONE HOUR	✓	420	100.000
3 - New Road South		ONE HOUR	✓	408	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	317
	2 - Station Hill	16	0	404
	3 - New Road South	190	218	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.48	9.28	0.9	A	304	456
2 - Station Hill	0.77	25.42	3.1	D	385	578
3 - New Road South	0.48	7.41	0.9	A	374	562

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	249	62	163	801	0.311	247	154	0.0	0.4	6.478	A
2 - Station Hill	316	79	237	669	0.472	312	174	0.0	0.9	9.991	A
3 - New Road South	307	77	12	938	0.327	305	538	0.0	0.5	5.669	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	298	74	196	781	0.381	297	185	0.4	0.6	7.435	A
2 - Station Hill	377	94	284	641	0.589	375	208	0.9	1.4	13.454	B
3 - New Road South	367	92	14	937	0.392	366	646	0.5	0.6	6.302	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	364	91	239	753	0.484	363	226	0.6	0.9	9.215	A
2 - Station Hill	462	116	348	602	0.767	456	255	1.4	3.0	23.582	C
3 - New Road South	449	112	17	935	0.480	448	787	0.6	0.9	7.379	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	364	91	240	752	0.485	364	226	0.9	0.9	9.282	A
2 - Station Hill	462	116	349	602	0.768	461	255	3.0	3.1	25.416	D
3 - New Road South	449	112	17	935	0.481	449	793	0.9	0.9	7.413	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	298	74	197	780	0.382	299	186	0.9	0.6	7.499	A
2 - Station Hill	377	94	286	640	0.590	384	209	3.1	1.5	14.411	B
3 - New Road South	367	92	14	937	0.392	368	656	0.9	0.7	6.343	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	249	62	164	800	0.311	250	155	0.6	0.5	6.547	A
2 - Station Hill	316	79	239	668	0.473	318	175	1.5	0.9	10.359	B
3 - New Road South	307	77	12	938	0.327	308	546	0.7	0.5	5.716	A

2024 Base + Committed , 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	17.47	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + Committed	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	256	100.000
2 - Station Hill		ONE HOUR	✓	254	100.000
3 - New Road South		ONE HOUR	✓	721	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	214
	2 - Station Hill	24	0	230
	3 - New Road South	283	438	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.46	10.81	0.8	B	235	352
2 - Station Hill	0.41	9.01	0.7	A	233	350
3 - New Road South	0.84	22.88	4.8	C	662	992

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	193	48	327	712	0.271	191	229	0.0	0.4	6.892	A
2 - Station Hill	191	48	160	725	0.264	190	358	0.0	0.4	6.709	A
3 - New Road South	543	136	18	953	0.570	538	332	0.0	1.3	8.567	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	230	58	392	671	0.343	230	275	0.4	0.5	8.144	A
2 - Station Hill	228	57	192	706	0.324	228	430	0.4	0.5	7.527	A
3 - New Road South	648	162	22	951	0.682	645	398	1.3	2.1	11.663	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	282	70	476	618	0.456	281	334	0.5	0.8	10.632	B
2 - Station Hill	280	70	235	680	0.411	279	522	0.5	0.7	8.960	A
3 - New Road South	794	198	26	947	0.838	784	487	2.1	4.5	20.818	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	282	70	482	615	0.459	282	338	0.8	0.8	10.812	B
2 - Station Hill	280	70	236	679	0.412	280	528	0.7	0.7	9.010	A
3 - New Road South	794	198	26	947	0.838	793	489	4.5	4.8	22.879	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	230	58	400	666	0.346	231	280	0.8	0.5	8.308	A
2 - Station Hill	228	57	193	705	0.324	229	438	0.7	0.5	7.586	A
3 - New Road South	648	162	22	950	0.682	659	401	4.8	2.2	12.736	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	193	48	332	709	0.272	193	233	0.5	0.4	6.994	A
2 - Station Hill	191	48	162	724	0.264	192	364	0.5	0.4	6.772	A
3 - New Road South	543	136	18	953	0.570	546	335	2.2	1.4	8.933	A

2024 Base + Committed + dev, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	14.67	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Committed + dev	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	335	100.000
2 - Station Hill		ONE HOUR	✓	421	100.000
3 - New Road South		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	321
	2 - Station Hill	16	0	405
	3 - New Road South	204	222	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.49	9.40	1.0	A	307	461
2 - Station Hill	0.77	25.73	3.2	D	386	579
3 - New Road South	0.50	7.73	1.0	A	391	586

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	166	802	0.314	250	164	0.0	0.5	6.505	A
2 - Station Hill	317	79	240	669	0.473	313	177	0.0	0.9	10.010	B
3 - New Road South	321	80	12	938	0.342	319	541	0.0	0.5	5.794	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	199	781	0.386	300	197	0.5	0.6	7.486	A
2 - Station Hill	378	95	288	640	0.591	376	212	0.9	1.4	13.513	B
3 - New Road South	383	96	14	937	0.409	382	650	0.5	0.7	6.487	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	244	752	0.491	368	241	0.6	0.9	9.335	A
2 - Station Hill	463	116	352	602	0.770	457	259	1.4	3.0	23.827	C
3 - New Road South	469	117	17	935	0.502	468	792	0.7	1.0	7.691	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	244	751	0.491	369	242	0.9	1.0	9.402	A
2 - Station Hill	463	116	353	601	0.771	463	260	3.0	3.2	25.733	D
3 - New Road South	469	117	17	934	0.502	469	799	1.0	1.0	7.732	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	200	780	0.386	302	198	1.0	0.6	7.559	A
2 - Station Hill	378	95	290	639	0.592	385	213	3.2	1.5	14.496	B
3 - New Road South	383	96	14	936	0.409	384	660	1.0	0.7	6.533	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	167	801	0.315	253	166	0.6	0.5	6.577	A
2 - Station Hill	317	79	242	668	0.474	319	178	1.5	0.9	10.385	B
3 - New Road South	321	80	12	938	0.342	321	549	0.7	0.5	5.846	A

2024 Base + Committed + dev, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	18.13	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Committed + dev	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	268	100.000
2 - Station Hill		ONE HOUR	✓	258	100.000
3 - New Road South		ONE HOUR	✓	728	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	226
	2 - Station Hill	24	0	234
	3 - New Road South	288	440	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.48	11.20	0.9	B	246	369
2 - Station Hill	0.42	9.33	0.7	A	237	355
3 - New Road South	0.85	23.88	5.1	C	668	1002

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	328	714	0.283	200	233	0.0	0.4	6.983	A
2 - Station Hill	194	49	169	718	0.271	193	359	0.0	0.4	6.834	A
3 - New Road South	548	137	18	954	0.575	543	344	0.0	1.3	8.658	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	394	673	0.358	240	279	0.4	0.5	8.307	A
2 - Station Hill	232	58	203	698	0.332	231	431	0.4	0.5	7.713	A
3 - New Road South	654	164	22	951	0.688	651	413	1.3	2.1	11.869	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	478	620	0.476	294	339	0.5	0.9	10.992	B
2 - Station Hill	284	71	248	670	0.424	283	524	0.5	0.7	9.272	A
3 - New Road South	802	200	26	948	0.845	791	504	2.1	4.8	21.553	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	484	616	0.479	295	343	0.9	0.9	11.199	B
2 - Station Hill	284	71	249	670	0.424	284	530	0.7	0.7	9.330	A
3 - New Road South	802	200	26	948	0.845	800	506	4.8	5.1	23.882	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	402	668	0.361	242	285	0.9	0.6	8.492	A
2 - Station Hill	232	58	204	697	0.333	233	440	0.7	0.5	7.778	A
3 - New Road South	654	164	22	951	0.688	666	415	5.1	2.3	13.056	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	333	711	0.284	202	236	0.6	0.4	7.093	A
2 - Station Hill	194	49	171	717	0.271	195	365	0.5	0.4	6.901	A
3 - New Road South	548	137	18	953	0.575	552	347	2.3	1.4	9.043	A

2024 Base + Gladman Sensitivity, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	22.12	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	335	100.000
2 - Station Hill		ONE HOUR	✓	478	100.000
3 - New Road South		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	14	321
	2 - Station Hill	16	0	462
	3 - New Road South	204	234	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	6	2
	2 - Station Hill	0	0	4
	3 - New Road South	1	4	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)
1 - Barton Road North West	0.50	9.62	1.0	A	307	461
2 - Station Hill	0.88	43.58	5.9	E	438	658
3 - New Road South	0.52	7.97	1.1	A	402	603

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	175	796	0.317	250	164	0.0	0.5	6.575	A
2 - Station Hill	360	90	240	669	0.537	355	185	0.0	1.1	11.303	B
3 - New Road South	330	82	12	938	0.352	328	583	0.0	0.5	5.882	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	210	774	0.389	300	197	0.5	0.6	7.596	A
2 - Station Hill	429	107	288	640	0.671	426	223	1.1	1.9	16.559	C
3 - New Road South	394	98	14	936	0.421	393	700	0.5	0.7	6.621	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	257	743	0.496	367	241	0.6	1.0	9.540	A
2 - Station Hill	526	131	352	601	0.874	512	272	1.9	5.3	35.951	E
3 - New Road South	482	121	17	934	0.516	481	848	0.7	1.0	7.917	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	369	92	258	743	0.496	369	242	1.0	1.0	9.617	A
2 - Station Hill	526	131	353	601	0.876	523	273	5.3	5.9	43.581	E
3 - New Road South	482	121	17	934	0.516	482	860	1.0	1.1	7.966	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	301	75	211	773	0.390	302	199	1.0	0.6	7.671	A
2 - Station Hill	429	107	290	639	0.672	445	224	5.9	2.2	19.753	C
3 - New Road South	394	98	15	936	0.421	395	720	1.1	0.7	6.673	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	252	63	177	795	0.317	253	166	0.6	0.5	6.646	A
2 - Station Hill	360	90	242	668	0.538	363	187	2.2	1.2	11.973	B
3 - New Road South	330	82	12	937	0.352	330	594	0.7	0.5	5.941	A

2024 Base + Gladman Sensitivity, 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
1	Station Hill - Mini Roundabout	Mini-roundabout		1, 2, 3	21.85	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 (%)
1 - Barton Road North West		ONE HOUR	✓	268	100.000
2 - Station Hill		ONE HOUR	✓	281	100.000
3 - New Road South		ONE HOUR	✓	758	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	42	226
	2 - Station Hill	24	0	257
	3 - New Road South	288	470	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Barton Road North West	2 - Station Hill	3 - New Road South
From	1 - Barton Road North West	0	0	1
	2 - Station Hill	0	0	3
	3 - New Road South	0	1	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)
1 - Barton Road North West	0.50	11.95	1.0	B	246	369
2 - Station Hill	0.46	9.99	0.8	A	258	387
3 - New Road South	0.88	29.85	6.5	D	696	1043

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	350	700	0.288	200	233	0.0	0.4	7.175	A
2 - Station Hill	212	53	169	718	0.295	210	382	0.0	0.4	7.065	A
3 - New Road South	571	143	18	954	0.598	565	361	0.0	1.5	9.132	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	420	656	0.367	240	279	0.4	0.6	8.638	A
2 - Station Hill	253	63	203	697	0.362	252	458	0.4	0.6	8.071	A
3 - New Road South	681	170	22	951	0.716	678	433	1.5	2.4	12.971	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	509	601	0.491	294	338	0.6	0.9	11.667	B
2 - Station Hill	309	77	248	670	0.462	308	555	0.6	0.8	9.909	A
3 - New Road South	835	209	26	948	0.880	820	530	2.4	6.0	25.660	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	295	74	516	596	0.495	295	343	0.9	1.0	11.955	B
2 - Station Hill	309	77	249	670	0.462	309	562	0.8	0.8	9.990	A
3 - New Road South	835	209	26	948	0.880	832	532	6.0	6.5	29.851	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	241	60	432	649	0.371	242	286	1.0	0.6	8.891	A
2 - Station Hill	253	63	204	696	0.363	254	470	0.8	0.6	8.153	A
3 - New Road South	681	170	22	951	0.716	697	436	6.5	2.7	14.933	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Barton Road North West	202	50	357	696	0.290	203	237	0.6	0.4	7.304	A
2 - Station Hill	212	53	171	717	0.295	212	388	0.6	0.4	7.146	A
3 - New Road South	571	143	18	953	0.599	575	365	2.7	1.5	9.627	A

<h1>Junctions 9</h1>
<h2>ARCADY 9 - Roundabout Module</h2>
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Filename: J4 Beyton Road changed to mini.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 20/06/2019 14:51:31

- »2024 Base, AM
- »2024 Base, PM
- »2024 Base + committed, AM
- »2024 Base + committed, PM
- »2024 Base + committed + dev, AM
- »2024 Base + committed + dev, PM
- »2024 Base + Gladman Sensitivity, AM
- »2024 Base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
A - Barton Road North	1.5	9.34	0.61	A	0.7	6.28	0.42	A
B - Beyton Road east	0.7	10.78	0.43	B	0.5	7.52	0.32	A
C - Barton Road South	0.3	5.08	0.21	A	1.1	8.27	0.52	A
2024 Base + committed								
A - Barton Road North	4.2	19.56	0.81	C	1.0	7.34	0.50	A
B - Beyton Road east	1.3	16.42	0.57	C	1.0	10.75	0.50	B
C - Barton Road South	0.3	5.37	0.23	A	1.5	11.07	0.61	B
2024 Base + committed + dev								
A - Barton Road North	4.3	20.28	0.82	C	1.1	7.61	0.52	A
B - Beyton Road east	1.5	17.93	0.61	C	1.0	11.00	0.51	B
C - Barton Road South	0.3	5.47	0.23	A	1.6	11.25	0.61	B
2024 Base + Gladman Sensitivity								
A - Barton Road North	6.1	27.38	0.87	D	1.2	7.96	0.54	A
B - Beyton Road east	1.8	21.25	0.65	C	1.2	12.24	0.55	B
C - Barton Road South	0.3	5.56	0.24	A	1.7	12.26	0.64	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	J4 - Beyton Road
Location	Thurston
Site number	J4
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J4
Client	X601
Jobnumber	
Enumerator	CANNON\DWR
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	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base + committed	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base + committed	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + committed + dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + committed + dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 Base, 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
1	J4 Beyton Road	Mini-roundabout		A, B, C	8.91	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
A	Barton Road North	
B	Beyton Road east	
C	Barton Road South	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A - Barton Road North	3.00	2.80	5.00	8.0	13.60	12.30	0.0	
B - Beyton Road east	2.75	2.75	4.00	3.3	12.80	11.60	0.0	
C - Barton Road South	3.21	3.20	4.50	8.0	16.20	16.50	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Barton Road North	0.633	1005
B - Beyton Road east	0.607	814
C - Barton Road South	0.683	1070

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 segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	537	100.000
B - Beyton Road east		ONE HOUR	✓	227	100.000
C - Barton Road South		ONE HOUR	✓	168	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	192	345
	B - Beyton Road east	214	0	13
	C - Barton Road South	147	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.61	9.34	1.5	A	493	739
B - Beyton Road east	0.43	10.78	0.7	B	208	312
C - Barton Road South	0.21	5.08	0.3	A	154	231

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	404	101	16	981	0.412	402	270	0.0	0.7	6.182	A
B - Beyton Road east	171	43	258	658	0.260	170	159	0.0	0.3	7.354	A
C - Barton Road South	126	32	160	944	0.134	126	268	0.0	0.2	4.398	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	483	121	19	979	0.493	482	324	0.7	1.0	7.220	A
B - Beyton Road east	204	51	309	626	0.326	204	191	0.3	0.5	8.503	A
C - Barton Road South	151	38	192	922	0.164	151	321	0.2	0.2	4.664	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	591	148	23	976	0.605	589	396	1.0	1.5	9.240	A
B - Beyton Road east	250	62	378	585	0.428	249	234	0.5	0.7	10.691	B
C - Barton Road South	185	46	235	894	0.207	185	393	0.2	0.3	5.076	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	591	148	23	976	0.605	591	397	1.5	1.5	9.339	A
B - Beyton Road east	250	62	380	584	0.428	250	234	0.7	0.7	10.781	B
C - Barton Road South	185	46	236	893	0.207	185	394	0.3	0.3	5.083	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	483	121	19	979	0.493	485	326	1.5	1.0	7.316	A
B - Beyton Road east	204	51	312	625	0.326	205	192	0.7	0.5	8.590	A
C - Barton Road South	151	38	193	921	0.164	151	323	0.3	0.2	4.676	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	404	101	16	981	0.412	405	272	1.0	0.7	6.265	A
B - Beyton Road east	171	43	260	656	0.260	171	161	0.5	0.4	7.434	A
C - Barton Road South	126	32	162	943	0.134	127	270	0.2	0.2	4.411	A

2024 Base, 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
1	J4 Beyton Road	Mini-roundabout		A, B, C	7.39	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	372	100.000
B - Beyton Road east		ONE HOUR	✓	200	100.000
C - Barton Road South		ONE HOUR	✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	199	173
	B - Beyton Road east	190	0	10
	C - Barton Road South	399	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.42	6.28	0.7	A	341	512
B - Beyton Road east	0.32	7.52	0.5	A	184	275
C - Barton Road South	0.52	8.27	1.1	A	395	593

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	280	70	24	990	0.283	278	441	0.0	0.4	5.049	A
B - Beyton Road east	151	38	130	736	0.205	150	173	0.0	0.3	6.133	A
C - Barton Road South	324	81	142	955	0.340	322	137	0.0	0.5	5.673	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	334	84	29	987	0.339	334	529	0.4	0.5	5.510	A
B - Beyton Road east	180	45	155	720	0.250	179	207	0.3	0.3	6.658	A
C - Barton Road South	387	97	171	936	0.414	387	164	0.5	0.7	6.545	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	410	102	35	983	0.417	409	647	0.5	0.7	6.261	A
B - Beyton Road east	220	55	190	699	0.315	220	254	0.3	0.5	7.505	A
C - Barton Road South	475	119	209	910	0.521	473	201	0.7	1.1	8.205	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	410	102	35	983	0.417	410	648	0.7	0.7	6.279	A
B - Beyton Road east	220	55	190	699	0.315	220	254	0.5	0.5	7.523	A
C - Barton Road South	475	119	209	910	0.522	474	201	1.1	1.1	8.266	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	334	84	29	987	0.339	335	531	0.7	0.5	5.533	A
B - Beyton Road east	180	45	156	720	0.250	180	208	0.5	0.3	6.683	A
C - Barton Road South	387	97	171	935	0.414	389	165	1.1	0.7	6.607	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	280	70	24	990	0.283	281	444	0.5	0.4	5.080	A
B - Beyton Road east	151	38	130	735	0.205	151	174	0.3	0.3	6.167	A
C - Barton Road South	324	81	143	954	0.340	325	138	0.7	0.5	5.731	A

2024 Base + committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and B have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	Mini-roundabout		A, B, C	16.67	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base + committed	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	722	100.000
B - Beyton Road east		ONE HOUR	✓	262	100.000
C - Barton Road South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	262	460
	B - Beyton Road east	249	0	13
	C - Barton Road South	158	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.81	19.56	4.2	C	663	994
B - Beyton Road east	0.57	16.42	1.3	C	240	361
C - Barton Road South	0.23	5.37	0.3	A	164	246

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	544	136	16	981	0.554	539	304	0.0	1.2	8.056	A
B - Beyton Road east	197	49	343	606	0.326	195	211	0.0	0.5	8.728	A
C - Barton Road South	135	34	186	927	0.145	134	353	0.0	0.2	4.539	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	649	162	19	979	0.663	646	365	1.2	1.9	10.731	B
B - Beyton Road east	236	59	412	564	0.417	235	253	0.5	0.7	10.886	B
C - Barton Road South	161	40	223	901	0.179	161	423	0.2	0.2	4.858	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	795	199	23	976	0.814	787	446	1.9	4.0	18.215	C
B - Beyton Road east	288	72	501	510	0.565	286	309	0.7	1.3	15.922	C
C - Barton Road South	197	49	272	869	0.227	197	515	0.2	0.3	5.356	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	795	199	23	976	0.814	794	448	4.0	4.2	19.563	C
B - Beyton Road east	288	72	506	507	0.569	288	311	1.3	1.3	16.420	C
C - Barton Road South	197	49	274	867	0.227	197	520	0.3	0.3	5.371	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	649	162	19	979	0.663	658	368	4.2	2.0	11.481	B
B - Beyton Road east	236	59	419	560	0.421	238	258	1.3	0.7	11.242	B
C - Barton Road South	161	40	226	899	0.179	161	431	0.3	0.2	4.879	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	544	136	16	981	0.554	547	308	2.0	1.3	8.348	A
B - Beyton Road east	197	49	348	603	0.327	198	214	0.7	0.5	8.919	A
C - Barton Road South	135	34	188	925	0.146	135	358	0.2	0.2	4.559	A

2024 Base + committed, 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
1	J4 Beyton Road	Mini-roundabout		A, B, C	9.62	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + committed	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	447	100.000
B - Beyton Road east		ONE HOUR	✓	302	100.000
C - Barton Road South		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	227	220
	B - Beyton Road east	292	0	10
	C - Barton Road South	431	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.50	7.34	1.0	A	410	615
B - Beyton Road east	0.50	10.75	1.0	B	277	416
C - Barton Road South	0.61	11.07	1.5	B	425	637

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	337	84	24	990	0.340	334	540	0.0	0.5	5.476	A
B - Beyton Road east	227	57	165	714	0.318	226	194	0.0	0.5	7.337	A
C - Barton Road South	349	87	218	904	0.386	346	172	0.0	0.6	6.426	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	402	100	29	987	0.407	401	648	0.5	0.7	6.136	A
B - Beyton Road east	271	68	197	694	0.391	271	232	0.5	0.6	8.485	A
C - Barton Road South	416	104	262	875	0.476	415	206	0.6	0.9	7.817	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	492	123	35	983	0.501	491	792	0.7	1.0	7.297	A
B - Beyton Road east	333	83	242	668	0.498	331	284	0.6	1.0	10.657	B
C - Barton Road South	510	127	320	835	0.610	507	253	0.9	1.5	10.885	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	492	123	35	983	0.501	492	796	1.0	1.0	7.336	A
B - Beyton Road east	333	83	242	667	0.498	332	285	1.0	1.0	10.750	B
C - Barton Road South	510	127	321	835	0.611	510	253	1.5	1.5	11.071	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	402	100	29	987	0.407	403	654	1.0	0.7	6.181	A
B - Beyton Road east	271	68	198	694	0.391	273	234	1.0	0.7	8.577	A
C - Barton Road South	416	104	264	873	0.477	419	207	1.5	0.9	7.962	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	337	84	24	990	0.340	337	546	0.7	0.5	5.522	A
B - Beyton Road east	227	57	166	713	0.319	228	195	0.7	0.5	7.426	A
C - Barton Road South	349	87	221	902	0.386	350	174	0.9	0.6	6.528	A

2024 Base + committed + dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and B have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	Mini-roundabout		A, B, C	17.49	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + committed + dev	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	728	100.000
B - Beyton Road east		ONE HOUR	✓	279	100.000
C - Barton Road South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	268	460
	B - Beyton Road east	266	0	13
	C - Barton Road South	158	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.82	20.28	4.3	C	668	1002
B - Beyton Road east	0.61	17.93	1.5	C	256	384
C - Barton Road South	0.23	5.47	0.3	A	164	246

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	548	137	16	981	0.559	543	317	0.0	1.2	8.139	A
B - Beyton Road east	210	53	343	606	0.347	208	216	0.0	0.5	8.999	A
C - Barton Road South	135	34	198	918	0.147	134	353	0.0	0.2	4.588	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	654	164	19	979	0.669	652	380	1.2	2.0	10.908	B
B - Beyton Road east	251	63	412	564	0.444	250	259	0.5	0.8	11.403	B
C - Barton Road South	161	40	238	891	0.181	161	423	0.2	0.2	4.926	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	802	200	23	976	0.821	793	464	2.0	4.1	18.781	C
B - Beyton Road east	307	77	501	510	0.602	305	315	0.8	1.4	17.272	C
C - Barton Road South	197	49	290	856	0.230	197	515	0.2	0.3	5.456	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	802	200	23	976	0.821	801	467	4.1	4.3	20.284	C
B - Beyton Road east	307	77	506	507	0.606	307	318	1.4	1.5	17.934	C
C - Barton Road South	197	49	293	855	0.231	197	520	0.3	0.3	5.473	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	654	164	19	979	0.669	663	384	4.3	2.1	11.723	B
B - Beyton Road east	251	63	419	560	0.448	253	263	1.5	0.8	11.849	B
C - Barton Road South	161	40	242	889	0.181	161	431	0.3	0.2	4.950	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	548	137	16	981	0.559	551	320	2.1	1.3	8.447	A
B - Beyton Road east	210	53	348	603	0.348	211	219	0.8	0.5	9.219	A
C - Barton Road South	135	34	201	916	0.147	135	358	0.2	0.2	4.611	A

2024 Base + committed + dev, 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
1	J4 Beyton Road	Mini-roundabout		A, B, C	9.83	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + committed + dev	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	463	100.000
B - Beyton Road east		ONE HOUR	✓	309	100.000
C - Barton Road South		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	243	220
	B - Beyton Road east	299	0	10
	C - Barton Road South	431	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.52	7.61	1.1	A	425	637
B - Beyton Road east	0.51	11.00	1.0	B	284	425
C - Barton Road South	0.61	11.25	1.6	B	425	637

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	349	87	24	990	0.352	346	545	0.0	0.5	5.577	A
B - Beyton Road east	233	58	165	714	0.326	231	206	0.0	0.5	7.417	A
C - Barton Road South	349	87	223	900	0.387	346	172	0.0	0.6	6.466	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	416	104	29	987	0.422	415	655	0.5	0.7	6.292	A
B - Beyton Road east	278	69	197	694	0.400	277	247	0.5	0.7	8.609	A
C - Barton Road South	416	104	268	870	0.478	415	206	0.6	0.9	7.888	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	510	127	35	983	0.519	508	800	0.7	1.1	7.566	A
B - Beyton Road east	340	85	242	668	0.510	339	302	0.7	1.0	10.898	B
C - Barton Road South	510	127	328	830	0.614	507	253	0.9	1.5	11.052	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	510	127	35	983	0.519	510	804	1.1	1.1	7.609	A
B - Beyton Road east	340	85	242	667	0.510	340	303	1.0	1.0	11.001	B
C - Barton Road South	510	127	329	829	0.615	510	253	1.5	1.6	11.248	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	416	104	29	987	0.422	418	660	1.1	0.7	6.338	A
B - Beyton Road east	278	69	198	694	0.400	279	248	1.0	0.7	8.713	A
C - Barton Road South	416	104	270	869	0.479	419	207	1.6	0.9	8.041	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	349	87	24	990	0.352	349	551	0.7	0.5	5.627	A
B - Beyton Road east	233	58	166	713	0.326	233	208	0.7	0.5	7.512	A
C - Barton Road South	349	87	226	899	0.388	350	174	0.9	0.6	6.573	A

2024 Base + Gladman Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms A and B have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	Mini-roundabout		A, B, C	22.75	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	773	100.000
B - Beyton Road east		ONE HOUR	✓	287	100.000
C - Barton Road South		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	278	495
	B - Beyton Road east	274	0	13
	C - Barton Road South	162	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.87	27.38	6.1	D	709	1064
B - Beyton Road east	0.65	21.25	1.8	C	263	395
C - Barton Road South	0.24	5.56	0.3	A	168	252

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	582	145	16	981	0.593	576	325	0.0	1.4	8.777	A
B - Beyton Road east	216	54	369	590	0.366	214	223	0.0	0.6	9.506	A
C - Barton Road South	138	34	204	914	0.151	137	379	0.0	0.2	4.629	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	695	174	19	979	0.710	691	391	1.4	2.3	12.344	B
B - Beyton Road east	258	65	443	546	0.473	257	267	0.6	0.9	12.406	B
C - Barton Road South	165	41	245	887	0.186	164	454	0.2	0.2	4.983	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	851	213	23	976	0.872	838	477	2.3	5.7	23.920	C
B - Beyton Road east	316	79	537	489	0.647	313	324	0.9	1.7	20.055	C
C - Barton Road South	201	50	298	851	0.237	201	551	0.2	0.3	5.539	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	851	213	23	976	0.872	849	480	5.7	6.1	27.378	D
B - Beyton Road east	316	79	544	484	0.652	316	329	1.7	1.8	21.254	C
C - Barton Road South	201	50	301	849	0.237	201	558	0.3	0.3	5.560	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	695	174	19	979	0.710	709	396	6.1	2.6	13.974	B
B - Beyton Road east	258	65	454	539	0.479	261	274	1.8	0.9	13.141	B
C - Barton Road South	165	41	250	884	0.186	165	466	0.3	0.2	5.012	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	582	145	16	981	0.593	586	330	2.6	1.5	9.215	A
B - Beyton Road east	216	54	375	586	0.368	217	227	0.9	0.6	9.794	A
C - Barton Road South	138	34	208	912	0.151	138	385	0.2	0.2	4.655	A

2024 Base + Gladman Sensitivity, 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
1	J4 Beyton Road	Mini-roundabout		A, B, C	10.65	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	482	100.000
B - Beyton Road east		ONE HOUR	✓	330	100.000
C - Barton Road South		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	247	235
	B - Beyton Road east	320	0	10
	C - Barton Road South	441	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	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)
A - Barton Road North	0.54	7.96	1.2	A	442	663
B - Beyton Road east	0.55	12.24	1.2	B	303	454
C - Barton Road South	0.64	12.26	1.7	B	434	651

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	363	91	24	990	0.367	361	568	0.0	0.6	5.700	A
B - Beyton Road east	248	62	176	708	0.351	246	209	0.0	0.5	7.771	A
C - Barton Road South	356	89	239	890	0.400	353	183	0.0	0.7	6.679	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	433	108	29	987	0.439	433	682	0.6	0.8	6.484	A
B - Beyton Road east	297	74	211	686	0.432	296	250	0.5	0.7	9.200	A
C - Barton Road South	425	106	287	858	0.496	424	220	0.7	1.0	8.275	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	531	133	35	983	0.540	529	833	0.8	1.2	7.907	A
B - Beyton Road east	363	91	258	658	0.552	362	306	0.7	1.2	12.080	B
C - Barton Road South	521	130	351	815	0.639	518	269	1.0	1.7	11.989	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	531	133	35	983	0.540	531	838	1.2	1.2	7.961	A
B - Beyton Road east	363	91	259	657	0.553	363	307	1.2	1.2	12.239	B
C - Barton Road South	521	130	352	814	0.640	521	270	1.7	1.7	12.261	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	433	108	29	987	0.439	435	689	1.2	0.8	6.539	A
B - Beyton Road east	297	74	212	686	0.433	298	252	1.2	0.8	9.340	A
C - Barton Road South	425	106	289	856	0.497	428	221	1.7	1.0	8.471	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Barton Road North	363	91	24	990	0.367	364	575	0.8	0.6	5.757	A
B - Beyton Road east	248	62	177	707	0.352	249	211	0.8	0.5	7.890	A
C - Barton Road South	356	89	242	888	0.401	357	185	1.0	0.7	6.801	A

Appendix J

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: J1 Fishwick Existing.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 18/06/2019 09:08:26

- »2024 base, AM
- »2024 base, PM
- »2024 base + committed development, AM
- »2024 base + committed development, PM
- »2024 base + committed development + dev, AM
- »2024 base + committed development + dev, PM
- »2024 base + Gladman Sensitivity, AM
- »2024 base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 base								
Stream B-ACD	3.7	35.21	0.80	E	0.8	14.28	0.44	B
Stream A-BCD	0.0	4.92	0.01	A	0.1	3.96	0.07	A
Stream D-ABC	0.2	8.47	0.15	A	0.2	8.59	0.16	A
Stream C-ABD	0.0	4.81	0.01	A	0.0	6.39	0.00	A
2024 base + committed development								
Stream B-ACD	26.8	179.96	1.07	F	1.3	18.55	0.57	C
Stream A-BCD	0.0	4.92	0.01	A	0.1	3.90	0.08	A
Stream D-ABC	0.2	8.82	0.15	A	0.2	8.81	0.17	A
Stream C-ABD	0.0	4.72	0.01	A	0.0	6.38	0.00	A
2024 base + committed development + dev								
Stream B-ACD	32.1	213.10	1.10	F	1.4	20.17	0.59	C
Stream A-BCD	0.0	4.95	0.01	A	0.1	3.84	0.08	A
Stream D-ABC	0.2	9.21	0.16	A	0.2	9.10	0.17	A
Stream C-ABD	0.0	4.57	0.01	A	0.0	6.29	0.00	A
2024 base + Gladman Sensitivity								
Stream B-ACD	51.7	356.80	1.18	F	1.6	22.09	0.62	C
Stream A-BCD	0.0	4.94	0.01	A	0.2	3.84	0.08	A
Stream D-ABC	0.2	9.34	0.16	A	0.2	9.13	0.17	A
Stream C-ABD	0.0	4.57	0.01	A	0.0	6.30	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.

File summary

File Description

Title	Junction 1 - Fishwick Corner
Location	Thurston
Site number	J1
Date	13/09/2018
Version	-
Status	(new file)
Identifier	J1
Client	
Jobnumber	X601
Enumerator	CANNON\ECC
Description	Junction Model based on Geometry from Aecom model 5/9/17

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 base + committed development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 base + committed development	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 base + committed development + dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 base + committed development + dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D10	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		15.15	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Mount Road West		Major
B	Barton Road North		Minor
C	Mount Road East (unnamed road)		Major
D	Roughham road South ("New Road")		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Mount Road West	6.00			250.0	✓	0.00
C - Mount Road East (unnamed road)	6.00			130.0	✓	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 - Barton Road North	One lane	4.78	20	37
D - Roughham road South ("New Road")	One lane	5.00	31	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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	719	-	-	-	-	-	-	0.278	0.398	0.278	-	-	-
1	B-A	592	0.108	0.272	0.272	-	-	-	0.171	0.389	-	0.272	0.272	0.136
1	B-C	763	0.117	0.295	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	592	0.108	0.272	0.272	-	-	-	0.171	0.389	0.171	-	-	-
1	B-D, offside lane	592	0.108	0.272	0.272	-	-	-	0.171	0.389	0.171	-	-	-
1	C-B	649	0.252	0.252	0.359	-	-	-	-	-	-	-	-	-
1	D-A	765	-	-	-	-	-	-	0.297	-	0.117	-	-	-
1	D-B, nearside lane	598	0.173	0.173	0.393	-	-	-	0.275	0.275	0.109	-	-	-
1	D-B, offside lane	598	0.173	0.173	0.393	-	-	-	0.275	0.275	0.109	-	-	-
1	D-C	598	-	0.173	0.393	0.138	0.275	0.275	0.275	0.275	0.109	-	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 base	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	174	100.000
B - Barton Road North		ONE HOUR	✓	359	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	283	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	129	38	7
	B - Barton Road North	207	0	0	152
	C - Mount Road East (unnamed road)	207	4	0	72
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-ACD	0.80	35.21	3.7	E	329	494
A-BCD	0.01	4.92	0.0	A	8	12
A-B					117	176
A-C					34	52
D-ABC	0.15	8.47	0.2	A	61	91
C-ABD	0.01	4.81	0.0	A	5	8
C-D					66	98
C-A					189	283

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	270	68	521	0.519	266	0.0	1.0	13.897	B
A-BCD	6	2	738	0.008	6	0.0	0.0	4.919	A
A-B	96	24			96				
A-C	28	7			28				
D-ABC	50	13	535	0.094	50	0.0	0.1	7.412	A
C-ABD	4	1	753	0.005	4	0.0	0.0	4.805	A
C-D	54	13			54				
C-A	155	39			155				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	323	81	510	0.633	320	1.0	1.6	18.748	C
A-BCD	8	2	743	0.010	8	0.0	0.0	4.897	A
A-B	115	29			115				
A-C	34	8			34				
D-ABC	60	15	520	0.115	60	0.1	0.1	7.825	A
C-ABD	5	1	774	0.007	5	0.0	0.0	4.679	A
C-D	64	16			64				
C-A	185	46			185				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	395	99	494	0.800	388	1.6	3.4	31.889	D
A-BCD	10	3	750	0.013	10	0.0	0.0	4.865	A
A-B	140	35			140				
A-C	41	10			41				
D-ABC	73	18	498	0.147	73	0.1	0.2	8.455	A
C-ABD	7	2	804	0.009	7	0.0	0.0	4.515	A
C-D	79	20			79				
C-A	226	56			226				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	395	99	494	0.800	394	3.4	3.7	35.214	E
A-BCD	10	3	750	0.013	10	0.0	0.0	4.866	A
A-B	140	35			140				
A-C	41	10			41				
D-ABC	73	18	498	0.147	73	0.2	0.2	8.470	A
C-ABD	7	2	804	0.009	7	0.0	0.0	4.516	A
C-D	79	20			79				
C-A	226	56			226				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	323	81	510	0.633	330	3.7	1.8	20.774	C
A-BCD	8	2	743	0.010	8	0.0	0.0	4.900	A
A-B	115	29			115				
A-C	34	8			34				
D-ABC	60	15	519	0.115	60	0.2	0.1	7.842	A
C-ABD	5	1	774	0.007	5	0.0	0.0	4.681	A
C-D	64	16			64				
C-A	185	46			185				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	270	68	521	0.519	273	1.8	1.1	14.676	B
A-BCD	6	2	738	0.008	6	0.0	0.0	4.921	A
A-B	96	24			96				
A-C	28	7			28				
D-ABC	50	13	535	0.094	50	0.1	0.1	7.432	A
C-ABD	4	1	753	0.005	4	0.0	0.0	4.808	A
C-D	54	13			54				
C-A	155	39			155				

2024 base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		3.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 base	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	579	100.000
B - Barton Road North		ONE HOUR	✓	183	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	102	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	386	163	30
	B - Barton Road North	116	0	0	67
	C - Mount Road East (unnamed road)	87	1	0	14
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-ACD	0.44	14.28	0.8	B	168	252
A-BCD	0.07	3.96	0.1	A	57	85
A-B					333	500
A-C					141	211
D-ABC	0.16	8.59	0.2	A	67	101
C-ABD	0.00	6.39	0.0	A	1	2
C-D					13	19
C-A					80	120

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	496	0.278	136	0.0	0.4	9.962	A
A-BCD	40	10	949	0.042	40	0.0	0.1	3.959	A
A-B	278	70			278				
A-C	118	29			118				
D-ABC	55	14	542	0.102	55	0.0	0.1	7.384	A
C-ABD	0.86	0.22	590	0.001	0.86	0.0	0.0	6.114	A
C-D	10	3			10				
C-A	65	16			65				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	165	41	478	0.344	164	0.4	0.5	11.437	B
A-BCD	54	13	995	0.054	54	0.1	0.1	3.825	A
A-B	328	82			328				
A-C	139	35			139				
D-ABC	66	17	524	0.126	66	0.1	0.1	7.850	A
C-ABD	1	0.27	579	0.002	1	0.0	0.0	6.228	A
C-D	12	3			12				
C-A	78	20			78				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	453	0.444	200	0.5	0.8	14.168	B
A-BCD	77	19	1059	0.073	77	0.1	0.1	3.664	A
A-B	394	98			394				
A-C	166	42			166				
D-ABC	81	20	500	0.162	81	0.1	0.2	8.583	A
C-ABD	1	0.34	565	0.002	1	0.0	0.0	6.386	A
C-D	15	4			15				
C-A	96	24			96				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	453	0.444	201	0.8	0.8	14.284	B
A-BCD	77	19	1059	0.073	77	0.1	0.1	3.669	A
A-B	394	98			394				
A-C	166	42			166				
D-ABC	81	20	500	0.162	81	0.2	0.2	8.591	A
C-ABD	1	0.34	565	0.002	1	0.0	0.0	6.386	A
C-D	15	4			15				
C-A	96	24			96				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	165	41	478	0.344	166	0.8	0.5	11.556	B
A-BCD	54	13	995	0.054	54	0.1	0.1	3.829	A
A-B	328	82			328				
A-C	139	35			139				
D-ABC	66	17	524	0.126	66	0.2	0.1	7.861	A
C-ABD	1	0.27	579	0.002	1	0.0	0.0	6.229	A
C-D	12	3			12				
C-A	78	20			78				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	496	0.278	138	0.5	0.4	10.084	B
A-BCD	40	10	949	0.042	40	0.1	0.1	3.963	A
A-B	278	70			278				
A-C	118	29			118				
D-ABC	55	14	542	0.102	55	0.1	0.1	7.404	A
C-ABD	0.86	0.22	589	0.001	0.87	0.0	0.0	6.118	A
C-D	10	3			10				
C-A	65	16			65				

2024 base + committed development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		82.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 base + committed development	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	188	100.000
B - Barton Road North		ONE HOUR	✓	474	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	314	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	140	41	7
	B - Barton Road North	243	0	0	231
	C - Mount Road East (unnamed road)	217	4	0	93
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-ACD	1.07	179.96	26.8	F	435	652
A-BCD	0.01	4.92	0.0	A	8	12
A-B					127	191
A-C					37	56
D-ABC	0.15	8.82	0.2	A	61	91
C-ABD	0.01	4.72	0.0	A	6	9
C-D					85	127
C-A					198	296

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	357	89	518	0.689	349	0.0	2.1	20.379	C
A-BCD	6	2	739	0.009	6	0.0	0.0	4.915	A
A-B	104	26			104				
A-C	31	8			31				
D-ABC	50	13	526	0.095	50	0.0	0.1	7.556	A
C-ABD	4	1	766	0.006	4	0.0	0.0	4.724	A
C-D	70	17			70				
C-A	162	41			162				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	107	506	0.842	417	2.1	4.3	37.088	E
A-BCD	8	2	744	0.011	8	0.0	0.0	4.891	A
A-B	125	31			125				
A-C	36	9			36				
D-ABC	60	15	508	0.118	60	0.1	0.1	8.024	A
C-ABD	5	1	790	0.007	5	0.0	0.0	4.587	A
C-D	83	21			83				
C-A	194	48			194				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	522	130	489	1.067	471	4.3	17.0	101.548	F
A-BCD	10	3	751	0.014	10	0.0	0.0	4.857	A
A-B	152	38			152				
A-C	45	11			45				
D-ABC	73	18	484	0.151	73	0.1	0.2	8.761	A
C-ABD	7	2	824	0.009	7	0.0	0.0	4.409	A
C-D	101	25			101				
C-A	237	59			237				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	522	130	489	1.067	483	17.0	26.8	179.958	F
A-BCD	10	3	751	0.014	10	0.0	0.0	4.860	A
A-B	152	38			152				
A-C	45	11			45				
D-ABC	73	18	481	0.152	73	0.2	0.2	8.824	A
C-ABD	7	2	824	0.009	7	0.0	0.0	4.412	A
C-D	101	25			101				
C-A	237	59			237				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	107	506	0.842	488	26.8	11.4	148.438	F
A-BCD	8	2	744	0.011	8	0.0	0.0	4.895	A
A-B	125	31			125				
A-C	36	9			36				
D-ABC	60	15	503	0.119	60	0.2	0.1	8.122	A
C-ABD	5	1	790	0.007	5	0.0	0.0	4.591	A
C-D	83	21			83				
C-A	194	48			194				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	357	89	518	0.689	393	11.4	2.4	35.209	E
A-BCD	6	2	739	0.009	6	0.0	0.0	4.916	A
A-B	104	26			104				
A-C	31	8			31				
D-ABC	50	13	524	0.096	50	0.1	0.1	7.604	A
C-ABD	4	1	766	0.006	4	0.0	0.0	4.725	A
C-D	70	17			70				
C-A	162	41			162				

2024 base + committed development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		4.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 base + committed development	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	620	100.000
B - Barton Road North		ONE HOUR	✓	230	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	115	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	418	172	30
	B - Barton Road North	131	0	0	99
	C - Mount Road East (unnamed road)	91	0.98	0	23
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-ACD	0.57	18.55	1.3	C	211	317
A-BCD	0.08	3.90	0.1	A	60	91
A-B					360	540
A-C					148	222
D-ABC	0.17	8.81	0.2	A	67	101
C-ABD	0.00	6.38	0.0	A	1	2
C-D					21	32
C-A					83	125

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	173	43	492	0.352	171	0.0	0.5	11.150	B
A-BCD	42	10	966	0.043	42	0.0	0.1	3.894	A
A-B	301	75			301				
A-C	124	31			124				
D-ABC	55	14	535	0.103	55	0.0	0.1	7.492	A
C-ABD	0.86	0.22	589	0.001	0.86	0.0	0.0	6.117	A
C-D	17	4			17				
C-A	68	17			68				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	473	0.437	206	0.5	0.8	13.430	B
A-BCD	57	14	1016	0.056	57	0.1	0.1	3.752	A
A-B	355	89			355				
A-C	146	36			146				
D-ABC	66	17	516	0.128	66	0.1	0.1	7.997	A
C-ABD	1	0.27	579	0.002	1	0.0	0.0	6.230	A
C-D	21	5			21				
C-A	82	20			82				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	447	0.567	251	0.8	1.3	18.202	C
A-BCD	83	21	1085	0.076	82	0.1	0.1	3.593	A
A-B	425	106			425				
A-C	175	44			175				
D-ABC	81	20	489	0.165	81	0.1	0.2	8.801	A
C-ABD	1	0.35	565	0.002	1	0.0	0.0	6.383	A
C-D	25	6			25				
C-A	100	25			100				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	447	0.567	253	1.3	1.3	18.548	C
A-BCD	83	21	1085	0.076	83	0.1	0.1	3.593	A
A-B	425	106			425				
A-C	175	44			175				
D-ABC	81	20	489	0.165	81	0.2	0.2	8.812	A
C-ABD	1	0.35	565	0.002	1	0.0	0.0	6.384	A
C-D	25	6			25				
C-A	100	25			100				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	473	0.437	209	1.3	0.8	13.727	B
A-BCD	57	14	1016	0.056	57	0.1	0.1	3.759	A
A-B	355	89			355				
A-C	146	36			146				
D-ABC	66	17	516	0.128	66	0.2	0.1	8.012	A
C-ABD	1	0.27	579	0.002	1	0.0	0.0	6.233	A
C-D	21	5			21				
C-A	82	20			82				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	173	43	492	0.352	174	0.8	0.6	11.373	B
A-BCD	42	10	966	0.043	42	0.1	0.1	3.898	A
A-B	301	75			301				
A-C	124	31			124				
D-ABC	55	14	535	0.103	55	0.1	0.1	7.513	A
C-ABD	0.87	0.22	589	0.001	0.87	0.0	0.0	6.121	A
C-D	17	4			17				
C-A	68	17			68				

2024 base + committed development + dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		91.75	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 base + committed development + dev	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	202	100.000
B - Barton Road North		ONE HOUR	✓	474	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	373	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	67	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	140	55	7
	B - Barton Road North	243	0	0	231
	C - Mount Road East (unnamed road)	251	4	0	118
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-ACD	1.10	213.10	32.1	F	435	652
A-BCD	0.01	4.95	0.0	A	8	13
A-B					127	190
A-C					50	75
D-ABC	0.16	9.21	0.2	A	61	92
C-ABD	0.01	4.57	0.0	A	6	9
C-D					107	161
C-A					229	343

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	357	89	509	0.701	348	0.0	2.2	21.345	C
A-BCD	6	2	734	0.009	6	0.0	0.0	4.948	A
A-B	104	26			104				
A-C	41	10			41				
D-ABC	50	13	515	0.098	50	0.0	0.1	7.736	A
C-ABD	5	1	793	0.006	5	0.0	0.0	4.564	A
C-D	88	22			88				
C-A	188	47			188				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	107	496	0.860	416	2.2	4.7	40.542	E
A-BCD	8	2	738	0.011	8	0.0	0.0	4.928	A
A-B	124	31			124				
A-C	49	12			49				
D-ABC	60	15	495	0.121	60	0.1	0.1	8.271	A
C-ABD	6	1	823	0.007	6	0.0	0.0	4.407	A
C-D	105	26			105				
C-A	224	56			224				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	522	130	477	1.095	462	4.7	19.6	115.440	F
A-BCD	11	3	745	0.014	11	0.0	0.0	4.898	A
A-B	152	38			152				
A-C	60	15			60				
D-ABC	73	18	467	0.157	73	0.1	0.2	9.127	A
C-ABD	8	2	864	0.009	8	0.0	0.0	4.206	A
C-D	129	32			129				
C-A	274	68			274				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	522	130	477	1.095	472	19.6	32.1	213.103	F
A-BCD	11	3	745	0.014	11	0.0	0.0	4.899	A
A-B	152	38			152				
A-C	60	15			60				
D-ABC	73	18	464	0.158	73	0.2	0.2	9.211	A
C-ABD	8	2	864	0.009	8	0.0	0.0	4.206	A
C-D	129	32			129				
C-A	274	68			274				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	107	496	0.860	481	32.1	18.5	193.694	F
A-BCD	8	2	738	0.011	8	0.0	0.0	4.932	A
A-B	124	31			124				
A-C	49	12			49				
D-ABC	60	15	489	0.123	60	0.2	0.1	8.396	A
C-ABD	6	1	823	0.007	6	0.0	0.0	4.411	A
C-D	105	26			105				
C-A	224	56			224				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	357	89	509	0.701	420	18.5	2.6	57.872	F
A-BCD	6	2	734	0.009	6	0.0	0.0	4.951	A
A-B	104	26			104				
A-C	41	10			41				
D-ABC	50	13	511	0.098	50	0.1	0.1	7.811	A
C-ABD	5	1	793	0.006	5	0.0	0.0	4.565	A
C-D	88	22			88				
C-A	188	47			188				

2024 base + committed development + dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		5.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 base + committed development + dev	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	661	100.000
B - Barton Road North		ONE HOUR	✓	230	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	139	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	418	213	30
	B - Barton Road North	131	0	0	99
	C - Mount Road East (unnamed road)	105	0.98	0	33
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-ACD	0.59	20.17	1.4	C	211	317
A-BCD	0.08	3.84	0.1	A	64	96
A-B					359	539
A-C					183	275
D-ABC	0.17	9.10	0.2	A	68	102
C-ABD	0.00	6.29	0.0	A	1	2
C-D					30	45
C-A					96	144

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	173	43	481	0.360	171	0.0	0.6	11.530	B
A-BCD	44	11	981	0.045	44	0.0	0.1	3.838	A
A-B	301	75			301				
A-C	153	38			153				
D-ABC	56	14	527	0.106	55	0.0	0.1	7.624	A
C-ABD	0.89	0.22	595	0.002	0.89	0.0	0.0	6.062	A
C-D	25	6			25				
C-A	79	20			79				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	460	0.449	206	0.6	0.8	14.096	B
A-BCD	60	15	1034	0.058	60	0.1	0.1	3.693	A
A-B	354	88			354				
A-C	180	45			180				
D-ABC	67	17	506	0.131	66	0.1	0.1	8.183	A
C-ABD	1	0.28	586	0.002	1	0.0	0.0	6.157	A
C-D	30	7			30				
C-A	94	24			94				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	431	0.587	251	0.8	1.4	19.718	C
A-BCD	89	22	1108	0.080	89	0.1	0.1	3.532	A
A-B	423	106			423				
A-C	216	54			216				
D-ABC	81	20	477	0.171	81	0.1	0.2	9.088	A
C-ABD	1	0.37	574	0.003	1	0.0	0.0	6.283	A
C-D	36	9			36				
C-A	115	29			115				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	431	0.587	253	1.4	1.4	20.173	C
A-BCD	89	22	1108	0.080	89	0.1	0.1	3.535	A
A-B	423	106			423				
A-C	216	54			216				
D-ABC	81	20	477	0.171	81	0.2	0.2	9.099	A
C-ABD	1	0.37	574	0.003	1	0.0	0.0	6.286	A
C-D	36	9			36				
C-A	115	29			115				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	460	0.449	209	1.4	0.8	14.460	B
A-BCD	60	15	1034	0.058	60	0.1	0.1	3.700	A
A-B	354	88			354				
A-C	180	45			180				
D-ABC	67	17	506	0.131	67	0.2	0.2	8.199	A
C-ABD	1	0.28	586	0.002	1	0.0	0.0	6.160	A
C-D	30	7			30				
C-A	94	24			94				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	173	43	481	0.360	174	0.8	0.6	11.777	B
A-BCD	44	11	981	0.045	44	0.1	0.1	3.842	A
A-B	301	75			301				
A-C	153	38			153				
D-ABC	56	14	527	0.106	56	0.2	0.1	7.646	A
C-ABD	0.90	0.22	595	0.002	0.90	0.0	0.0	6.063	A
C-D	25	6			25				
C-A	79	20			79				

2024 base + Gladman Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		159.17	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	205	100.000
B - Barton Road North		ONE HOUR	✓	510	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	373	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	67	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	143	55	7
	B - Barton Road North	254	0	0	256
	C - Mount Road East (unnamed road)	251	4	0	118
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-ACD	1.18	356.80	51.7	F	468	702
A-BCD	0.01	4.94	0.0	A	8	13
A-B					130	195
A-C					50	75
D-ABC	0.16	9.34	0.2	A	61	92
C-ABD	0.01	4.57	0.0	A	6	9
C-D					107	161
C-A					229	343

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	384	96	509	0.754	373	0.0	2.7	24.776	C
A-BCD	6	2	735	0.009	6	0.0	0.0	4.938	A
A-B	107	27			107				
A-C	41	10			41				
D-ABC	50	13	513	0.098	50	0.0	0.1	7.764	A
C-ABD	5	1	793	0.006	5	0.0	0.0	4.567	A
C-D	88	22			88				
C-A	188	47			188				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	458	115	495	0.926	441	2.7	7.0	54.100	F
A-BCD	8	2	740	0.011	8	0.0	0.0	4.916	A
A-B	127	32			127				
A-C	49	12			49				
D-ABC	60	15	493	0.122	60	0.1	0.1	8.313	A
C-ABD	6	1	822	0.007	6	0.0	0.0	4.410	A
C-D	105	26			105				
C-A	224	56			224				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	562	140	476	1.179	469	7.0	30.0	161.905	F
A-BCD	11	3	748	0.014	11	0.0	0.0	4.884	A
A-B	155	39			155				
A-C	60	15			60				
D-ABC	73	18	464	0.158	73	0.1	0.2	9.203	A
C-ABD	8	2	863	0.009	8	0.0	0.0	4.209	A
C-D	129	32			129				
C-A	274	68			274				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	562	140	476	1.179	475	30.0	51.7	322.302	F
A-BCD	11	3	748	0.014	11	0.0	0.0	4.887	A
A-B	155	39			155				
A-C	60	15			60				
D-ABC	73	18	459	0.160	73	0.2	0.2	9.339	A
C-ABD	8	2	863	0.009	8	0.0	0.0	4.211	A
C-D	129	32			129				
C-A	274	68			274				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	458	115	495	0.926	486	51.7	44.8	356.803	F
A-BCD	8	2	740	0.011	8	0.0	0.0	4.918	A
A-B	127	32			127				
A-C	49	12			49				
D-ABC	60	15	482	0.124	60	0.2	0.1	8.532	A
C-ABD	6	1	822	0.007	6	0.0	0.0	4.414	A
C-D	105	26			105				
C-A	224	56			224				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	384	96	509	0.754	498	44.8	16.3	227.365	F
A-BCD	6	2	735	0.009	7	0.0	0.0	4.939	A
A-B	107	27			107				
A-C	41	10			41				
D-ABC	50	13	504	0.100	50	0.1	0.1	7.936	A
C-ABD	5	1	793	0.006	5	0.0	0.0	4.568	A
C-D	88	22			88				
C-A	188	47			188				

2024 base + Gladman Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Existing	Crossroads	Two-way		5.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	666	100.000
B - Barton Road North		ONE HOUR	✓	244	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	139	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	423	213	30
	B - Barton Road North	135	0	0	109
	C - Mount Road East (unnamed road)	105	0.98	0	33
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
A - Mount Road West	0	1	0	0
B - Barton Road North	1	0	0	0
C - Mount Road East (unnamed road)	0	0	0	0
D - Roughham road South ("New Road")	0	0	0	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)
B-ACD	0.62	22.09	1.6	C	224	336
A-BCD	0.08	3.84	0.2	A	65	97
A-B					363	545
A-C					183	275
D-ABC	0.17	9.13	0.2	A	68	102
C-ABD	0.00	6.30	0.0	A	1	2
C-D					30	45
C-A					96	144

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	184	46	481	0.382	181	0.0	0.6	11.921	B
A-BCD	44	11	984	0.045	44	0.0	0.1	3.830	A
A-B	304	76			304				
A-C	153	38			153				
D-ABC	56	14	526	0.106	55	0.0	0.1	7.638	A
C-ABD	0.89	0.22	594	0.002	0.89	0.0	0.0	6.071	A
C-D	25	6			25				
C-A	79	20			79				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	460	0.477	218	0.6	0.9	14.823	B
A-BCD	60	15	1037	0.058	60	0.1	0.1	3.687	A
A-B	358	90			358				
A-C	180	45			180				
D-ABC	67	17	505	0.132	66	0.1	0.2	8.203	A
C-ABD	1	0.28	585	0.002	1	0.0	0.0	6.168	A
C-D	30	7			30				
C-A	94	24			94				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	269	67	431	0.623	266	0.9	1.6	21.455	C
A-BCD	90	22	1112	0.081	89	0.1	0.1	3.523	A
A-B	428	107			428				
A-C	216	54			216				
D-ABC	81	20	476	0.171	81	0.2	0.2	9.118	A
C-ABD	1	0.37	573	0.003	1	0.0	0.0	6.297	A
C-D	36	9			36				
C-A	115	29			115				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	269	67	431	0.623	268	1.6	1.6	22.094	C
A-BCD	90	22	1112	0.081	90	0.1	0.2	3.525	A
A-B	428	107			428				
A-C	216	54			216				
D-ABC	81	20	476	0.171	81	0.2	0.2	9.130	A
C-ABD	1	0.37	573	0.003	1	0.0	0.0	6.298	A
C-D	36	9			36				
C-A	115	29			115				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	460	0.477	222	1.6	0.9	15.305	C
A-BCD	60	15	1037	0.058	61	0.2	0.1	3.691	A
A-B	358	90			358				
A-C	180	45			180				
D-ABC	67	17	505	0.132	67	0.2	0.2	8.221	A
C-ABD	1	0.28	585	0.002	1	0.0	0.0	6.171	A
C-D	30	7			30				
C-A	94	24			94				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	184	46	481	0.382	185	0.9	0.6	12.221	B
A-BCD	44	11	984	0.045	44	0.1	0.1	3.835	A
A-B	304	76			304				
A-C	153	38			153				
D-ABC	56	14	526	0.106	56	0.2	0.1	7.660	A
C-ABD	0.90	0.22	594	0.002	0.90	0.0	0.0	6.072	A
C-D	25	6			25				
C-A	79	20			79				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: J1 Fishwick staggered junction.j9
 Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
 Report generation date: 18/06/2019 09:09:19

- »2024 base, AM
- »2024 base, PM
- »2024 base + committed development, AM
- »2024 base + committed development, PM
- »2024 base + committed development + dev, AM
- »2024 base + committed development + dev, PM
- »2024 base + Gladman Sensitivity, AM
- »2024 base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 base								
Stream B-CD	0.5	10.49	0.33	B	0.2	8.14	0.14	A
Stream B-A	1.0	15.37	0.49	C	0.4	11.30	0.29	B
Stream AB-CD	0.4	7.73	0.29	A	0.3	5.45	0.17	A
Stream D-ABC	0.1	6.65	0.12	A	0.1	5.90	0.12	A
Stream CD-AB	0.2	5.47	0.10	A	0.2	7.14	0.12	A
2024 base + committed development								
Stream B-CD	1.3	18.52	0.57	C	0.3	8.98	0.21	A
Stream B-A	1.8	25.78	0.66	D	0.5	12.88	0.34	B
Stream AB-CD	0.8	9.88	0.44	A	0.4	5.86	0.23	A
Stream D-ABC	0.1	6.88	0.12	A	0.1	5.97	0.12	A
Stream CD-AB	0.2	5.45	0.10	A	0.2	7.25	0.12	A
2024 base + committed development + dev								
Stream B-CD	1.4	19.81	0.58	C	0.3	9.32	0.22	A
Stream B-A	2.0	27.97	0.68	D	0.5	13.60	0.35	B
Stream AB-CD	0.9	10.31	0.45	B	0.4	5.78	0.24	A
Stream D-ABC	0.1	7.10	0.13	A	0.1	6.06	0.12	A
Stream CD-AB	0.2	5.34	0.10	A	0.2	7.27	0.12	A
2024 base + Gladman Sensitivity								
Stream B-CD	2.1	28.54	0.69	D	0.3	9.63	0.24	A
Stream B-A	2.8	38.23	0.75	E	0.6	14.11	0.37	B
Stream AB-CD	1.0	11.27	0.50	B	0.5	5.92	0.26	A
Stream D-ABC	0.1	7.17	0.13	A	0.1	6.08	0.12	A
Stream CD-AB	0.2	5.35	0.10	A	0.2	7.29	0.12	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	Junction 1 - Fishwick Corner - proposed stagger
Location	Thurston
Site number	J1
Date	13/09/2018
Version	-
Status	(new file)
Identifier	J1
Client	
Jobnumber	X601
Enumerator	CANNON\ECC
Description	Junction Model based on Geometry from Aecom model 5/9/17

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 base + committed development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 base + committed development	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 base + committed development + dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 base + committed development + dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D10	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		5.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Mount Road West		Major
B	Barton Road North		Minor
C	Mount Road East (unnamed road)		Major
D	Roughham road South ("New Road")		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Mount Road West	6.00			250.0	✓	0.00
C - Mount Road East (unnamed road)	6.00			130.0	✓	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)	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 - Barton Road North	One lane plus flare		10.00	7.70	5.70	5.00	4.00		1.00	63	77
D - Roughham road South ("New Road")	One lane	5.00								31	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	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
1	AB-D	719	-	-	-	-	-	0.278	0.278	0.278	-	-
1	B-A	586	0.107	0.270	0.270	-	-	0.170	0.385	-	0.170	0.385
1	B-CD	684	0.105	0.265	0.265	-	-	-	-	-	-	-
1	CD-B	649	0.252	0.252	0.252	-	-	-	-	-	-	-
1	D-AB	765	-	-	-	-	-	0.297	0.297	0.117	-	-
1	D-C	598	-	0.173	0.393	0.173	0.393	0.275	0.275	0.109	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 base	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	174	100.000
B - Barton Road North		ONE HOUR	✓	359	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	283	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	129	38	7
	B - Barton Road North	207	0	0	152
	C - Mount Road East (unnamed road)	207	4	0	72
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-CD	0.33	10.49	0.5	B	139	209
B-A	0.49	15.37	1.0	C	190	285
A-B					118	178
A-C					35	52
A-D					6	9
AB-CD	0.29	7.73	0.4	A	154	231
AB-C					27	40
D-ABC	0.12	6.65	0.1	A	61	91
C-D					66	99
C-A					190	285
C-B					4	5
CD-AB	0.10	5.47	0.2	A	57	85
CD-A					188	282

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	114	29	591	0.194	113	0.0	0.2	7.518	A
B-A	156	39	504	0.309	154	0.0	0.4	10.244	B
A-B	97	24			97				
A-C	29	7			29				
A-D	5	1			5				
AB-CD	124	31	671	0.185	123	0.0	0.2	6.559	A
AB-C	23	6			23				
D-ABC	50	13	646	0.077	50	0.0	0.1	6.030	A
C-D	54	14			54				
C-A	156	39			156				
C-B	3	0.74			3				
CD-AB	43	11	701	0.062	43	0.0	0.1	5.462	A
CD-A	157	39			157				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	137	34	562	0.243	136	0.2	0.3	8.447	A
B-A	186	47	488	0.382	185	0.4	0.6	11.884	B
A-B	116	29			116				
A-C	34	9			34				
A-D	6	2			6				
AB-CD	150	38	663	0.227	150	0.2	0.3	7.010	A
AB-C	26	7			26				
D-ABC	60	15	633	0.094	60	0.1	0.1	6.277	A
C-D	65	16			65				
C-A	186	47			186				
C-B	4	0.88			4				
CD-AB	55	14	718	0.076	55	0.1	0.1	5.434	A
CD-A	185	46			185				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	167	42	512	0.327	167	0.3	0.5	10.408	B
B-A	228	57	462	0.493	227	0.6	0.9	15.193	C
A-B	142	36			142				
A-C	42	10			42				
A-D	8	2			8				
AB-CD	186	47	653	0.285	186	0.3	0.4	7.705	A
AB-C	30	7			30				
D-ABC	73	18	615	0.119	73	0.1	0.1	6.643	A
C-D	79	20			79				
C-A	228	57			228				
C-B	4	1			4				
CD-AB	72	18	741	0.097	72	0.1	0.2	5.391	A
CD-A	221	55			221				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	167	42	510	0.328	167	0.5	0.5	10.492	B
B-A	228	57	462	0.494	228	0.9	1.0	15.374	C
A-B	142	36			142				
A-C	42	10			42				
A-D	8	2			8				
AB-CD	187	47	653	0.286	187	0.4	0.4	7.730	A
AB-C	30	7			30				
D-ABC	73	18	615	0.119	73	0.1	0.1	6.647	A
C-D	79	20			79				
C-A	228	57			228				
C-B	4	1			4				
CD-AB	72	18	741	0.098	72	0.2	0.2	5.387	A
CD-A	221	55			221				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	137	34	560	0.244	137	0.5	0.3	8.521	A
B-A	186	47	487	0.382	187	1.0	0.6	12.048	B
A-B	116	29			116				
A-C	34	9			34				
A-D	6	2			6				
AB-CD	151	38	663	0.228	152	0.4	0.3	7.044	A
AB-C	26	7			26				
D-ABC	60	15	633	0.094	60	0.1	0.1	6.284	A
C-D	65	16			65				
C-A	186	47			186				
C-B	4	0.88			4				
CD-AB	55	14	718	0.076	55	0.2	0.1	5.429	A
CD-A	185	46			185				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	114	29	589	0.194	115	0.3	0.2	7.592	A
B-A	156	39	504	0.309	157	0.6	0.5	10.395	B
A-B	97	24			97				
A-C	29	7			29				
A-D	5	1			5				
AB-CD	125	31	671	0.187	126	0.3	0.2	6.603	A
AB-C	23	6			23				
D-ABC	50	13	646	0.077	50	0.1	0.1	6.039	A
C-D	54	14			54				
C-A	156	39			156				
C-B	3	0.74			3				
CD-AB	44	11	702	0.062	44	0.1	0.1	5.469	A
CD-A	157	39			157				

2024 base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		2.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 base	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	579	100.000
B - Barton Road North		ONE HOUR	✓	183	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	102	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	386	163	30
	B - Barton Road North	116	0	0	67
	C - Mount Road East (unnamed road)	87	1	0	14
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-CD	0.14	8.14	0.2	A	61	92
B-A	0.29	11.30	0.4	B	106	160
A-B					354	531
A-C					150	224
A-D					28	41
AB-CD	0.17	5.45	0.3	A	111	166
AB-C					128	192
D-ABC	0.12	5.90	0.1	A	67	101
C-D					13	19
C-A					80	120
C-B					0.92	1
CD-AB	0.12	7.14	0.2	A	53	79
CD-A					86	129

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	50	13	570	0.088	50	0.0	0.1	6.916	A
B-A	87	22	494	0.177	86	0.0	0.2	8.816	A
A-B	291	73			291				
A-C	123	31			123				
A-D	23	6			23				
AB-CD	86	22	773	0.112	86	0.0	0.1	5.239	A
AB-C	109	27			109				
D-ABC	55	14	706	0.078	55	0.0	0.1	5.526	A
C-D	10	3			10				
C-A	65	16			65				
C-B	0.75	0.19			0.75				
CD-AB	41	10	593	0.070	41	0.0	0.1	6.515	A
CD-A	73	18			73				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	60	15	549	0.110	60	0.1	0.1	7.368	A
B-A	104	26	474	0.220	104	0.2	0.3	9.721	A
A-B	347	87			347				
A-C	147	37			147				
A-D	27	7			27				
AB-CD	107	27	783	0.137	107	0.1	0.2	5.322	A
AB-C	126	32			126				
D-ABC	66	17	700	0.094	66	0.1	0.1	5.680	A
C-D	12	3			12				
C-A	78	20			78				
C-B	0.90	0.22			0.90				
CD-AB	51	13	584	0.088	51	0.1	0.1	6.760	A
CD-A	85	21			85				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	74	18	516	0.143	74	0.1	0.2	8.129	A
B-A	128	32	446	0.286	127	0.3	0.4	11.267	B
A-B	425	106			425				
A-C	179	45			179				
A-D	33	8			33				
AB-CD	138	34	799	0.172	137	0.2	0.3	5.446	A
AB-C	148	37			148				
D-ABC	81	20	691	0.117	81	0.1	0.1	5.903	A
C-D	15	4			15				
C-A	96	24			96				
C-B	1	0.28			1				
CD-AB	66	16	571	0.116	66	0.1	0.2	7.129	A
CD-A	101	25			101				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	74	18	516	0.143	74	0.2	0.2	8.144	A
B-A	128	32	446	0.286	128	0.4	0.4	11.302	B
A-B	425	106			425				
A-C	179	45			179				
A-D	33	8			33				
AB-CD	138	34	799	0.173	138	0.3	0.3	5.453	A
AB-C	148	37			148				
D-ABC	81	20	691	0.117	81	0.1	0.1	5.903	A
C-D	15	4			15				
C-A	96	24			96				
C-B	1	0.28			1				
CD-AB	66	17	571	0.116	66	0.2	0.2	7.136	A
CD-A	101	25			101				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	60	15	548	0.110	60	0.2	0.1	7.387	A
B-A	104	26	474	0.220	105	0.4	0.3	9.762	A
A-B	347	87			347				
A-C	147	37			147				
A-D	27	7			27				
AB-CD	108	27	784	0.137	108	0.3	0.2	5.333	A
AB-C	126	32			126				
D-ABC	66	17	700	0.094	66	0.1	0.1	5.685	A
C-D	12	3			12				
C-A	78	20			78				
C-B	0.90	0.22			0.90				
CD-AB	51	13	584	0.088	52	0.2	0.1	6.768	A
CD-A	85	21			85				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	50	13	570	0.089	51	0.1	0.1	6.935	A
B-A	87	22	494	0.177	88	0.3	0.2	8.868	A
A-B	291	73			291				
A-C	123	31			123				
A-D	23	6			23				
AB-CD	87	22	773	0.113	87	0.2	0.2	5.255	A
AB-C	109	27			109				
D-ABC	55	14	706	0.078	55	0.1	0.1	5.534	A
C-D	10	3			10				
C-A	65	16			65				
C-B	0.75	0.19			0.75				
CD-AB	42	10	593	0.070	42	0.1	0.1	6.530	A
CD-A	73	18			73				

2024 base + committed development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		8.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 base + committed development	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	188	100.000
B - Barton Road North		ONE HOUR	✓	474	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	314	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	140	41	7
	B - Barton Road North	243	0	0	231
	C - Mount Road East (unnamed road)	217	4	0	93
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-CD	0.57	18.52	1.3	C	212	318
B-A	0.66	25.78	1.8	D	223	334
A-B					128	193
A-C					38	56
A-D					6	9
AB-CD	0.44	9.88	0.8	A	232	347
AB-C					24	36
D-ABC	0.12	6.88	0.1	A	61	91
C-D					85	128
C-A					199	299
C-B					4	5
CD-AB	0.10	5.45	0.2	A	58	87
CD-A					196	294

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	174	43	581	0.299	172	0.0	0.4	8.766	A
B-A	183	46	478	0.383	181	0.0	0.6	12.017	B
A-B	105	26			105				
A-C	31	8			31				
A-D	5	1			5				
AB-CD	186	47	666	0.279	184	0.0	0.4	7.452	A
AB-C	22	6			22				
D-ABC	50	13	636	0.079	50	0.0	0.1	6.143	A
C-D	70	18			70				
C-A	163	41			163				
C-B	3	0.74			3				
CD-AB	44	11	704	0.062	43	0.0	0.1	5.444	A
CD-A	164	41			164				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	208	52	536	0.388	207	0.4	0.6	10.913	B
B-A	218	55	453	0.482	217	0.6	0.9	15.194	C
A-B	126	31			126				
A-C	37	9			37				
A-D	6	2			6				
AB-CD	226	56	657	0.343	225	0.4	0.5	8.321	A
AB-C	24	6			24				
D-ABC	60	15	619	0.096	60	0.1	0.1	6.430	A
C-D	84	21			84				
C-A	195	49			195				
C-B	4	0.88			4				
CD-AB	56	14	721	0.077	55	0.1	0.1	5.411	A
CD-A	193	48			193				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	254	64	454	0.561	252	0.6	1.2	17.644	C
B-A	268	67	408	0.656	264	0.9	1.8	24.413	C
A-B	154	39			154				
A-C	45	11			45				
A-D	8	2			8				
AB-CD	279	70	646	0.432	278	0.5	0.8	9.773	A
AB-C	26	6			26				
D-ABC	73	18	597	0.123	73	0.1	0.1	6.868	A
C-D	102	26			102				
C-A	239	60			239				
C-B	4	1			4				
CD-AB	74	18	745	0.099	73	0.1	0.2	5.366	A
CD-A	231	58			231				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	254	64	448	0.568	254	1.2	1.3	18.520	C
B-A	268	67	406	0.659	267	1.8	1.8	25.776	D
A-B	154	39			154				
A-C	45	11			45				
A-D	8	2			8				
AB-CD	281	70	646	0.436	281	0.8	0.8	9.882	A
AB-C	25	6			25				
D-ABC	73	18	597	0.123	73	0.1	0.1	6.877	A
C-D	102	26			102				
C-A	239	60			239				
C-B	4	1			4				
CD-AB	74	18	745	0.099	74	0.2	0.2	5.366	A
CD-A	231	58			231				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	208	52	530	0.392	210	1.3	0.7	11.337	B
B-A	218	55	451	0.484	222	1.8	1.0	15.923	C
A-B	126	31			126				
A-C	37	9			37				
A-D	6	2			6				
AB-CD	229	57	657	0.349	230	0.8	0.6	8.443	A
AB-C	24	6			24				
D-ABC	60	15	619	0.097	60	0.1	0.1	6.443	A
C-D	84	21			84				
C-A	195	49			195				
C-B	4	0.88			4				
CD-AB	56	14	721	0.077	56	0.2	0.1	5.409	A
CD-A	193	48			193				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	174	43	578	0.301	175	0.7	0.4	8.956	A
B-A	183	46	477	0.384	184	1.0	0.6	12.355	B
A-B	105	26			105				
A-C	31	8			31				
A-D	5	1			5				
AB-CD	189	47	666	0.283	189	0.6	0.4	7.560	A
AB-C	22	6			22				
D-ABC	50	13	635	0.079	50	0.1	0.1	6.155	A
C-D	70	18			70				
C-A	163	41			163				
C-B	3	0.74			3				
CD-AB	44	11	704	0.063	44	0.1	0.1	5.451	A
CD-A	164	41			164				

2024 base + committed development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 base + committed development	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	620	100.000
B - Barton Road North		ONE HOUR	✓	230	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	115	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	418	172	30
	B - Barton Road North	131	0	0	99
	C - Mount Road East (unnamed road)	91	0.98	0	23
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-CD	0.21	8.98	0.3	A	91	136
B-A	0.34	12.88	0.5	B	120	180
A-B					384	575
A-C					158	237
A-D					28	41
AB-CD	0.23	5.86	0.4	A	149	223
AB-C					127	191
D-ABC	0.12	5.97	0.1	A	67	101
C-D					21	32
C-A					84	125
C-B					0.90	1
CD-AB	0.12	7.25	0.2	A	53	80
CD-A					89	134

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	75	19	577	0.129	74	0.0	0.1	7.155	A
B-A	99	25	475	0.208	98	0.0	0.3	9.509	A
A-B	315	79			315				
A-C	129	32			129				
A-D	23	6			23				
AB-CD	116	29	774	0.150	115	0.0	0.2	5.457	A
AB-C	110	28			110				
D-ABC	55	14	702	0.079	55	0.0	0.1	5.562	A
C-D	17	4			17				
C-A	69	17			69				
C-B	0.74	0.18			0.74				
CD-AB	42	10	588	0.071	41	0.0	0.1	6.581	A
CD-A	75	19			75				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	89	22	550	0.162	89	0.1	0.2	7.798	A
B-A	118	29	454	0.259	117	0.3	0.3	10.683	B
A-B	376	94			376				
A-C	155	39			155				
A-D	27	7			27				
AB-CD	144	36	785	0.184	144	0.2	0.3	5.614	A
AB-C	126	32			126				
D-ABC	66	17	694	0.095	66	0.1	0.1	5.728	A
C-D	21	5			21				
C-A	82	20			82				
C-B	0.88	0.22			0.88				
CD-AB	52	13	578	0.090	52	0.1	0.1	6.845	A
CD-A	88	22			88				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	109	27	510	0.214	109	0.2	0.3	8.949	A
B-A	144	36	424	0.340	144	0.3	0.5	12.816	B
A-B	460	115			460				
A-C	189	47			189				
A-D	33	8			33				
AB-CD	186	46	801	0.232	185	0.3	0.4	5.846	A
AB-C	145	36			145				
D-ABC	81	20	684	0.118	81	0.1	0.1	5.968	A
C-D	25	6			25				
C-A	100	25			100				
C-B	1	0.27			1				
CD-AB	67	17	564	0.119	67	0.1	0.2	7.245	A
CD-A	104	26			104				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	109	27	510	0.214	109	0.3	0.3	8.981	A
B-A	144	36	424	0.340	144	0.5	0.5	12.876	B
A-B	460	115			460				
A-C	189	47			189				
A-D	33	8			33				
AB-CD	186	47	801	0.232	186	0.4	0.4	5.859	A
AB-C	145	36			145				
D-ABC	81	20	684	0.118	81	0.1	0.1	5.969	A
C-D	25	6			25				
C-A	100	25			100				
C-B	1	0.27			1				
CD-AB	67	17	564	0.119	67	0.2	0.2	7.253	A
CD-A	104	26			104				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	89	22	550	0.162	89	0.3	0.2	7.823	A
B-A	118	29	454	0.259	118	0.5	0.4	10.748	B
A-B	376	94			376				
A-C	155	39			155				
A-D	27	7			27				
AB-CD	145	36	786	0.184	145	0.4	0.3	5.628	A
AB-C	126	32			126				
D-ABC	66	17	694	0.095	66	0.1	0.1	5.731	A
C-D	21	5			21				
C-A	82	20			82				
C-B	0.88	0.22			0.88				
CD-AB	52	13	578	0.090	52	0.2	0.1	6.856	A
CD-A	88	22			88				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	75	19	576	0.129	75	0.2	0.2	7.190	A
B-A	99	25	475	0.208	99	0.4	0.3	9.582	A
A-B	315	79			315				
A-C	129	32			129				
A-D	23	6			23				
AB-CD	117	29	774	0.151	117	0.3	0.2	5.482	A
AB-C	110	27			110				
D-ABC	55	14	702	0.079	55	0.1	0.1	5.569	A
C-D	17	4			17				
C-A	69	17			69				
C-B	0.74	0.18			0.74				
CD-AB	42	10	588	0.071	42	0.1	0.1	6.593	A
CD-A	75	19			75				

2024 base + committed development + dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		8.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 base + committed development + dev	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	202	100.000
B - Barton Road North		ONE HOUR	✓	474	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	373	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	67	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	140	55	7
	B - Barton Road North	243	0	0	231
	C - Mount Road East (unnamed road)	251	4	0	118
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-CD	0.58	19.81	1.4	C	212	318
B-A	0.68	27.97	2.0	D	223	334
A-B					128	193
A-C					50	76
A-D					6	9
AB-CD	0.45	10.31	0.9	B	237	355
AB-C					31	47
D-ABC	0.13	7.10	0.1	A	61	92
C-D					108	162
C-A					230	345
C-B					4	5
CD-AB	0.10	5.34	0.2	A	61	91
CD-A					224	336

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	174	43	577	0.302	172	0.0	0.4	8.863	A
B-A	183	46	471	0.389	180	0.0	0.6	12.298	B
A-B	105	26			105				
A-C	41	10			41				
A-D	5	1			5				
AB-CD	189	47	661	0.286	188	0.0	0.4	7.586	A
AB-C	30	7			30				
D-ABC	50	13	625	0.080	50	0.0	0.1	6.259	A
C-D	89	22			89				
C-A	189	47			189				
C-B	3	0.74			3				
CD-AB	46	11	719	0.063	45	0.0	0.1	5.339	A
CD-A	188	47			188				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	208	52	529	0.393	207	0.4	0.6	11.143	B
B-A	218	55	444	0.491	217	0.6	0.9	15.748	C
A-B	126	31			126				
A-C	49	12			49				
A-D	6	2			6				
AB-CD	231	58	651	0.354	230	0.4	0.6	8.536	A
AB-C	32	8			32				
D-ABC	60	15	606	0.099	60	0.1	0.1	6.587	A
C-D	106	27			106				
C-A	226	56			226				
C-B	4	0.88			4				
CD-AB	58	15	739	0.079	58	0.1	0.1	5.291	A
CD-A	221	55			221				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	254	64	442	0.576	252	0.6	1.3	18.692	C
B-A	268	67	397	0.674	264	0.9	1.9	26.227	D
A-B	154	39			154				
A-C	61	15			61				
A-D	8	2			8				
AB-CD	286	72	638	0.449	285	0.6	0.8	10.175	B
AB-C	33	8			33				
D-ABC	73	18	581	0.126	73	0.1	0.1	7.092	A
C-D	130	32			130				
C-A	276	69			276				
C-B	4	1			4				
CD-AB	78	20	767	0.102	78	0.1	0.2	5.230	A
CD-A	264	66			264				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	254	64	435	0.584	254	1.3	1.4	19.810	C
B-A	268	67	395	0.678	267	1.9	2.0	27.973	D
A-B	154	39			154				
A-C	61	15			61				
A-D	8	2			8				
AB-CD	289	72	638	0.453	289	0.8	0.9	10.309	B
AB-C	33	8			33				
D-ABC	73	18	580	0.127	73	0.1	0.1	7.102	A
C-D	130	32			130				
C-A	276	69			276				
C-B	4	1			4				
CD-AB	78	20	768	0.102	78	0.2	0.2	5.227	A
CD-A	264	66			264				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	208	52	522	0.397	210	1.4	0.7	11.637	B
B-A	218	55	443	0.493	222	2.0	1.0	16.620	C
A-B	126	31			126				
A-C	49	12			49				
A-D	6	2			6				
AB-CD	234	59	651	0.360	235	0.9	0.6	8.680	A
AB-C	32	8			32				
D-ABC	60	15	606	0.099	60	0.1	0.1	6.599	A
C-D	106	27			106				
C-A	226	56			226				
C-B	4	0.88			4				
CD-AB	59	15	739	0.079	59	0.2	0.1	5.286	A
CD-A	221	55			221				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	174	43	573	0.304	175	0.7	0.4	9.067	A
B-A	183	46	470	0.389	184	1.0	0.7	12.667	B
A-B	105	26			105				
A-C	41	10			41				
A-D	5	1			5				
AB-CD	192	48	661	0.291	193	0.6	0.4	7.704	A
AB-C	29	7			29				
D-ABC	50	13	624	0.080	50	0.1	0.1	6.278	A
C-D	89	22			89				
C-A	189	47			189				
C-B	3	0.74			3				
CD-AB	46	11	719	0.064	46	0.1	0.1	5.345	A
CD-A	188	47			188				

2024 base + committed development + dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		2.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 base + committed development + dev	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	661	100.000
B - Barton Road North		ONE HOUR	✓	230	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	139	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	418	213	30
	B - Barton Road North	131	0	0	99
	C - Mount Road East (unnamed road)	105	0.98	0	33
	D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-CD	0.22	9.32	0.3	A	91	136
B-A	0.35	13.60	0.5	B	120	180
A-B					384	575
A-C					195	293
A-D					28	41
AB-CD	0.24	5.78	0.4	A	158	236
AB-C					156	234
D-ABC	0.12	6.06	0.1	A	68	102
C-D					30	45
C-A					96	145
C-B					0.90	1
CD-AB	0.12	7.27	0.2	A	55	83
CD-A					101	151

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	75	19	568	0.131	74	0.0	0.1	7.278	A
B-A	99	25	465	0.212	98	0.0	0.3	9.766	A
A-B	315	79			315				
A-C	160	40			160				
A-D	23	6			23				
AB-CD	121	30	789	0.154	120	0.0	0.2	5.383	A
AB-C	136	34			136				
D-ABC	56	14	696	0.080	55	0.0	0.1	5.617	A
C-D	25	6			25				
C-A	79	20			79				
C-B	0.74	0.18			0.74				
CD-AB	43	11	588	0.072	42	0.0	0.1	6.589	A
CD-A	85	21			85				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	89	22	540	0.165	89	0.1	0.2	7.981	A
B-A	118	29	442	0.266	117	0.3	0.4	11.082	B
A-B	376	94			376				
A-C	191	48			191				
A-D	27	7			27				
AB-CD	152	38	803	0.189	152	0.2	0.3	5.532	A
AB-C	155	39			155				
D-ABC	67	17	687	0.097	66	0.1	0.1	5.797	A
C-D	30	7			30				
C-A	94	24			94				
C-B	0.88	0.22			0.88				
CD-AB	53	13	578	0.092	53	0.1	0.1	6.856	A
CD-A	100	25			100				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	109	27	496	0.220	109	0.2	0.3	9.286	A
B-A	144	36	409	0.353	144	0.4	0.5	13.529	B
A-B	460	115			460				
A-C	235	59			235				
A-D	33	8			33				
AB-CD	198	50	823	0.241	198	0.3	0.4	5.764	A
AB-C	178	44			178				
D-ABC	81	20	675	0.121	81	0.1	0.1	6.059	A
C-D	36	9			36				
C-A	116	29			116				
C-B	1	0.27			1				
CD-AB	69	17	565	0.123	69	0.1	0.2	7.265	A
CD-A	118	29			118				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	109	27	495	0.220	109	0.3	0.3	9.315	A
B-A	144	36	409	0.353	144	0.5	0.5	13.603	B
A-B	460	115			460				
A-C	235	59			235				
A-D	33	8			33				
AB-CD	199	50	823	0.242	199	0.4	0.4	5.776	A
AB-C	178	44			178				
D-ABC	81	20	675	0.121	81	0.1	0.1	6.062	A
C-D	36	9			36				
C-A	116	29			116				
C-B	1	0.27			1				
CD-AB	69	17	565	0.123	69	0.2	0.2	7.270	A
CD-A	118	29			118				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	89	22	539	0.165	89	0.3	0.2	8.015	A
B-A	118	29	442	0.266	118	0.5	0.4	11.154	B
A-B	376	94			376				
A-C	191	48			191				
A-D	27	7			27				
AB-CD	153	38	803	0.190	153	0.4	0.3	5.548	A
AB-C	155	39			155				
D-ABC	67	17	687	0.097	67	0.1	0.1	5.803	A
C-D	30	7			30				
C-A	94	24			94				
C-B	0.88	0.22			0.88				
CD-AB	53	13	578	0.092	54	0.2	0.1	6.866	A
CD-A	100	25			100				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	75	19	567	0.131	75	0.2	0.2	7.318	A
B-A	99	25	465	0.212	99	0.4	0.3	9.849	A
A-B	315	79			315				
A-C	160	40			160				
A-D	23	6			23				
AB-CD	122	31	789	0.155	122	0.3	0.2	5.410	A
AB-C	135	34			135				
D-ABC	56	14	696	0.080	56	0.1	0.1	5.624	A
C-D	25	6			25				
C-A	79	20			79				
C-B	0.74	0.18			0.74				
CD-AB	43	11	588	0.073	43	0.1	0.1	6.604	A
CD-A	85	21			85				

2024 base + Gladman Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		11.90	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 - Mount Road West		ONE HOUR	✓	205	100.000
B - Barton Road North		ONE HOUR	✓	510	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	373	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	67	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	143	55	7
	B - Barton Road North	254	0	0	256
	C - Mount Road East (unnamed road)	251	4	0	118
	D - Roughham road South ("New Road")	16	40	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
From	A - Mount Road West	0	1	0	0
	B - Barton Road North	3	0	0	1
	C - Mount Road East (unnamed road)	1	0	0	0
	D - Roughham road South ("New Road")	0	5	0	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)
B-CD	0.69	28.54	2.1	D	235	352
B-A	0.75	38.23	2.8	E	233	350
A-B					131	197
A-C					50	76
A-D					6	9
AB-CD	0.50	11.27	1.0	B	262	393
AB-C					30	44
D-ABC	0.13	7.17	0.1	A	61	92
C-D					108	162
C-A					230	345
C-B					4	5
CD-AB	0.10	5.35	0.2	A	61	91
CD-A					224	336

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	193	48	571	0.338	191	0.0	0.5	9.422	A
B-A	191	48	463	0.413	188	0.0	0.7	12.995	B
A-B	108	27			108				
A-C	41	10			41				
A-D	5	1			5				
AB-CD	209	52	661	0.316	207	0.0	0.5	7.907	A
AB-C	28	7			28				
D-ABC	50	13	622	0.081	50	0.0	0.1	6.285	A
C-D	89	22			89				
C-A	189	47			189				
C-B	3	0.74			3				
CD-AB	46	11	719	0.063	45	0.0	0.1	5.343	A
CD-A	188	47			188				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	230	58	517	0.445	229	0.5	0.8	12.454	B
B-A	228	57	432	0.528	227	0.7	1.1	17.370	C
A-B	129	32			129				
A-C	49	12			49				
A-D	6	2			6				
AB-CD	255	64	651	0.391	254	0.5	0.7	9.045	A
AB-C	30	8			30				
D-ABC	60	15	603	0.099	60	0.1	0.1	6.625	A
C-D	106	27			106				
C-A	226	56			226				
C-B	4	0.88			4				
CD-AB	58	15	739	0.079	58	0.1	0.1	5.296	A
CD-A	221	55			221				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	282	70	417	0.677	277	0.8	1.9	25.068	D
B-A	280	70	375	0.745	274	1.1	2.6	33.590	D
A-B	157	39			157				
A-C	61	15			61				
A-D	8	2			8				
AB-CD	315	79	638	0.493	313	0.7	1.0	11.044	B
AB-C	31	8			31				
D-ABC	73	18	577	0.127	73	0.1	0.1	7.151	A
C-D	130	32			130				
C-A	276	69			276				
C-B	4	1			4				
CD-AB	78	20	767	0.102	78	0.1	0.2	5.234	A
CD-A	264	66			264				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	282	70	406	0.695	281	1.9	2.1	28.538	D
B-A	280	70	371	0.754	279	2.6	2.8	38.232	E
A-B	157	39			157				
A-C	61	15			61				
A-D	8	2			8				
AB-CD	319	80	639	0.499	319	1.0	1.0	11.266	B
AB-C	30	8			30				
D-ABC	73	18	576	0.128	73	0.1	0.1	7.167	A
C-D	130	32			130				
C-A	276	69			276				
C-B	4	1			4				
CD-AB	78	20	767	0.102	78	0.2	0.2	5.232	A
CD-A	264	66			264				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	230	58	506	0.455	235	2.1	0.9	13.544	B
B-A	228	57	429	0.533	235	2.8	1.2	19.138	C
A-B	129	32			129				
A-C	49	12			49				
A-D	6	2			6				
AB-CD	261	65	651	0.401	263	1.0	0.7	9.293	A
AB-C	30	7			30				
D-ABC	60	15	602	0.100	60	0.1	0.1	6.642	A
C-D	106	27			106				
C-A	226	56			226				
C-B	4	0.88			4				
CD-AB	59	15	739	0.079	59	0.2	0.1	5.293	A
CD-A	221	55			221				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	193	48	566	0.341	194	0.9	0.5	9.714	A
B-A	191	48	462	0.414	193	1.2	0.7	13.497	B
A-B	108	27			108				
A-C	41	10			41				
A-D	5	1			5				
AB-CD	213	53	661	0.322	213	0.7	0.5	8.063	A
AB-C	28	7			28				
D-ABC	50	13	621	0.081	50	0.1	0.1	6.305	A
C-D	89	22			89				
C-A	189	47			189				
C-B	3	0.74			3				
CD-AB	46	11	719	0.064	46	0.1	0.1	5.349	A
CD-A	188	47			188				

2024 base + Gladman Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Fishwick Corner Staggered	Left-Right Stagger	Two-way		3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 - Mount Road West		ONE HOUR	✓	666	100.000
B - Barton Road North		ONE HOUR	✓	244	100.000
C - Mount Road East (unnamed road)		ONE HOUR	✓	139	100.000
D - Roughham road South ("New Road")		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
A - Mount Road West	0	423	213	30
B - Barton Road North	135	0	0	109
C - Mount Road East (unnamed road)	105	0.98	0	33
D - Roughham road South ("New Road")	17	47	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Mount Road West	B - Barton Road North	C - Mount Road East (unnamed road)	D - Roughham road South ("New Road")
	A - Mount Road West	0	1	0	0
	B - Barton Road North	1	0	0	0
	C - Mount Road East (unnamed road)	0	0	0	0
	D - Roughham road South ("New Road")	0	0	0	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)
B-CD	0.24	9.63	0.3	A	100	150
B-A	0.37	14.11	0.6	B	124	186
A-B					388	582
A-C					195	293
A-D					28	41
AB-CD	0.26	5.92	0.5	A	170	255
AB-C					153	230
D-ABC	0.12	6.08	0.1	A	68	102
C-D					30	45
C-A					96	145
C-B					0.90	1
CD-AB	0.12	7.29	0.2	A	55	83
CD-A					101	151

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	82	21	570	0.144	81	0.0	0.2	7.363	A
B-A	102	25	461	0.220	101	0.0	0.3	9.953	A
A-B	318	80			318				
A-C	160	40			160				
A-D	23	6			23				
AB-CD	131	33	789	0.166	130	0.0	0.2	5.457	A
AB-C	134	33			134				
D-ABC	56	14	695	0.080	55	0.0	0.1	5.623	A
C-D	25	6			25				
C-A	79	20			79				
C-B	0.74	0.18			0.74				
CD-AB	43	11	587	0.072	42	0.0	0.1	6.600	A
CD-A	85	21			85				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	98	24	540	0.181	98	0.2	0.2	8.131	A
B-A	121	30	438	0.277	121	0.3	0.4	11.350	B
A-B	380	95			380				
A-C	191	48			191				
A-D	27	7			27				
AB-CD	164	41	803	0.204	164	0.2	0.3	5.634	A
AB-C	152	38			152				
D-ABC	67	17	686	0.097	66	0.1	0.1	5.806	A
C-D	30	7			30				
C-A	94	24			94				
C-B	0.88	0.22			0.88				
CD-AB	53	13	577	0.092	53	0.1	0.1	6.871	A
CD-A	100	25			100				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	120	30	494	0.243	120	0.2	0.3	9.596	A
B-A	149	37	404	0.368	148	0.4	0.6	14.019	B
A-B	466	116			466				
A-C	235	59			235				
A-D	33	8			33				
AB-CD	214	53	823	0.260	213	0.3	0.4	5.907	A
AB-C	174	43			174				
D-ABC	81	20	674	0.121	81	0.1	0.1	6.072	A
C-D	36	9			36				
C-A	116	29			116				
C-B	1	0.27			1				
CD-AB	69	17	563	0.123	69	0.1	0.2	7.284	A
CD-A	118	29			118				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	120	30	494	0.243	120	0.3	0.3	9.634	A
B-A	149	37	404	0.368	149	0.6	0.6	14.105	B
A-B	466	116			466				
A-C	235	59			235				
A-D	33	8			33				
AB-CD	214	54	823	0.260	214	0.4	0.5	5.923	A
AB-C	173	43			173				
D-ABC	81	20	674	0.121	81	0.1	0.1	6.076	A
C-D	36	9			36				
C-A	116	29			116				
C-B	1	0.27			1				
CD-AB	69	17	563	0.123	69	0.2	0.2	7.290	A
CD-A	118	29			118				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	98	24	539	0.182	98	0.3	0.2	8.169	A
B-A	121	30	438	0.277	122	0.6	0.4	11.436	B
A-B	380	95			380				
A-C	191	48			191				
A-D	27	7			27				
AB-CD	165	41	803	0.205	165	0.5	0.3	5.655	A
AB-C	152	38			152				
D-ABC	67	17	686	0.097	67	0.1	0.1	5.812	A
C-D	30	7			30				
C-A	94	24			94				
C-B	0.88	0.22			0.88				
CD-AB	53	13	577	0.092	54	0.2	0.1	6.883	A
CD-A	100	25			100				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	82	21	569	0.144	82	0.2	0.2	7.403	A
B-A	102	25	461	0.221	102	0.4	0.3	10.044	B
A-B	318	80			318				
A-C	160	40			160				
A-D	23	6			23				
AB-CD	132	33	789	0.167	132	0.3	0.2	5.489	A
AB-C	134	33			134				
D-ABC	56	14	695	0.080	56	0.1	0.1	5.631	A
C-D	25	6			25				
C-A	79	20			79				
C-B	0.74	0.18			0.74				
CD-AB	43	11	588	0.073	43	0.1	0.1	6.616	A
CD-A	85	21			85				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J3 Pokeridge Corner Existing.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 18/06/2019 09:15:35

- »2024 base, AM
- »2024 base, PM
- »2024 base + committed, AM
- »2024 base + committed, PM
- »2024 base + committed + dev, AM
- »2024 base + committed + dev, PM
- »2024 base + Gladman Sensitivity, AM
- »2024 base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 base								
Stream B-ACD	0.8	14.37	0.44	B	0.2	9.44	0.19	A
Stream A-BCD	0.1	5.62	0.09	A	0.0	4.87	0.01	A
Stream D-ABC	0.1	9.47	0.12	A	0.7	13.21	0.41	B
Stream C-ABD	0.2	4.90	0.11	A	0.2	4.98	0.11	A
2024 base + committed								
Stream B-ACD	2.6	29.97	0.73	D	0.4	11.95	0.31	B
Stream A-BCD	0.2	5.48	0.10	A	0.0	5.12	0.01	A
Stream D-ABC	0.2	11.19	0.15	B	1.1	19.33	0.52	C
Stream C-ABD	0.4	5.43	0.22	A	0.8	6.52	0.37	A
2024 base + committed + dev								
Stream B-ACD	2.8	32.93	0.75	D	0.5	12.59	0.33	B
Stream A-BCD	0.2	5.36	0.10	A	0.0	5.12	0.01	A
Stream D-ABC	0.2	11.54	0.15	B	1.1	20.66	0.54	C
Stream C-ABD	0.5	5.46	0.22	A	0.9	6.49	0.38	A
2024 base + Gladman Sensitivity								
Stream B-ACD	3.3	37.51	0.78	E	0.5	12.98	0.34	B
Stream A-BCD	0.2	5.33	0.10	A	0.0	5.15	0.01	A
Stream D-ABC	0.2	11.86	0.16	B	1.2	22.05	0.55	C
Stream C-ABD	0.5	5.53	0.24	A	1.0	6.75	0.41	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	J3 Pokeridge Corner Existing
Location	Thurston
Site number	J3
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J3
Client	
Jobnumber	X601
Enumerator	CANNON\DWR
Description	Geometry based on Aecom model 5/9/2017

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024 base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 base + committed	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 base + committed	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 base + committed + dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 base + committed + dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		4.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Beyton Road Northwest		Major
B	Thedwastre Road North West		Minor
C	Thurston Road South East		Major
D	Unnamed Road Southwest		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Beyton Road Northwest	6.12			213.7	✓	0.00
C - Thurston Road South East	6.12			250.0	✓	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 - Thedwastre Road North West	One lane	4.48	18	17
D - Unnamed Road Southwest	One lane	5.00	17	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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	698	-	-	-	-	-	-	0.269	0.384	0.269	-	-	-
1	B-A	565	0.102	0.259	0.259	-	-	-	0.163	0.369	-	0.259	0.259	0.129
1	B-C	729	0.111	0.281	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	565	0.102	0.259	0.259	-	-	-	0.163	0.369	0.163	-	-	-
1	B-D, offside lane	565	0.102	0.259	0.259	-	-	-	0.163	0.369	0.163	-	-	-
1	C-B	719	0.277	0.277	0.396	-	-	-	-	-	-	-	-	-
1	D-A	764	-	-	-	-	-	-	0.294	-	0.116	-	-	-
1	D-B, nearside lane	592	0.170	0.170	0.387	-	-	-	0.271	0.271	0.107	-	-	-
1	D-B, offside lane	592	0.170	0.170	0.387	-	-	-	0.271	0.271	0.107	-	-	-
1	D-C	592	-	0.170	0.387	0.135	0.271	0.271	0.271	0.271	0.107	-	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 base	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	211	100.000
B - Thedwastre Road North West		ONE HOUR	✓	181	100.000
C - Thurston Road South East		ONE HOUR	✓	366	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
A - Beyton Road Northwest	0	21	149	41
B - Thedwastre Road North West	4	0	33	144
C - Thurston Road South East	217	51	0	98
D - Unnamed Road Southwest	3	26	19	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
A - Beyton Road Northwest	0	0	5	0
B - Thedwastre Road North West	0	0	13	0
C - Thurston Road South East	4	5	0	3
D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.44	14.37	0.8	B	166	249
A-BCD	0.09	5.62	0.1	A	49	73
A-B					18	26
A-C					127	190
D-ABC	0.12	9.47	0.1	A	44	65
C-ABD	0.11	4.90	0.2	A	74	111
C-D					82	122
C-A					181	271

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	136	34	491	0.277	135	0.0	0.4	10.062	B
A-BCD	38	9	698	0.054	37	0.0	0.1	5.447	A
A-B	15	4			15				
A-C	106	27			106				
D-ABC	36	9	487	0.074	35	0.0	0.1	7.973	A
C-ABD	55	14	791	0.069	54	0.0	0.1	4.888	A
C-D	69	17			69				
C-A	152	38			152				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163	41	474	0.343	162	0.4	0.5	11.533	B
A-BCD	47	12	700	0.067	47	0.1	0.1	5.515	A
A-B	17	4			17				
A-C	125	31			125				
D-ABC	43	11	464	0.092	43	0.1	0.1	8.543	A
C-ABD	71	18	812	0.087	70	0.1	0.2	4.857	A
C-D	80	20			80				
C-A	178	45			178				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	199	50	450	0.443	198	0.5	0.8	14.248	B
A-BCD	62	15	702	0.088	61	0.1	0.1	5.613	A
A-B	21	5			21				
A-C	150	37			150				
D-ABC	52	13	433	0.121	52	0.1	0.1	9.461	A
C-ABD	96	24	842	0.114	95	0.2	0.2	4.823	A
C-D	96	24			96				
C-A	212	53			212				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	199	50	450	0.443	199	0.8	0.8	14.366	B
A-BCD	62	15	702	0.088	62	0.1	0.1	5.620	A
A-B	21	5			21				
A-C	150	37			150				
D-ABC	52	13	433	0.121	52	0.1	0.1	9.470	A
C-ABD	96	24	842	0.114	96	0.2	0.2	4.827	A
C-D	96	24			96				
C-A	212	53			212				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163	41	474	0.343	164	0.8	0.5	11.657	B
A-BCD	47	12	700	0.068	47	0.1	0.1	5.529	A
A-B	17	4			17				
A-C	125	31			125				
D-ABC	43	11	464	0.092	43	0.1	0.1	8.560	A
C-ABD	71	18	812	0.087	71	0.2	0.2	4.862	A
C-D	80	20			80				
C-A	178	44			178				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	136	34	491	0.278	137	0.5	0.4	10.186	B
A-BCD	38	9	698	0.054	38	0.1	0.1	5.459	A
A-B	15	4			15				
A-C	106	27			106				
D-ABC	36	9	486	0.074	36	0.1	0.1	7.997	A
C-ABD	55	14	791	0.070	55	0.2	0.1	4.897	A
C-D	69	17			69				
C-A	152	38			152				

2024 base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		4.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 base	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	231	100.000
B - Thedwastre Road North West		ONE HOUR	✓	79	100.000
C - Thurston Road South East		ONE HOUR	✓	285	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	175	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	23	203	5
	B - Thedwastre Road North West	18	0	19	42
	C - Thurston Road South East	179	53	0	53
	D - Unnamed Road Southwest	2	101	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.19	9.44	0.2	A	72	109
A-BCD	0.01	4.87	0.0	A	6	10
A-B					21	31
A-C					185	277
D-ABC	0.41	13.21	0.7	B	161	241
C-ABD	0.11	4.98	0.2	A	67	101
C-D					44	67
C-A					150	225

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	59	15	510	0.117	59	0.0	0.1	7.972	A
A-BCD	5	1	744	0.007	5	0.0	0.0	4.868	A
A-B	17	4			17				
A-C	152	38			152				
D-ABC	132	33	506	0.260	130	0.0	0.3	9.554	A
C-ABD	51	13	778	0.066	51	0.0	0.1	4.950	A
C-D	37	9			37				
C-A	126	31			126				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	71	18	493	0.144	71	0.1	0.2	8.533	A
A-BCD	6	2	755	0.008	6	0.0	0.0	4.808	A
A-B	21	5			21				
A-C	181	45			181				
D-ABC	157	39	489	0.322	157	0.3	0.5	10.833	B
C-ABD	65	16	791	0.082	65	0.1	0.1	4.954	A
C-D	44	11			44				
C-A	148	37			148				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	87	22	469	0.186	87	0.2	0.2	9.422	A
A-BCD	8	2	770	0.011	8	0.0	0.0	4.724	A
A-B	25	6			25				
A-C	221	55			221				
D-ABC	193	48	465	0.414	192	0.5	0.7	13.127	B
C-ABD	85	21	809	0.106	85	0.1	0.2	4.970	A
C-D	52	13			52				
C-A	176	44			176				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	87	22	468	0.186	87	0.2	0.2	9.436	A
A-BCD	8	2	770	0.011	8	0.0	0.0	4.726	A
A-B	25	6			25				
A-C	221	55			221				
D-ABC	193	48	465	0.414	193	0.7	0.7	13.214	B
C-ABD	85	21	810	0.106	85	0.2	0.2	4.976	A
C-D	52	13			52				
C-A	176	44			176				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	71	18	492	0.144	71	0.2	0.2	8.552	A
A-BCD	6	2	755	0.008	6	0.0	0.0	4.813	A
A-B	21	5			21				
A-C	181	45			181				
D-ABC	157	39	489	0.322	158	0.7	0.5	10.928	B
C-ABD	65	16	791	0.082	65	0.2	0.1	4.961	A
C-D	44	11			44				
C-A	148	37			148				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	59	15	510	0.117	60	0.2	0.1	7.999	A
A-BCD	5	1	744	0.007	5	0.0	0.0	4.870	A
A-B	17	4			17				
A-C	152	38			152				
D-ABC	132	33	506	0.261	132	0.5	0.4	9.656	A
C-ABD	52	13	779	0.066	52	0.1	0.1	4.957	A
C-D	37	9			37				
C-A	126	31			126				

2024 base + committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		9.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 base + committed	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	281	100.000
B - Thedwastre Road North West		ONE HOUR	✓	291	100.000
C - Thurston Road South East		ONE HOUR	✓	441	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	21	219	41
	B - Thedwastre Road North West	4	0	112	175
	C - Thurston Road South East	252	91	0	98
	D - Unnamed Road Southwest	3	29	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.73	29.97	2.6	D	267	400
A-BCD	0.10	5.48	0.2	A	55	83
A-B					17	26
A-C					185	278
D-ABC	0.15	11.19	0.2	B	46	70
C-ABD	0.22	5.43	0.4	A	140	211
C-D					74	111
C-A					190	285

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	490	0.447	216	0.0	0.8	12.993	B
A-BCD	41	10	714	0.058	41	0.0	0.1	5.345	A
A-B	15	4			15				
A-C	155	39			155				
D-ABC	38	10	451	0.084	38	0.0	0.1	8.705	A
C-ABD	103	26	792	0.130	102	0.0	0.2	5.213	A
C-D	64	16			64				
C-A	165	41			165				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	262	65	469	0.558	260	0.8	1.2	17.090	C
A-BCD	53	13	720	0.073	53	0.1	0.1	5.390	A
A-B	17	4			17				
A-C	182	46			182				
D-ABC	45	11	420	0.108	45	0.1	0.1	9.593	A
C-ABD	134	33	815	0.164	133	0.2	0.3	5.287	A
C-D	74	18			74				
C-A	189	47			189				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	439	0.730	315	1.2	2.4	28.069	D
A-BCD	71	18	729	0.097	71	0.1	0.2	5.465	A
A-B	20	5			20				
A-C	218	54			218				
D-ABC	56	14	378	0.147	55	0.1	0.2	11.145	B
C-ABD	184	46	848	0.217	184	0.3	0.4	5.425	A
C-D	84	21			84				
C-A	217	54			217				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	439	0.730	320	2.4	2.6	29.966	D
A-BCD	71	18	729	0.097	71	0.2	0.2	5.477	A
A-B	20	5			20				
A-C	217	54			217				
D-ABC	56	14	377	0.148	56	0.2	0.2	11.191	B
C-ABD	185	46	848	0.218	185	0.4	0.4	5.434	A
C-D	84	21			84				
C-A	217	54			217				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	262	65	468	0.558	266	2.6	1.3	18.235	C
A-BCD	53	13	720	0.073	53	0.2	0.1	5.413	A
A-B	17	4			17				
A-C	182	46			182				
D-ABC	45	11	419	0.108	46	0.2	0.1	9.642	A
C-ABD	134	33	815	0.164	134	0.4	0.3	5.296	A
C-D	74	18			74				
C-A	189	47			189				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	490	0.447	221	1.3	0.8	13.499	B
A-BCD	41	10	714	0.058	42	0.1	0.1	5.362	A
A-B	15	4			15				
A-C	155	39			155				
D-ABC	38	10	450	0.085	38	0.1	0.1	8.750	A
C-ABD	103	26	792	0.130	103	0.3	0.2	5.232	A
C-D	64	16			64				
C-A	165	41			165				

2024 base + committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 base + committed	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	259	100.000
B - Thedwastre Road North West		ONE HOUR	✓	124	100.000
C - Thurston Road South East		ONE HOUR	✓	502	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	23	231	5
	B - Thedwastre Road North West	18	0	51	55
	C - Thurston Road South East	281	168	0	53
	D - Unnamed Road Southwest	2	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.31	11.95	0.4	B	114	171
A-BCD	0.01	5.12	0.0	A	7	10
A-B					21	31
A-C					210	315
D-ABC	0.52	19.33	1.1	C	169	253
C-ABD	0.37	6.52	0.8	A	246	369
C-D					34	51
C-A					180	271

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	93	23	500	0.187	92	0.0	0.2	8.813	A
A-BCD	5	1	710	0.007	5	0.0	0.0	5.109	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	139	35	454	0.305	137	0.0	0.4	11.284	B
C-ABD	182	46	821	0.222	181	0.0	0.4	5.614	A
C-D	31	8			31				
C-A	165	41			165				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	111	28	474	0.235	111	0.2	0.3	9.906	A
A-BCD	7	2	714	0.009	7	0.0	0.0	5.084	A
A-B	20	5			20				
A-C	206	51			206				
D-ABC	165	41	427	0.388	165	0.4	0.6	13.700	B
C-ABD	235	59	843	0.279	235	0.4	0.5	5.915	A
C-D	34	9			34				
C-A	182	45			182				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	137	34	438	0.312	136	0.3	0.4	11.893	B
A-BCD	9	2	723	0.012	9	0.0	0.0	5.039	A
A-B	25	6			25				
A-C	251	63			251				
D-ABC	203	51	389	0.521	201	0.6	1.0	18.974	C
C-ABD	320	80	875	0.366	319	0.5	0.8	6.488	A
C-D	37	9			37				
C-A	195	49			195				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	137	34	438	0.312	137	0.4	0.4	11.949	B
A-BCD	9	2	723	0.012	9	0.0	0.0	5.045	A
A-B	25	6			25				
A-C	251	63			251				
D-ABC	203	51	389	0.521	202	1.0	1.1	19.326	C
C-ABD	321	80	875	0.367	321	0.8	0.8	6.516	A
C-D	37	9			37				
C-A	195	49			195				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	111	28	474	0.235	112	0.4	0.3	9.968	A
A-BCD	7	2	714	0.009	7	0.0	0.0	5.091	A
A-B	20	5			20				
A-C	206	51			206				
D-ABC	165	41	426	0.388	167	1.1	0.6	13.991	B
C-ABD	236	59	844	0.279	237	0.8	0.5	5.956	A
C-D	34	9			34				
C-A	181	45			181				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	93	23	499	0.187	94	0.3	0.2	8.881	A
A-BCD	5	1	709	0.007	5	0.0	0.0	5.117	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	139	35	453	0.305	139	0.6	0.4	11.489	B
C-ABD	183	46	822	0.223	184	0.5	0.4	5.656	A
C-D	31	8			31				
C-A	164	41			164				

2024 base + committed + dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		10.37	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 base + committed + dev	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	309	100.000
B - Thedwastre Road North West		ONE HOUR	✓	292	100.000
C - Thurston Road South East		ONE HOUR	✓	452	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	24	244	41
	B - Thedwastre Road North West	5	0	112	175
	C - Thurston Road South East	263	91	0	98
	D - Unnamed Road Southwest	3	29	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.75	32.93	2.8	D	268	402
A-BCD	0.10	5.36	0.2	A	58	86
A-B					20	30
A-C					206	309
D-ABC	0.15	11.54	0.2	B	47	70
C-ABD	0.22	5.46	0.5	A	143	215
C-D					74	111
C-A					198	297

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	220	55	483	0.455	217	0.0	0.8	13.344	B
A-BCD	43	11	726	0.059	42	0.0	0.1	5.263	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	38	10	445	0.086	38	0.0	0.1	8.842	A
C-ABD	104	26	792	0.132	103	0.0	0.2	5.223	A
C-D	64	16			64				
C-A	172	43			172				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	263	66	461	0.570	261	0.8	1.3	17.834	C
A-BCD	55	14	735	0.075	55	0.1	0.1	5.292	A
A-B	20	5			20				
A-C	203	51			203				
D-ABC	46	11	413	0.111	46	0.1	0.1	9.797	A
C-ABD	136	34	816	0.167	136	0.2	0.3	5.300	A
C-D	73	18			73				
C-A	197	49			197				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	429	0.750	316	1.3	2.7	30.446	D
A-BCD	75	19	748	0.100	75	0.1	0.2	5.344	A
A-B	24	6			24				
A-C	242	60			242				
D-ABC	56	14	369	0.152	56	0.1	0.2	11.489	B
C-ABD	189	47	850	0.223	188	0.3	0.5	5.453	A
C-D	84	21			84				
C-A	225	56			225				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	429	0.750	321	2.7	2.8	32.925	D
A-BCD	75	19	747	0.100	75	0.2	0.2	5.357	A
A-B	24	6			24				
A-C	242	60			242				
D-ABC	56	14	368	0.153	56	0.2	0.2	11.543	B
C-ABD	189	47	850	0.223	189	0.5	0.5	5.461	A
C-D	84	21			84				
C-A	225	56			225				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	263	66	460	0.570	268	2.8	1.4	19.246	C
A-BCD	55	14	734	0.075	55	0.2	0.1	5.318	A
A-B	20	5			20				
A-C	203	51			203				
D-ABC	46	11	412	0.111	46	0.2	0.1	9.853	A
C-ABD	137	34	816	0.167	137	0.5	0.3	5.310	A
C-D	73	18			73				
C-A	197	49			197				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	220	55	483	0.455	222	1.4	0.9	13.906	B
A-BCD	43	11	726	0.059	43	0.1	0.1	5.282	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	38	10	444	0.087	39	0.1	0.1	8.891	A
C-ABD	105	26	793	0.132	105	0.3	0.2	5.240	A
C-D	64	16			64				
C-A	172	43			172				

2024 base + committed + dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 base + committed + dev	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	271	100.000
B - Thedwastre Road North West		ONE HOUR	✓	127	100.000
C - Thurston Road South East		ONE HOUR	✓	534	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	25	241	5
	B - Thedwastre Road North West	21	0	51	55
	C - Thurston Road South East	313	168	0	53
	D - Unnamed Road Southwest	2	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.33	12.59	0.5	B	117	175
A-BCD	0.01	5.12	0.0	A	7	11
A-B					23	34
A-C					219	328
D-ABC	0.54	20.66	1.1	C	169	253
C-ABD	0.38	6.49	0.9	A	258	387
C-D					34	50
C-A					199	298

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	96	24	492	0.194	95	0.0	0.2	9.044	A
A-BCD	5	1	710	0.007	5	0.0	0.0	5.107	A
A-B	19	5			19				
A-C	180	45			180				
D-ABC	139	35	446	0.311	137	0.0	0.4	11.577	B
C-ABD	189	47	834	0.226	187	0.0	0.4	5.556	A
C-D	31	8			31				
C-A	182	46			182				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	114	29	465	0.246	114	0.2	0.3	10.257	B
A-BCD	7	2	715	0.009	7	0.0	0.0	5.080	A
A-B	22	6			22				
A-C	215	54			215				
D-ABC	165	41	417	0.397	165	0.4	0.6	14.227	B
C-ABD	246	61	859	0.286	245	0.4	0.6	5.862	A
C-D	34	8			34				
C-A	201	50			201				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	140	35	426	0.328	139	0.3	0.5	12.519	B
A-BCD	9	2	724	0.013	9	0.0	0.0	5.032	A
A-B	27	7			27				
A-C	262	65			262				
D-ABC	203	51	377	0.538	201	0.6	1.1	20.215	C
C-ABD	338	85	894	0.378	337	0.6	0.9	6.462	A
C-D	36	9			36				
C-A	214	53			214				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	140	35	426	0.328	140	0.5	0.5	12.588	B
A-BCD	9	2	724	0.013	9	0.0	0.0	5.038	A
A-B	27	7			27				
A-C	262	65			262				
D-ABC	203	51	376	0.538	202	1.1	1.1	20.657	C
C-ABD	339	85	895	0.378	339	0.9	0.9	6.494	A
C-D	36	9			36				
C-A	213	53			213				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	114	29	464	0.246	115	0.5	0.3	10.328	B
A-BCD	7	2	715	0.009	7	0.0	0.0	5.090	A
A-B	22	6			22				
A-C	215	54			215				
D-ABC	165	41	416	0.397	167	1.1	0.7	14.568	B
C-ABD	246	62	860	0.286	247	0.9	0.6	5.907	A
C-D	34	8			34				
C-A	200	50			200				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	96	24	491	0.195	96	0.3	0.2	9.119	A
A-BCD	5	1	709	0.007	5	0.0	0.0	5.116	A
A-B	19	5			19				
A-C	180	45			180				
D-ABC	139	35	445	0.311	139	0.7	0.5	11.805	B
C-ABD	190	47	835	0.227	190	0.6	0.4	5.599	A
C-D	31	8			31				
C-A	182	45			182				

2024 base + Gladman Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		11.71	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	320	100.000
B - Thedwastre Road North West		ONE HOUR	✓	303	100.000
C - Thurston Road South East		ONE HOUR	✓	464	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	24	255	41
	B - Thedwastre Road North West	5	0	123	175
	C - Thurston Road South East	271	95	0	98
	D - Unnamed Road Southwest	3	29	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.78	37.51	3.3	E	278	417
A-BCD	0.10	5.33	0.2	A	59	88
A-B					20	30
A-C					215	322
D-ABC	0.16	11.86	0.2	B	47	70
C-ABD	0.24	5.53	0.5	A	152	228
C-D					73	109
C-A					201	302

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	228	57	483	0.473	225	0.0	0.9	13.777	B
A-BCD	43	11	729	0.059	43	0.0	0.1	5.245	A
A-B	17	4			17				
A-C	181	45			181				
D-ABC	38	10	440	0.087	38	0.0	0.1	8.956	A
C-ABD	110	27	794	0.138	109	0.0	0.2	5.252	A
C-D	64	16			64				
C-A	176	44			176				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	459	0.593	270	0.9	1.4	18.821	C
A-BCD	56	14	738	0.076	56	0.1	0.1	5.273	A
A-B	20	5			20				
A-C	212	53			212				
D-ABC	46	11	407	0.113	46	0.1	0.1	9.970	A
C-ABD	144	36	818	0.176	144	0.2	0.3	5.344	A
C-D	73	18			73				
C-A	201	50			201				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	334	83	427	0.782	327	1.4	3.1	33.875	D
A-BCD	77	19	752	0.102	76	0.1	0.2	5.320	A
A-B	24	6			24				
A-C	252	63			252				
D-ABC	56	14	361	0.156	56	0.1	0.2	11.794	B
C-ABD	201	50	853	0.235	200	0.3	0.5	5.523	A
C-D	82	21			82				
C-A	228	57			228				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	334	83	427	0.782	333	3.1	3.3	37.514	E
A-BCD	77	19	752	0.102	77	0.2	0.2	5.333	A
A-B	24	6			24				
A-C	252	63			252				
D-ABC	56	14	360	0.156	56	0.2	0.2	11.859	B
C-ABD	201	50	853	0.235	201	0.5	0.5	5.534	A
C-D	82	21			82				
C-A	228	57			228				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	459	0.593	279	3.3	1.5	20.742	C
A-BCD	56	14	738	0.076	56	0.2	0.1	5.298	A
A-B	20	5			20				
A-C	212	53			212				
D-ABC	46	11	405	0.113	46	0.2	0.1	10.036	B
C-ABD	144	36	819	0.176	145	0.5	0.3	5.353	A
C-D	72	18			72				
C-A	200	50			200				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	228	57	482	0.473	231	1.5	0.9	14.440	B
A-BCD	44	11	729	0.060	44	0.1	0.1	5.266	A
A-B	17	4			17				
A-C	180	45			180				
D-ABC	38	10	438	0.088	39	0.1	0.1	9.008	A
C-ABD	110	28	795	0.139	111	0.3	0.2	5.272	A
C-D	63	16			63				
C-A	175	44			175				

2024 base + Gladman Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	274	100.000
B - Thedwastre Road North West		ONE HOUR	✓	132	100.000
C - Thurston Road South East		ONE HOUR	✓	566	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	24	245	5
	B - Thedwastre Road North West	21	0	56	55
	C - Thurston Road South East	334	179	0	53
	D - Unnamed Road Southwest	2	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.34	12.98	0.5	B	121	182
A-BCD	0.01	5.15	0.0	A	7	11
A-B					22	33
A-C					222	334
D-ABC	0.55	22.05	1.2	C	169	253
C-ABD	0.41	6.75	1.0	A	283	424
C-D					32	49
C-A					204	306

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	491	0.202	98	0.0	0.3	9.136	A
A-BCD	5	1	705	0.007	5	0.0	0.0	5.145	A
A-B	18	4			18				
A-C	183	46			183				
D-ABC	139	35	439	0.316	137	0.0	0.5	11.863	B
C-ABD	206	51	844	0.244	204	0.0	0.4	5.619	A
C-D	30	8			30				
C-A	190	48			190				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	119	30	463	0.256	118	0.3	0.3	10.430	B
A-BCD	7	2	709	0.010	7	0.0	0.0	5.123	A
A-B	21	5			21				
A-C	218	55			218				
D-ABC	165	41	408	0.406	165	0.5	0.7	14.744	B
C-ABD	269	67	871	0.309	268	0.4	0.6	5.979	A
C-D	33	8			33				
C-A	207	52			207				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	145	36	423	0.344	145	0.3	0.5	12.898	B
A-BCD	9	2	718	0.013	9	0.0	0.0	5.081	A
A-B	26	7			26				
A-C	266	67			266				
D-ABC	203	51	366	0.554	201	0.7	1.2	21.503	C
C-ABD	373	93	909	0.410	371	0.6	1.0	6.706	A
C-D	34	9			34				
C-A	216	54			216				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	145	36	423	0.344	145	0.5	0.5	12.981	B
A-BCD	9	2	717	0.013	9	0.0	0.0	5.086	A
A-B	26	7			26				
A-C	266	67			266				
D-ABC	203	51	365	0.554	202	1.2	1.2	22.055	C
C-ABD	373	93	909	0.411	373	1.0	1.0	6.748	A
C-D	34	9			34				
C-A	216	54			216				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	119	30	462	0.257	119	0.5	0.4	10.512	B
A-BCD	7	2	709	0.010	7	0.0	0.0	5.134	A
A-B	21	5			21				
A-C	218	55			218				
D-ABC	165	41	407	0.406	167	1.2	0.7	15.146	C
C-ABD	270	67	872	0.309	271	1.0	0.7	6.030	A
C-D	33	8			33				
C-A	206	52			206				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	491	0.203	100	0.4	0.3	9.219	A
A-BCD	5	1	704	0.008	5	0.0	0.0	5.152	A
A-B	18	4			18				
A-C	183	46			183				
D-ABC	139	35	438	0.316	139	0.7	0.5	12.109	B
C-ABD	207	52	844	0.245	207	0.7	0.5	5.672	A
C-D	30	8			30				
C-A	189	47			189				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J3 Pokeridge Corner with visibility improvement.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 20/06/2019 12:30:14

- »2024 base, AM
- »2024 base, PM
- »2024 base + committed, AM
- »2024 base + committed, PM
- »2024 base + committed + dev, AM
- »2024 base + committed + dev, PM
- »2024 base + Gladman Sensitivity, AM
- »2024 base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 base								
Stream B-ACD	0.6	11.09	0.38	B	0.2	7.87	0.16	A
Stream A-BCD	0.1	5.62	0.09	A	0.0	4.87	0.01	A
Stream D-ABC	0.1	9.49	0.12	A	0.7	13.27	0.42	B
Stream C-ABD	0.2	5.02	0.12	A	0.2	5.11	0.11	A
2024 base + committed								
Stream B-ACD	1.7	19.33	0.63	C	0.4	9.76	0.27	A
Stream A-BCD	0.2	5.48	0.10	A	0.0	5.12	0.01	A
Stream D-ABC	0.2	11.21	0.15	B	1.1	19.42	0.52	C
Stream C-ABD	0.5	5.58	0.22	A	0.9	6.77	0.38	A
2024 base + committed + dev								
Stream B-ACD	1.8	20.72	0.65	C	0.4	10.23	0.28	B
Stream A-BCD	0.2	5.36	0.10	A	0.0	5.11	0.01	A
Stream D-ABC	0.2	11.56	0.15	B	1.1	20.76	0.54	C
Stream C-ABD	0.5	5.61	0.23	A	1.0	6.75	0.39	A
2024 base + Gladman Sensitivity								
Stream B-ACD	2.0	22.66	0.68	C	0.4	10.51	0.30	B
Stream A-BCD	0.2	5.34	0.10	A	0.0	5.15	0.01	A
Stream D-ABC	0.2	11.87	0.16	B	1.2	22.17	0.56	C
Stream C-ABD	0.5	5.69	0.24	A	1.1	7.04	0.42	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	J3 Pokeridge Corner Proposed improved visibility
Location	Thurston
Site number	J3
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J3
Client	
Jobnumber	X601
Enumerator	CANNON\DWR
Description	Geometry based on Aecom model 5/9/2017

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024 base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 base + committed	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 base + committed	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 base + committed + dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 base + committed + dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		3.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Beyton Road Northwest		Major
B	Thedwastre Road North West		Minor
C	Thurston Road South East		Major
D	Unnamed Road Southwest		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Beyton Road Northwest	6.12			213.7	✓	0.00
C - Thurston Road South East	6.12			210.0	✓	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 - Thedwastre Road North West	One lane	4.48	120	120
D - Unnamed Road Southwest	One lane	5.00	18	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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	698	-	-	-	-	-	-	0.269	0.384	0.269	-	-	-
1	B-A	664	0.120	0.304	0.304	-	-	-	0.191	0.434	-	0.304	0.304	0.152
1	B-C	803	0.122	0.310	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	664	0.120	0.304	0.304	-	-	-	0.191	0.434	0.191	-	-	-
1	B-D, offside lane	664	0.120	0.304	0.304	-	-	-	0.191	0.434	0.191	-	-	-
1	C-B	696	0.268	0.268	0.383	-	-	-	-	-	-	-	-	-
1	D-A	762	-	-	-	-	-	-	0.294	-	0.116	-	-	-
1	D-B, nearside lane	590	0.170	0.170	0.386	-	-	-	0.270	0.270	0.107	-	-	-
1	D-B, offside lane	590	0.170	0.170	0.386	-	-	-	0.270	0.270	0.107	-	-	-
1	D-C	590	-	0.170	0.386	0.135	0.270	0.270	0.270	0.270	0.107	-	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 base	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	211	100.000
B - Thedwastre Road North West		ONE HOUR	✓	181	100.000
C - Thurston Road South East		ONE HOUR	✓	366	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	21	149	41
	B - Thedwastre Road North West	4	0	33	144
	C - Thurston Road South East	217	51	0	98
	D - Unnamed Road Southwest	3	26	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.38	11.09	0.6	B	166	249
A-BCD	0.09	5.62	0.1	A	49	73
A-B					18	26
A-C					127	190
D-ABC	0.12	9.49	0.1	A	44	65
C-ABD	0.12	5.02	0.2	A	75	112
C-D					81	122
C-A					180	270

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	136	34	572	0.238	135	0.0	0.3	8.222	A
A-BCD	38	9	698	0.054	37	0.0	0.1	5.447	A
A-B	15	4			15				
A-C	106	27			106				
D-ABC	36	9	486	0.074	35	0.0	0.1	7.994	A
C-ABD	55	14	773	0.072	55	0.0	0.1	5.014	A
C-D	68	17			68				
C-A	152	38			152				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163	41	552	0.295	162	0.3	0.4	9.236	A
A-BCD	47	12	700	0.067	47	0.1	0.1	5.515	A
A-B	17	4			17				
A-C	125	31			125				
D-ABC	43	11	463	0.092	43	0.1	0.1	8.565	A
C-ABD	71	18	795	0.090	71	0.1	0.2	4.979	A
C-D	80	20			80				
C-A	177	44			177				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	199	50	524	0.380	198	0.4	0.6	11.036	B
A-BCD	62	15	702	0.088	61	0.1	0.1	5.613	A
A-B	21	5			21				
A-C	150	37			150				
D-ABC	52	13	432	0.121	52	0.1	0.1	9.485	A
C-ABD	97	24	826	0.117	97	0.2	0.2	4.940	A
C-D	95	24			95				
C-A	211	53			211				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	199	50	524	0.380	199	0.6	0.6	11.090	B
A-BCD	62	15	702	0.088	62	0.1	0.1	5.622	A
A-B	21	5			21				
A-C	150	37			150				
D-ABC	52	13	432	0.121	52	0.1	0.1	9.493	A
C-ABD	97	24	826	0.118	97	0.2	0.2	4.942	A
C-D	95	24			95				
C-A	211	53			211				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163	41	551	0.295	163	0.6	0.4	9.297	A
A-BCD	47	12	700	0.068	47	0.1	0.1	5.531	A
A-B	17	4			17				
A-C	125	31			125				
D-ABC	43	11	463	0.092	43	0.1	0.1	8.582	A
C-ABD	72	18	795	0.090	72	0.2	0.2	4.982	A
C-D	80	20			80				
C-A	177	44			177				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	136	34	571	0.238	137	0.4	0.3	8.291	A
A-BCD	38	9	698	0.054	38	0.1	0.1	5.461	A
A-B	15	4			15				
A-C	106	27			106				
D-ABC	36	9	485	0.074	36	0.1	0.1	8.017	A
C-ABD	56	14	773	0.072	56	0.2	0.1	5.024	A
C-D	68	17			68				
C-A	152	38			152				

2024 base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		4.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 base	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	231	100.000
B - Thedwastre Road North West		ONE HOUR	✓	79	100.000
C - Thurston Road South East		ONE HOUR	✓	285	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	175	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	23	203	5
	B - Thedwastre Road North West	18	0	19	42
	C - Thurston Road South East	179	53	0	53
	D - Unnamed Road Southwest	2	101	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.16	7.87	0.2	A	72	109
A-BCD	0.01	4.87	0.0	A	6	10
A-B					21	31
A-C					185	277
D-ABC	0.42	13.27	0.7	B	161	241
C-ABD	0.11	5.11	0.2	A	68	102
C-D					44	66
C-A					149	224

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	59	15	592	0.100	59	0.0	0.1	6.743	A
A-BCD	5	1	744	0.007	5	0.0	0.0	4.868	A
A-B	17	4			17				
A-C	152	38			152				
D-ABC	132	33	505	0.261	130	0.0	0.3	9.584	A
C-ABD	52	13	759	0.068	51	0.0	0.1	5.085	A
C-D	37	9			37				
C-A	126	31			126				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	71	18	572	0.124	71	0.1	0.1	7.177	A
A-BCD	6	2	755	0.008	6	0.0	0.0	4.808	A
A-B	21	5			21				
A-C	181	45			181				
D-ABC	157	39	488	0.323	157	0.3	0.5	10.870	B
C-ABD	65	16	772	0.085	65	0.1	0.1	5.090	A
C-D	44	11			44				
C-A	147	37			147				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	87	22	545	0.160	87	0.1	0.2	7.860	A
A-BCD	8	2	770	0.011	8	0.0	0.0	4.725	A
A-B	25	6			25				
A-C	221	55			221				
D-ABC	193	48	464	0.415	192	0.5	0.7	13.179	B
C-ABD	86	22	792	0.109	86	0.1	0.2	5.104	A
C-D	52	13			52				
C-A	175	44			175				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	87	22	544	0.160	87	0.2	0.2	7.868	A
A-BCD	8	2	770	0.011	8	0.0	0.0	4.728	A
A-B	25	6			25				
A-C	221	55			221				
D-ABC	193	48	464	0.415	193	0.7	0.7	13.266	B
C-ABD	86	22	792	0.109	86	0.2	0.2	5.109	A
C-D	52	13			52				
C-A	175	44			175				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	71	18	572	0.124	71	0.2	0.1	7.190	A
A-BCD	6	2	755	0.008	6	0.0	0.0	4.813	A
A-B	21	5			21				
A-C	181	45			181				
D-ABC	157	39	487	0.323	158	0.7	0.5	10.964	B
C-ABD	65	16	773	0.085	66	0.2	0.1	5.097	A
C-D	44	11			44				
C-A	147	37			147				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	59	15	592	0.100	60	0.1	0.1	6.763	A
A-BCD	5	1	744	0.007	5	0.0	0.0	4.872	A
A-B	17	4			17				
A-C	152	38			152				
D-ABC	132	33	504	0.261	132	0.5	0.4	9.686	A
C-ABD	52	13	759	0.068	52	0.1	0.1	5.095	A
C-D	37	9			37				
C-A	125	31			125				

2024 base + committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 base + committed	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	281	100.000
B - Thedwastre Road North West		ONE HOUR	✓	291	100.000
C - Thurston Road South East		ONE HOUR	✓	441	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	21	219	41
	B - Thedwastre Road North West	4	0	112	175
	C - Thurston Road South East	252	91	0	98
	D - Unnamed Road Southwest	3	29	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.63	19.33	1.7	C	267	400
A-BCD	0.10	5.48	0.2	A	55	83
A-B					17	26
A-C					185	278
D-ABC	0.15	11.21	0.2	B	46	70
C-ABD	0.22	5.58	0.5	A	142	213
C-D					73	110
C-A					189	283

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	564	0.388	217	0.0	0.6	10.286	B
A-BCD	41	10	714	0.058	41	0.0	0.1	5.345	A
A-B	15	4			15				
A-C	155	39			155				
D-ABC	38	10	450	0.085	38	0.0	0.1	8.727	A
C-ABD	104	26	775	0.134	103	0.0	0.2	5.354	A
C-D	64	16			64				
C-A	164	41			164				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	262	65	540	0.484	260	0.6	0.9	12.821	B
A-BCD	53	13	720	0.073	53	0.1	0.1	5.390	A
A-B	17	4			17				
A-C	182	46			182				
D-ABC	45	11	420	0.108	45	0.1	0.1	9.616	A
C-ABD	135	34	799	0.169	135	0.2	0.3	5.427	A
C-D	73	18			73				
C-A	188	47			188				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	506	0.633	317	0.9	1.6	18.793	C
A-BCD	71	18	729	0.097	71	0.1	0.2	5.465	A
A-B	20	5			20				
A-C	218	54			218				
D-ABC	56	14	378	0.147	55	0.1	0.2	11.171	B
C-ABD	187	47	833	0.225	187	0.3	0.5	5.574	A
C-D	84	21			84				
C-A	215	54			215				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	320	80	506	0.633	320	1.6	1.7	19.334	C
A-BCD	71	18	729	0.097	71	0.2	0.2	5.477	A
A-B	20	5			20				
A-C	217	54			217				
D-ABC	56	14	377	0.148	56	0.2	0.2	11.206	B
C-ABD	187	47	834	0.225	187	0.5	0.5	5.582	A
C-D	83	21			83				
C-A	215	54			215				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	262	65	540	0.485	264	1.7	1.0	13.212	B
A-BCD	53	13	720	0.073	53	0.2	0.1	5.413	A
A-B	17	4			17				
A-C	182	46			182				
D-ABC	45	11	419	0.109	46	0.2	0.1	9.657	A
C-ABD	136	34	799	0.170	136	0.5	0.3	5.437	A
C-D	73	18			73				
C-A	188	47			188				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	564	0.389	220	1.0	0.6	10.522	B
A-BCD	41	10	714	0.058	42	0.1	0.1	5.364	A
A-B	15	4			15				
A-C	155	39			155				
D-ABC	38	10	449	0.085	38	0.1	0.1	8.767	A
C-ABD	104	26	775	0.134	105	0.3	0.2	5.373	A
C-D	64	16			64				
C-A	164	41			164				

2024 base + committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 base + committed	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	259	100.000
B - Thedwastre Road North West		ONE HOUR	✓	124	100.000
C - Thurston Road South East		ONE HOUR	✓	502	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	23	231	5
	B - Thedwastre Road North West	18	0	51	55
	C - Thurston Road South East	281	168	0	53
	D - Unnamed Road Southwest	2	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.27	9.76	0.4	A	114	171
A-BCD	0.01	5.12	0.0	A	7	10
A-B					21	31
A-C					210	315
D-ABC	0.52	19.42	1.1	C	169	253
C-ABD	0.38	6.77	0.9	A	249	374
C-D					34	50
C-A					178	267

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	93	23	576	0.162	93	0.0	0.2	7.422	A
A-BCD	5	1	710	0.007	5	0.0	0.0	5.109	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	139	35	453	0.306	137	0.0	0.4	11.321	B
C-ABD	184	46	803	0.229	183	0.0	0.4	5.795	A
C-D	31	8			31				
C-A	163	41			163				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	111	28	547	0.204	111	0.2	0.3	8.261	A
A-BCD	7	2	714	0.009	7	0.0	0.0	5.084	A
A-B	20	5			20				
A-C	206	51			206				
D-ABC	165	41	426	0.389	165	0.4	0.6	13.754	B
C-ABD	238	59	826	0.288	237	0.4	0.6	6.119	A
C-D	34	8			34				
C-A	179	45			179				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	137	34	506	0.270	136	0.3	0.4	9.729	A
A-BCD	9	2	723	0.012	9	0.0	0.0	5.039	A
A-B	25	6			25				
A-C	251	63			251				
D-ABC	203	51	388	0.522	201	0.6	1.0	19.065	C
C-ABD	325	81	858	0.379	324	0.6	0.9	6.741	A
C-D	36	9			36				
C-A	192	48			192				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	137	34	505	0.270	137	0.4	0.4	9.764	A
A-BCD	9	2	723	0.012	9	0.0	0.0	5.043	A
A-B	25	6			25				
A-C	251	63			251				
D-ABC	203	51	388	0.523	202	1.0	1.1	19.422	C
C-ABD	325	81	859	0.379	325	0.9	0.9	6.773	A
C-D	36	9			36				
C-A	191	48			191				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	111	28	546	0.204	112	0.4	0.3	8.298	A
A-BCD	7	2	714	0.009	7	0.0	0.0	5.093	A
A-B	20	5			20				
A-C	206	51			206				
D-ABC	165	41	425	0.389	167	1.1	0.7	14.047	B
C-ABD	239	60	827	0.289	240	0.9	0.6	6.166	A
C-D	34	8			34				
C-A	179	45			179				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	93	23	575	0.162	94	0.3	0.2	7.478	A
A-BCD	5	1	709	0.007	5	0.0	0.0	5.115	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	139	35	452	0.306	139	0.7	0.4	11.531	B
C-ABD	185	46	804	0.230	185	0.6	0.4	5.842	A
C-D	31	8			31				
C-A	162	41			162				

2024 base + committed + dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		7.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 base + committed + dev	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	309	100.000
B - Thedwastre Road North West		ONE HOUR	✓	292	100.000
C - Thurston Road South East		ONE HOUR	✓	452	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	24	244	41
	B - Thedwastre Road North West	5	0	112	175
	C - Thurston Road South East	263	91	0	98
	D - Unnamed Road Southwest	3	29	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.65	20.72	1.8	C	268	402
A-BCD	0.10	5.36	0.2	A	58	86
A-B					20	30
A-C					206	309
D-ABC	0.15	11.56	0.2	B	47	70
C-ABD	0.23	5.61	0.5	A	145	218
C-D					73	110
C-A					196	294

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	220	55	557	0.395	217	0.0	0.6	10.535	B
A-BCD	43	11	726	0.059	42	0.0	0.1	5.263	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	38	10	444	0.087	38	0.0	0.1	8.864	A
C-ABD	105	26	776	0.136	105	0.0	0.2	5.363	A
C-D	64	16			64				
C-A	171	43			171				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	263	66	531	0.495	261	0.6	1.0	13.293	B
A-BCD	55	14	735	0.075	55	0.1	0.1	5.294	A
A-B	20	5			20				
A-C	203	51			203				
D-ABC	46	11	412	0.111	46	0.1	0.1	9.821	A
C-ABD	138	35	800	0.173	138	0.2	0.3	5.444	A
C-D	73	18			73				
C-A	195	49			195				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	495	0.650	318	1.0	1.8	20.046	C
A-BCD	75	19	748	0.100	75	0.1	0.2	5.346	A
A-B	24	6			24				
A-C	242	60			242				
D-ABC	56	14	368	0.152	56	0.1	0.2	11.515	B
C-ABD	192	48	835	0.230	191	0.3	0.5	5.604	A
C-D	83	21			83				
C-A	223	56			223				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	494	0.650	321	1.8	1.8	20.724	C
A-BCD	75	19	747	0.100	75	0.2	0.2	5.359	A
A-B	24	6			24				
A-C	242	60			242				
D-ABC	56	14	368	0.153	56	0.2	0.2	11.557	B
C-ABD	192	48	835	0.230	192	0.5	0.5	5.611	A
C-D	83	21			83				
C-A	222	56			222				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	263	66	530	0.495	266	1.8	1.0	13.754	B
A-BCD	55	14	734	0.075	55	0.2	0.1	5.316	A
A-B	20	5			20				
A-C	203	51			203				
D-ABC	46	11	411	0.112	46	0.2	0.1	9.867	A
C-ABD	138	35	800	0.173	139	0.5	0.3	5.453	A
C-D	73	18			73				
C-A	195	49			195				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	220	55	556	0.395	221	1.0	0.7	10.796	B
A-BCD	43	11	726	0.059	43	0.1	0.1	5.282	A
A-B	17	4			17				
A-C	173	43			173				
D-ABC	38	10	443	0.087	39	0.1	0.1	8.910	A
C-ABD	106	26	776	0.137	106	0.3	0.2	5.384	A
C-D	64	16			64				
C-A	171	43			171				

2024 base + committed + dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 base + committed + dev	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	271	100.000
B - Thedwastre Road North West		ONE HOUR	✓	127	100.000
C - Thurston Road South East		ONE HOUR	✓	534	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	25	241	5
	B - Thedwastre Road North West	21	0	51	55
	C - Thurston Road South East	313	168	0	53
	D - Unnamed Road Southwest	2	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.28	10.23	0.4	B	117	175
A-BCD	0.01	5.11	0.0	A	7	11
A-B					23	34
A-C					219	328
D-ABC	0.54	20.76	1.1	C	169	253
C-ABD	0.39	6.75	1.0	A	261	392
C-D					33	50
C-A					196	293

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	96	24	567	0.169	95	0.0	0.2	7.612	A
A-BCD	5	1	710	0.007	5	0.0	0.0	5.107	A
A-B	19	5			19				
A-C	180	45			180				
D-ABC	139	35	445	0.311	137	0.0	0.4	11.616	B
C-ABD	191	48	816	0.234	189	0.0	0.4	5.734	A
C-D	31	8			31				
C-A	181	45			181				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	114	29	536	0.213	114	0.2	0.3	8.524	A
A-BCD	7	2	715	0.009	7	0.0	0.0	5.080	A
A-B	22	6			22				
A-C	215	54			215				
D-ABC	165	41	416	0.398	165	0.4	0.6	14.282	B
C-ABD	249	62	842	0.295	248	0.4	0.6	6.062	A
C-D	34	8			34				
C-A	198	49			198				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	140	35	492	0.284	139	0.3	0.4	10.186	B
A-BCD	9	2	724	0.013	9	0.0	0.0	5.032	A
A-B	27	7			27				
A-C	262	65			262				
D-ABC	203	51	376	0.539	201	0.6	1.1	20.314	C
C-ABD	343	86	879	0.391	342	0.6	0.9	6.715	A
C-D	35	9			35				
C-A	209	52			209				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	140	35	492	0.284	140	0.4	0.4	10.228	B
A-BCD	9	2	724	0.013	9	0.0	0.0	5.038	A
A-B	27	7			27				
A-C	262	65			262				
D-ABC	203	51	376	0.539	202	1.1	1.1	20.764	C
C-ABD	344	86	879	0.391	344	0.9	1.0	6.754	A
C-D	35	9			35				
C-A	209	52			209				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	114	29	535	0.213	115	0.4	0.3	8.569	A
A-BCD	7	2	714	0.009	7	0.0	0.0	5.090	A
A-B	22	6			22				
A-C	215	54			215				
D-ABC	165	41	415	0.398	167	1.1	0.7	14.625	B
C-ABD	249	62	843	0.296	251	1.0	0.6	6.110	A
C-D	33	8			33				
C-A	197	49			197				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	96	24	566	0.169	96	0.3	0.2	7.661	A
A-BCD	5	1	709	0.007	5	0.0	0.0	5.114	A
A-B	19	5			19				
A-C	180	45			180				
D-ABC	139	35	444	0.312	139	0.7	0.5	11.846	B
C-ABD	192	48	817	0.235	192	0.6	0.4	5.781	A
C-D	30	8			30				
C-A	180	45			180				

2024 base + Gladman Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		7.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 - Beyton Road Northwest		ONE HOUR	✓	320	100.000
B - Thedwastre Road North West		ONE HOUR	✓	303	100.000
C - Thurston Road South East		ONE HOUR	✓	464	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	24	255	41
	B - Thedwastre Road North West	5	0	123	175
	C - Thurston Road South East	271	95	0	98
	D - Unnamed Road Southwest	3	29	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
	A - Beyton Road Northwest	0	0	5	0
	B - Thedwastre Road North West	0	0	13	0
	C - Thurston Road South East	4	5	0	3
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.68	22.66	2.0	C	278	417
A-BCD	0.10	5.34	0.2	A	59	88
A-B					20	30
A-C					215	322
D-ABC	0.16	11.87	0.2	B	47	70
C-ABD	0.24	5.69	0.5	A	154	231
C-D					72	108
C-A					200	299

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	228	57	555	0.411	225	0.0	0.7	10.831	B
A-BCD	43	11	729	0.059	43	0.0	0.1	5.245	A
A-B	17	4			17				
A-C	181	45			181				
D-ABC	38	10	439	0.088	38	0.0	0.1	8.979	A
C-ABD	111	28	778	0.143	110	0.0	0.2	5.391	A
C-D	63	16			63				
C-A	175	44			175				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	529	0.515	271	0.7	1.0	13.888	B
A-BCD	56	14	738	0.076	56	0.1	0.1	5.271	A
A-B	20	5			20				
A-C	212	53			212				
D-ABC	46	11	406	0.113	46	0.1	0.1	9.994	A
C-ABD	146	37	803	0.182	146	0.2	0.3	5.488	A
C-D	72	18			72				
C-A	199	50			199				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	334	83	492	0.678	330	1.0	2.0	21.721	C
A-BCD	77	19	752	0.102	76	0.1	0.2	5.322	A
A-B	24	6			24				
A-C	252	63			252				
D-ABC	56	14	360	0.156	56	0.1	0.2	11.819	B
C-ABD	204	51	838	0.243	203	0.3	0.5	5.678	A
C-D	82	20			82				
C-A	226	56			226				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	334	83	491	0.679	333	2.0	2.0	22.661	C
A-BCD	77	19	752	0.102	77	0.2	0.2	5.335	A
A-B	24	6			24				
A-C	252	63			252				
D-ABC	56	14	359	0.156	56	0.2	0.2	11.867	B
C-ABD	204	51	839	0.243	204	0.5	0.5	5.686	A
C-D	81	20			81				
C-A	225	56			225				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	528	0.516	276	2.0	1.1	14.476	B
A-BCD	56	14	738	0.076	56	0.2	0.1	5.298	A
A-B	20	5			20				
A-C	212	53			212				
D-ABC	46	11	405	0.113	46	0.2	0.1	10.044	B
C-ABD	146	37	803	0.182	147	0.5	0.4	5.499	A
C-D	72	18			72				
C-A	199	50			199				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	228	57	555	0.411	230	1.1	0.7	11.130	B
A-BCD	44	11	729	0.060	44	0.1	0.1	5.266	A
A-B	17	4			17				
A-C	180	45			180				
D-ABC	38	10	437	0.088	39	0.1	0.1	9.026	A
C-ABD	112	28	778	0.144	112	0.4	0.3	5.415	A
C-D	63	16			63				
C-A	174	44			174				

2024 base + Gladman Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J3 Pokeridge Corner	Crossroads	Two-way		6.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 - Beyton Road Northwest		ONE HOUR	✓	274	100.000
B - Thedwastre Road North West		ONE HOUR	✓	132	100.000
C - Thurston Road South East		ONE HOUR	✓	566	100.000
D - Unnamed Road Southwest		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	24	245	5
	B - Thedwastre Road North West	21	0	56	55
	C - Thurston Road South East	334	179	0	53
	D - Unnamed Road Southwest	2	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Beyton Road Northwest	B - Thedwastre Road North West	C - Thurston Road South East	D - Unnamed Road Southwest
From	A - Beyton Road Northwest	0	0	1	0
	B - Thedwastre Road North West	0	0	0	0
	C - Thurston Road South East	1	0	0	2
	D - Unnamed Road Southwest	0	0	0	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)
B-ACD	0.30	10.51	0.4	B	121	182
A-BCD	0.01	5.15	0.0	A	7	11
A-B					22	33
A-C					222	334
D-ABC	0.56	22.17	1.2	C	169	253
C-ABD	0.42	7.04	1.1	A	287	430
C-D					32	48
C-A					201	301

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	566	0.176	99	0.0	0.2	7.687	A
A-BCD	5	1	705	0.007	5	0.0	0.0	5.145	A
A-B	18	4			18				
A-C	183	46			183				
D-ABC	139	35	438	0.317	137	0.0	0.5	11.897	B
C-ABD	208	52	826	0.252	206	0.0	0.5	5.803	A
C-D	30	7			30				
C-A	188	47			188				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	119	30	534	0.222	118	0.2	0.3	8.659	A
A-BCD	7	2	709	0.010	7	0.0	0.0	5.124	A
A-B	21	5			21				
A-C	218	55			218				
D-ABC	165	41	407	0.407	165	0.5	0.7	14.802	B
C-ABD	273	68	854	0.319	272	0.5	0.7	6.189	A
C-D	32	8			32				
C-A	204	51			204				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	145	36	488	0.298	145	0.3	0.4	10.464	B
A-BCD	9	2	718	0.013	9	0.0	0.0	5.082	A
A-B	26	7			26				
A-C	266	67			266				
D-ABC	203	51	365	0.555	201	0.7	1.2	21.610	C
C-ABD	379	95	893	0.424	377	0.7	1.1	6.985	A
C-D	33	8			33				
C-A	211	53			211				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	145	36	488	0.298	145	0.4	0.4	10.514	B
A-BCD	9	2	717	0.013	9	0.0	0.0	5.086	A
A-B	26	7			26				
A-C	266	67			266				
D-ABC	203	51	364	0.556	202	1.2	1.2	22.172	C
C-ABD	379	95	894	0.424	379	1.1	1.1	7.036	A
C-D	33	8			33				
C-A	210	53			210				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	119	30	533	0.223	119	0.4	0.3	8.709	A
A-BCD	7	2	708	0.010	7	0.0	0.0	5.132	A
A-B	21	5			21				
A-C	218	55			218				
D-ABC	165	41	406	0.407	167	1.2	0.7	15.210	C
C-ABD	273	68	855	0.320	275	1.1	0.7	6.248	A
C-D	32	8			32				
C-A	203	51			203				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	565	0.176	100	0.3	0.2	7.740	A
A-BCD	5	1	704	0.008	5	0.0	0.0	5.153	A
A-B	18	4			18				
A-C	183	46			183				
D-ABC	139	35	437	0.317	139	0.7	0.5	12.151	B
C-ABD	209	52	827	0.253	210	0.7	0.5	5.859	A
C-D	30	7			30				
C-A	187	47			187				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J4 Beyton Road Existing.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 20/06/2019 15:46:55

- »2024 Base, AM
- »2024 Base, PM
- »2024 Base + committed, AM
- »2024 Base + committed, PM
- »2024 Base + committed + dev, AM
- »2024 Base + committed + dev, PM
- »2024 Base + Gladman Sensitivity, AM
- »2024 Base + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
Stream B-C	0.0	10.52	0.04	B	0.0	8.60	0.03	A
Stream B-A	1.5	22.89	0.60	C	1.1	19.76	0.54	C
Stream C-AB	0.1	5.71	0.05	A	0.1	4.54	0.08	A
2024 Base + committed								
Stream B-C	0.1	20.50	0.08	C	0.1	38.39	0.11	E
Stream B-A	3.3	45.45	0.78	E	5.4	65.14	0.87	F
Stream C-AB	0.1	6.15	0.05	A	0.2	4.54	0.08	A
2024 Base + committed + dev								
Stream B-C	0.1	30.48	0.11	D	0.2	64.29	0.17	F
Stream B-A	4.4	57.93	0.84	F	6.3	74.84	0.90	F
Stream C-AB	0.1	6.17	0.05	A	0.2	4.55	0.08	A
2024 Base + Gladman Sensitivity								
Stream B-C	0.3	73.87	0.23	F	1.5	535.77	0.99	F
Stream B-A	6.1	78.55	0.89	F	11.2	119.47	0.98	F
Stream C-AB	0.1	6.28	0.05	A	0.2	4.55	0.09	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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	J4 - Beyton Road
Location	Thurston
Site number	J4
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J4
Client	X601
Jobnumber	
Enumerator	CANNON\DWR
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	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base + committed	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base + committed	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + committed + dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + committed + dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		5.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Barton Road North		Major
B	Beyton Road east		Minor
C	Barton Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Barton Road South	5.80			250.0	✓	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	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 - Beyton Road east	One lane plus flare	10.00	6.70	3.60	3.00	3.00	✓	1.00	30	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	546	0.100	0.253	0.159	0.362
1	B-C	662	0.102	0.259	-	-
1	C-B	719	0.281	0.281	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	537	100.000
B - Beyton Road east		ONE HOUR	✓	227	100.000
C - Barton Road South		ONE HOUR	✓	168	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	192	345
	B - Beyton Road east	214	0	13
	C - Barton Road South	147	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	0	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)
B-C	0.04	10.52	0.0	B	12	18
B-A	0.60	22.89	1.5	C	196	295
C-AB	0.05	5.71	0.1	A	24	37
C-A					130	195
A-B					176	264
A-C					317	475

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	502	0.020	10	0.0	0.0	7.312	A
B-A	161	40	441	0.365	159	0.0	0.6	12.664	B
C-AB	19	5	676	0.028	19	0.0	0.0	5.474	A
C-A	108	27			108				
A-B	145	36			145				
A-C	260	65			260				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	451	0.026	12	0.0	0.0	8.192	A
B-A	192	48	421	0.457	191	0.6	0.8	15.633	C
C-AB	24	6	670	0.035	24	0.0	0.0	5.568	A
C-A	127	32			127				
A-B	173	43			173				
A-C	310	78			310				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	360	0.040	14	0.0	0.0	10.407	B
B-A	236	59	392	0.601	233	0.8	1.4	22.275	C
C-AB	31	8	662	0.046	31	0.0	0.1	5.702	A
C-A	154	39			154				
A-B	211	53			211				
A-C	380	95			380				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	356	0.040	14	0.0	0.0	10.522	B
B-A	236	59	392	0.601	235	1.4	1.5	22.885	C
C-AB	31	8	662	0.046	31	0.1	0.1	5.705	A
C-A	154	39			154				
A-B	211	53			211				
A-C	380	95			380				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	447	0.026	12	0.0	0.0	8.267	A
B-A	192	48	421	0.457	195	1.5	0.9	16.105	C
C-AB	24	6	670	0.035	24	0.1	0.0	5.577	A
C-A	127	32			127				
A-B	173	43			173				
A-C	310	78			310				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	499	0.020	10	0.0	0.0	7.357	A
B-A	161	40	441	0.365	162	0.9	0.6	12.970	B
C-AB	19	5	676	0.028	19	0.0	0.0	5.478	A
C-A	108	27			108				
A-B	145	36			145				
A-C	260	65			260				

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		4.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	372	100.000
B - Beyton Road east		ONE HOUR	✓	200	100.000
C - Barton Road South		ONE HOUR	✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	199	173
	B - Beyton Road east	190	0	10
	C - Barton Road South	399	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	0	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)
B-C	0.03	8.60	0.0	A	9	14
B-A	0.54	19.76	1.1	C	174	262
C-AB	0.08	4.54	0.1	A	52	79
C-A					343	515
A-B					183	274
A-C					159	238

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	545	0.014	7	0.0	0.0	6.702	A
B-A	143	36	440	0.325	141	0.0	0.5	11.972	B
C-AB	38	9	832	0.045	37	0.0	0.1	4.533	A
C-A	287	72			287				
A-B	150	37			150				
A-C	130	33			130				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	505	0.018	9	0.0	0.0	7.257	A
B-A	171	43	419	0.407	170	0.5	0.7	14.385	B
C-AB	50	12	857	0.058	50	0.1	0.1	4.458	A
C-A	338	84			338				
A-B	179	45			179				
A-C	156	39			156				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	432	0.025	11	0.0	0.0	8.547	A
B-A	209	52	391	0.535	207	0.7	1.1	19.424	C
C-AB	70	17	893	0.078	69	0.1	0.1	4.370	A
C-A	405	101			405				
A-B	219	55			219				
A-C	190	48			190				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	430	0.026	11	0.0	0.0	8.599	A
B-A	209	52	391	0.535	209	1.1	1.1	19.763	C
C-AB	70	17	893	0.078	70	0.1	0.1	4.376	A
C-A	405	101			405				
A-B	219	55			219				
A-C	190	48			190				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	502	0.018	9	0.0	0.0	7.299	A
B-A	171	43	419	0.407	172	1.1	0.7	14.682	B
C-AB	50	12	857	0.058	50	0.1	0.1	4.468	A
C-A	338	84			338				
A-B	179	45			179				
A-C	156	39			156				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	542	0.014	8	0.0	0.0	6.731	A
B-A	143	36	440	0.325	144	0.7	0.5	12.196	B
C-AB	38	9	832	0.046	38	0.1	0.1	4.540	A
C-A	287	72			287				
A-B	150	37			150				
A-C	130	33			130				

2024 Base + committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		9.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base + committed	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	722	100.000
B - Beyton Road east		ONE HOUR	✓	262	100.000
C - Barton Road South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	262	460
	B - Beyton Road east	249	0	13
	C - Barton Road South	158	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	0	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)
B-C	0.08	20.50	0.1	C	12	18
B-A	0.78	45.45	3.3	E	228	343
C-AB	0.05	6.15	0.1	A	25	38
C-A					139	208
A-B					240	361
A-C					422	633

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	445	0.022	10	0.0	0.0	8.275	A
B-A	187	47	412	0.455	184	0.0	0.8	15.585	C
C-AB	19	5	645	0.030	19	0.0	0.0	5.753	A
C-A	115	29			115				
A-B	197	49			197				
A-C	346	87			346				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	364	0.032	12	0.0	0.0	10.219	B
B-A	224	56	386	0.580	222	0.8	1.3	21.633	C
C-AB	24	6	633	0.039	24	0.0	0.1	5.913	A
C-A	137	34			137				
A-B	236	59			236				
A-C	414	103			414				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	206	0.070	14	0.0	0.1	18.775	C
B-A	274	69	350	0.783	267	1.3	3.0	40.450	E
C-AB	32	8	618	0.052	32	0.1	0.1	6.145	A
C-A	165	41			165				
A-B	288	72			288				
A-C	506	127			506				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	190	0.075	14	0.1	0.1	20.502	C
B-A	274	69	350	0.783	273	3.0	3.3	45.451	E
C-AB	32	8	618	0.052	32	0.1	0.1	6.153	A
C-A	165	41			165				
A-B	288	72			288				
A-C	506	127			506				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	349	0.033	12	0.1	0.0	10.676	B
B-A	224	56	386	0.580	231	3.3	1.5	24.170	C
C-AB	24	6	633	0.039	25	0.1	0.1	5.922	A
C-A	137	34			137				
A-B	236	59			236				
A-C	414	103			414				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	439	0.022	10	0.0	0.0	8.399	A
B-A	187	47	412	0.455	190	1.5	0.9	16.366	C
C-AB	19	5	645	0.030	19	0.1	0.0	5.760	A
C-A	115	29			115				
A-B	197	49			197				
A-C	346	87			346				

2024 Base + committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		16.12	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + committed	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	447	100.000
B - Beyton Road east		ONE HOUR	✓	302	100.000
C - Barton Road South		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	227	220
	B - Beyton Road east	292	0	10
	C - Barton Road South	431	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	0	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)
B-C	0.11	38.39	0.1	E	9	14
B-A	0.87	65.14	5.4	F	268	402
C-AB	0.08	4.54	0.2	A	56	83
C-A					369	554
A-B					208	312
A-C					202	303

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	453	0.017	7	0.0	0.0	8.074	A
B-A	220	55	425	0.517	216	0.0	1.0	16.891	C
C-AB	39	10	834	0.047	39	0.0	0.1	4.529	A
C-A	309	77			309				
A-B	171	43			171				
A-C	166	41			166				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	352	0.026	9	0.0	0.0	10.501	B
B-A	263	66	401	0.654	260	1.0	1.8	24.846	C
C-AB	52	13	860	0.061	52	0.1	0.1	4.455	A
C-A	364	91			364				
A-B	204	51			204				
A-C	198	49			198				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	140	0.079	11	0.0	0.1	27.851	D
B-A	321	80	369	0.871	310	1.8	4.7	52.554	F
C-AB	75	19	899	0.083	75	0.1	0.2	4.366	A
C-A	435	109			435				
A-B	250	62			250				
A-C	242	61			242				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	105	0.105	11	0.1	0.1	38.390	E
B-A	321	80	369	0.872	319	4.7	5.4	65.137	F
C-AB	75	19	899	0.083	75	0.2	0.2	4.372	A
C-A	435	109			435				
A-B	250	62			250				
A-C	242	61			242				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	318	0.028	9	0.1	0.0	11.673	B
B-A	263	66	401	0.654	276	5.4	2.0	31.149	D
C-AB	53	13	860	0.061	53	0.2	0.1	4.464	A
C-A	364	91			364				
A-B	204	51			204				
A-C	198	49			198				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	443	0.017	8	0.0	0.0	8.276	A
B-A	220	55	425	0.517	224	2.0	1.1	18.190	C
C-AB	40	10	834	0.047	40	0.1	0.1	4.536	A
C-A	309	77			309				
A-B	171	43			171				
A-C	166	41			166				

2024 Base + committed + dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		13.32	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + committed + dev	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	728	100.000
B - Beyton Road east		ONE HOUR	✓	279	100.000
C - Barton Road South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - Barton Road North	B - Beyton Road east	C - Barton Road South
A - Barton Road North	0	268	460
B - Beyton Road east	266	0	13
C - Barton Road South	158	21	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Barton Road North	B - Beyton Road east	C - Barton Road South
A - Barton Road North	0	4	0
B - Beyton Road east	0	0	0
C - Barton Road South	2	0	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)
B-C	0.11	30.48	0.1	D	12	18
B-A	0.84	57.93	4.4	F	244	366
C-AB	0.05	6.17	0.1	A	25	38
C-A					139	208
A-B					246	369
A-C					422	633

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	430	0.023	10	0.0	0.0	8.555	A
B-A	200	50	412	0.486	197	0.0	0.9	16.475	C
C-AB	19	5	644	0.030	19	0.0	0.0	5.764	A
C-A	115	29			115				
A-B	202	50			202				
A-C	346	87			346				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	339	0.034	12	0.0	0.0	10.995	B
B-A	239	60	386	0.620	237	0.9	1.5	23.762	C
C-AB	24	6	631	0.039	24	0.0	0.1	5.927	A
C-A	137	34			137				
A-B	241	60			241				
A-C	414	103			414				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	157	0.091	14	0.0	0.1	25.178	D
B-A	293	73	349	0.838	283	1.5	3.9	48.625	E
C-AB	32	8	616	0.052	32	0.1	0.1	6.164	A
C-A	165	41			165				
A-B	295	74			295				
A-C	506	127			506				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	132	0.108	14	0.1	0.1	30.480	D
B-A	293	73	349	0.838	291	3.9	4.4	57.929	F
C-AB	32	8	616	0.052	32	0.1	0.1	6.172	A
C-A	165	41			165				
A-B	295	74			295				
A-C	506	127			506				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	316	0.037	12	0.1	0.0	11.852	B
B-A	239	60	386	0.620	250	4.4	1.7	28.228	D
C-AB	24	6	631	0.039	25	0.1	0.1	5.937	A
C-A	136	34			136				
A-B	241	60			241				
A-C	414	103			414				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	422	0.023	10	0.0	0.0	8.727	A
B-A	200	50	412	0.487	203	1.7	1.0	17.524	C
C-AB	19	5	644	0.030	19	0.1	0.0	5.774	A
C-A	115	29			115				
A-B	202	50			202				
A-C	346	87			346				

2024 Base + committed + dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		18.74	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + committed + dev	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	463	100.000
B - Beyton Road east		ONE HOUR	✓	309	100.000
C - Barton Road South		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	243	220
	B - Beyton Road east	299	0	10
	C - Barton Road South	431	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	0	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	0	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)
B-C	0.17	64.29	0.2	F	9	14
B-A	0.90	74.84	6.3	F	274	412
C-AB	0.08	4.55	0.2	A	56	84
C-A					369	554
A-B					223	334
A-C					202	303

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	445	0.017	7	0.0	0.0	8.232	A
B-A	225	56	424	0.531	221	0.0	1.1	17.386	C
C-AB	40	10	831	0.048	39	0.0	0.1	4.545	A
C-A	309	77			309				
A-B	183	46			183				
A-C	166	41			166				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	337	0.027	9	0.0	0.0	10.982	B
B-A	269	67	400	0.672	266	1.1	1.9	26.132	D
C-AB	53	13	857	0.061	53	0.1	0.1	4.473	A
C-A	364	91			364				
A-B	218	55			218				
A-C	198	49			198				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	110	0.100	11	0.0	0.1	36.159	E
B-A	329	82	367	0.897	315	1.9	5.4	57.941	F
C-AB	75	19	895	0.084	75	0.1	0.2	4.387	A
C-A	435	109			435				
A-B	268	67			268				
A-C	242	61			242				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	66	0.166	11	0.1	0.2	64.289	F
B-A	329	82	367	0.897	325	5.4	6.3	74.844	F
C-AB	75	19	896	0.084	75	0.2	0.2	4.393	A
C-A	434	109			434				
A-B	268	67			268				
A-C	242	61			242				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	294	0.031	10	0.2	0.0	12.670	B
B-A	269	67	400	0.672	285	6.3	2.2	34.811	D
C-AB	53	13	857	0.062	53	0.2	0.1	4.482	A
C-A	363	91			363				
A-B	218	55			218				
A-C	198	49			198				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	433	0.017	8	0.0	0.0	8.474	A
B-A	225	56	424	0.531	229	2.2	1.2	18.900	C
C-AB	40	10	831	0.048	40	0.1	0.1	4.555	A
C-A	309	77			309				
A-B	183	46			183				
A-C	166	41			166				

2024 Base + Gladman Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		18.02	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	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 - Barton Road North		ONE HOUR	✓	773	100.000
B - Beyton Road east		ONE HOUR	✓	287	100.000
C - Barton Road South		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	278	495
	B - Beyton Road east	274	0	13
	C - Barton Road South	162	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Barton Road North	B - Beyton Road east	C - Barton Road South
From	A - Barton Road North	0	4	0
	B - Beyton Road east	0	0	0
	C - Barton Road South	2	0	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)
B-C	0.23	73.87	0.3	F	12	18
B-A	0.89	78.55	6.1	F	251	377
C-AB	0.05	6.28	0.1	A	26	39
C-A					142	213
A-B					255	383
A-C					454	681

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	413	0.024	10	0.0	0.0	8.922	A
B-A	206	52	404	0.511	202	0.0	1.0	17.544	C
C-AB	20	5	637	0.031	19	0.0	0.0	5.830	A
C-A	118	30			118				
A-B	209	52			209				
A-C	373	93			373				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	311	0.038	12	0.0	0.0	12.035	B
B-A	246	62	376	0.655	243	1.0	1.8	26.498	D
C-AB	25	6	623	0.040	25	0.0	0.1	6.009	A
C-A	140	35			140				
A-B	250	62			250				
A-C	445	111			445				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	101	0.142	14	0.0	0.2	41.169	E
B-A	302	75	338	0.893	288	1.8	5.1	60.559	F
C-AB	33	8	606	0.054	33	0.1	0.1	6.271	A
C-A	169	42			169				
A-B	306	77			306				
A-C	545	136			545				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	4	62	0.230	14	0.2	0.3	73.866	F
B-A	302	75	338	0.893	298	5.1	6.1	78.552	F
C-AB	33	8	607	0.054	33	0.1	0.1	6.277	A
C-A	169	42			169				
A-B	306	77			306				
A-C	545	136			545				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	12	3	274	0.043	13	0.3	0.0	13.835	B
B-A	246	62	376	0.655	262	6.1	2.1	35.167	E
C-AB	25	6	623	0.040	25	0.1	0.1	6.022	A
C-A	140	35			140				
A-B	250	62			250				
A-C	445	111			445				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	10	2	403	0.024	10	0.0	0.0	9.158	A
B-A	206	52	404	0.511	210	2.1	1.1	18.961	C
C-AB	20	5	637	0.031	20	0.1	0.0	5.840	A
C-A	118	30			118				
A-B	209	52			209				
A-C	373	93			373				

2024 Base + Gladman Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Barton Road South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J4 Beyton Road	T-Junction	Two-way		33.91	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	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 - Barton Road North		ONE HOUR	✓	482	100.000
B - Beyton Road east		ONE HOUR	✓	330	100.000
C - Barton Road South		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - Barton Road North	B - Beyton Road east	C - Barton Road South
A - Barton Road North	0	247	235
B - Beyton Road east	320	0	10
C - Barton Road South	441	32	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Barton Road North	B - Beyton Road east	C - Barton Road South
A - Barton Road North	0	0	0
B - Beyton Road east	0	0	0
C - Barton Road South	2	0	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)
B-C	0.99	535.77	1.5	F	9	14
B-A	0.98	119.47	11.2	F	294	440
C-AB	0.09	4.55	0.2	A	57	85
C-A					377	566
A-B					227	340
A-C					216	323

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	417	0.018	7	0.0	0.0	8.792	A
B-A	241	60	419	0.574	236	0.0	1.3	19.120	C
C-AB	40	10	833	0.048	40	0.0	0.1	4.539	A
C-A	316	79			316				
A-B	186	46			186				
A-C	177	44			177				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	287	0.031	9	0.0	0.0	12.955	B
B-A	288	72	395	0.729	283	1.3	2.4	31.023	D
C-AB	54	13	859	0.062	53	0.1	0.1	4.464	A
C-A	372	93			372				
A-B	222	56			222				
A-C	211	53			211				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	11	0.992	6	0.0	1.2	535.765	F
B-A	352	88	361	0.977	329	2.4	8.3	79.759	F
C-AB	77	19	899	0.086	77	0.1	0.2	4.380	A
C-A	444	111			444				
A-B	272	68			272				
A-C	259	65			259				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	3	15	0.739	10	1.2	1.5	416.924	F
B-A	352	88	361	0.977	341	8.3	11.2	119.473	F
C-AB	77	19	899	0.086	77	0.2	0.2	4.385	A
C-A	444	111			444				
A-B	272	68			272				
A-C	259	65			259				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	9	2	195	0.046	15	1.5	0.0	20.506	C
B-A	288	72	394	0.729	320	11.2	3.1	59.003	F
C-AB	54	13	860	0.062	54	0.2	0.1	4.475	A
C-A	372	93			372				
A-B	222	56			222				
A-C	211	53			211				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	2	398	0.019	8	0.0	0.0	9.229	A
B-A	241	60	419	0.575	248	3.1	1.4	21.717	C
C-AB	40	10	833	0.048	40	0.1	0.1	4.549	A
C-A	316	79			316				
A-B	186	46			186				
A-C	177	44			177				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J6 Proposed Site Access South.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 18/06/2019 10:32:32

- »2024 + committed + dev, AM
- »2024 + committed + dev, PM
- »2024 + Gladman Sensitivity, AM
- »2024 + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024 + committed + dev								
Stream B-AC	0.2	8.67	0.13	A	0.1	8.15	0.06	A
Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2024 + Gladman Sensitivity								
Stream B-AC	0.2	8.67	0.13	A	0.1	8.15	0.06	A
Stream C-AB	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.

File summary

File Description

Title	J6 Proposed Access (south)
Location	Thurston
Site number	J6
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J6
Client	-
Jobnumber	X601
Enumerator	CANNON\DWR
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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 + committed + dev	AM	ONE HOUR	07:45	09:15	15
D2	2024 + committed + dev	PM	ONE HOUR	16:45	18:15	15
D3	2024 + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15
D4	2024 + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024 + committed + dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J6	J6 Proposed Site Access South	T-Junction	Two-way		1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Un named road West		Major
B	Site Access		Minor
C	Un named Road East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Un named Road East	6.00			150.0	✓	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 - Site Access	One lane	3.00	100	100

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
J6	B-A	561	0.102	0.258	0.162	0.369
J6	B-C	687	0.105	0.266	-	-
J6	C-B	661	0.256	0.256	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 + committed + dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Un named road West		✓	80	100.000
B - Site Access		✓	59	100.000
C - Un named Road East		✓	314	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	14	66
	B - Site Access	59	0	0
	C - Un named Road East	314	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	1	2
	B - Site Access	1	0	1
	C - Un named Road East	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	8.67	0.2	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	508	0.087	44	0.1	7.823	A
C-AB	0	645	0.000	0	0.0	0.000	A
C-A	236			236			
A-B	11			11			
A-C	50			50			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	498	0.106	53	0.1	8.162	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	282			282			
A-B	13			13			
A-C	59			59			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	484	0.134	65	0.2	8.665	A
C-AB	0	638	0.000	0	0.0	0.000	A
C-A	346			346			
A-B	15			15			
A-C	73			73			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	484	0.134	65	0.2	8.671	A
C-AB	0	638	0.000	0	0.0	0.000	A
C-A	346			346			
A-B	15			15			
A-C	73			73			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	498	0.106	53	0.1	8.172	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	282			282			
A-B	13			13			
A-C	59			59			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	508	0.087	45	0.1	7.838	A
C-AB	0	645	0.000	0	0.0	0.000	A
C-A	236			236			
A-B	11			11			
A-C	50			50			

2024 + committed + dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J6	J6 Proposed Site Access South	T-Junction	Two-way		0.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024 + committed + dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Un named road West		✓	264	100.000
B - Site Access		✓	24	100.000
C - Un named Road East		✓	114	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	41	223
	B - Site Access	24	0	0
	C - Un named Road East	114	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	1	2
	B - Site Access	1	0	1
	C - Un named Road East	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	8.15	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	500	0.036	18	0.0	7.535	A
C-AB	0	610	0.000	0	0.0	0.000	A
C-A	86			86			
A-B	31			31			
A-C	168			168			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	489	0.044	22	0.0	7.785	A
C-AB	0	600	0.000	0	0.0	0.000	A
C-A	102			102			
A-B	37			37			
A-C	200			200			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	472	0.056	26	0.1	8.151	A
C-AB	0	586	0.000	0	0.0	0.000	A
C-A	126			126			
A-B	45			45			
A-C	246			246			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	472	0.056	26	0.1	8.153	A
C-AB	0	586	0.000	0	0.0	0.000	A
C-A	126			126			
A-B	45			45			
A-C	246			246			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	489	0.044	22	0.0	7.787	A
C-AB	0	600	0.000	0	0.0	0.000	A
C-A	102			102			
A-B	37			37			
A-C	200			200			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	500	0.036	18	0.0	7.542	A
C-AB	0	610	0.000	0	0.0	0.000	A
C-A	86			86			
A-B	31			31			
A-C	168			168			

2024 + Gladman Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J6	J6 Proposed Site Access South	T-Junction	Two-way		1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2024 + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Un named road West		✓	80	100.000
B - Site Access		✓	59	100.000
C - Un named Road East		✓	314	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	14	66
	B - Site Access	59	0	0
	C - Un named Road East	314	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	1	2
	B - Site Access	1	0	1
	C - Un named Road East	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	8.67	0.2	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	508	0.087	44	0.1	7.823	A
C-AB	0	645	0.000	0	0.0	0.000	A
C-A	236			236			
A-B	11			11			
A-C	50			50			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	498	0.106	53	0.1	8.162	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	282			282			
A-B	13			13			
A-C	59			59			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	484	0.134	65	0.2	8.665	A
C-AB	0	638	0.000	0	0.0	0.000	A
C-A	346			346			
A-B	15			15			
A-C	73			73			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	484	0.134	65	0.2	8.671	A
C-AB	0	638	0.000	0	0.0	0.000	A
C-A	346			346			
A-B	15			15			
A-C	73			73			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	53	498	0.106	53	0.1	8.172	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	282			282			
A-B	13			13			
A-C	59			59			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	508	0.087	45	0.1	7.838	A
C-AB	0	645	0.000	0	0.0	0.000	A
C-A	236			236			
A-B	11			11			
A-C	50			50			

2024 + Gladman Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J6	J6 Proposed Site Access South	T-Junction	Two-way		0.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2024 + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Un named road West		✓	264	100.000
B - Site Access		✓	24	100.000
C - Un named Road East		✓	114	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	41	223
	B - Site Access	24	0	0
	C - Un named Road East	114	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Un named road West	B - Site Access	C - Un named Road East
From	A - Un named road West	0	1	2
	B - Site Access	1	0	1
	C - Un named Road East	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	8.15	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	500	0.036	18	0.0	7.535	A
C-AB	0	610	0.000	0	0.0	0.000	A
C-A	86			86			
A-B	31			31			
A-C	168			168			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	489	0.044	22	0.0	7.785	A
C-AB	0	600	0.000	0	0.0	0.000	A
C-A	102			102			
A-B	37			37			
A-C	200			200			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	472	0.056	26	0.1	8.151	A
C-AB	0	586	0.000	0	0.0	0.000	A
C-A	126			126			
A-B	45			45			
A-C	246			246			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	472	0.056	26	0.1	8.153	A
C-AB	0	586	0.000	0	0.0	0.000	A
C-A	126			126			
A-B	45			45			
A-C	246			246			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	489	0.044	22	0.0	7.787	A
C-AB	0	600	0.000	0	0.0	0.000	A
C-A	102			102			
A-B	37			37			
A-C	200			200			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	500	0.036	18	0.0	7.542	A
C-AB	0	610	0.000	0	0.0	0.000	A
C-A	86			86			
A-B	31			31			
A-C	168			168			

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
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Filename: J7 Proposed Site Access North.j9
Path: M:\X601 Beyton Road, Thurston, SUFFOLK\5 TRAFFIC\PICADY\Aecom Base
Report generation date: 18/06/2019 10:33:51

- »2024 + committed + dev, AM
- »2024 + committed + dev, PM
- »2024 + Gladman Sensitivity, AM
- »2024 + Gladman Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024 + committed + dev								
Stream B-AC	0.1	8.26	0.10	A	0.0	8.02	0.04	A
Stream C-AB	0.0	4.90	0.01	A	0.1	5.14	0.04	A
2024 + Gladman Sensitivity								
Stream B-AC	0.1	8.33	0.10	A	0.0	8.15	0.04	A
Stream C-AB	0.0	4.87	0.01	A	0.1	5.14	0.04	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	J6 Proposed Access (North)
Location	Thurston
Site number	J7
Date	17/04/2019
Version	-
Status	(new file)
Identifier	X601 - J7
Client	-
Jobnumber	X601
Enumerator	CANNON\DWR
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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 + committed + dev	AM	ONE HOUR	07:45	09:15	15
D2	2024 + committed + dev	PM	ONE HOUR	16:45	18:15	15
D3	2024 + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15
D4	2024 + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2024 + committed + dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J7 proposed access North	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Beyton Road South East		Major
B	Site Access		Minor
C	Beyton Road North West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Beyton Road North West	6.00			150.0	✓	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 - Site Access	One lane	3.00	100	100

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	561	0.102	0.258	0.162	0.369
1	B-C	687	0.105	0.266	-	-
1	C-B	661	0.256	0.256	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024 + committed + dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Beyton Road South East		✓	271	100.000
B - Site Access		✓	45	100.000
C - Beyton Road North West		✓	289	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	12	259
	B - Site Access	27	0	18
	C - Beyton Road North West	284	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	1	2
	B - Site Access	1	0	1
	C - Beyton Road North West	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	8.26	0.1	A
C-AB	0.01	4.90	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	527	0.064	34	0.1	7.370	A
C-AB	5	750	0.007	5	0.0	4.894	A
C-A	212			212			
A-B	9			9			
A-C	195			195			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	511	0.079	40	0.1	7.720	A
C-AB	7	769	0.009	7	0.0	4.784	A
C-A	253			253			
A-B	11			11			
A-C	233			233			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	490	0.101	49	0.1	8.256	A
C-AB	9	796	0.011	9	0.0	4.639	A
C-A	309			309			
A-B	13			13			
A-C	285			285			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	490	0.101	50	0.1	8.260	A
C-AB	9	796	0.011	9	0.0	4.642	A
C-A	309			309			
A-B	13			13			
A-C	285			285			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	511	0.079	41	0.1	7.727	A
C-AB	7	769	0.009	7	0.0	4.787	A
C-A	253			253			
A-B	11			11			
A-C	233			233			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	527	0.064	34	0.1	7.378	A
C-AB	5	750	0.007	5	0.0	4.898	A
C-A	212			212			
A-B	9			9			
A-C	195			195			

2024 + committed + dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J7 proposed access North	T-Junction	Two-way		0.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024 + committed + dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Beyton Road South East		✓	336	100.000
B - Site Access		✓	18	100.000
C - Beyton Road North West		✓	275	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	35	301
	B - Site Access	11	0	7
	C - Beyton Road North West	259	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	1	2
	B - Site Access	1	0	1
	C - Beyton Road North West	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	8.02	0.0	A
C-AB	0.04	5.14	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	515	0.026	13	0.0	7.248	A
C-AB	16	726	0.023	16	0.0	5.134	A
C-A	191			191			
A-B	26			26			
A-C	227			227			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	497	0.033	16	0.0	7.555	A
C-AB	21	741	0.028	21	0.0	5.065	A
C-A	226			226			
A-B	31			31			
A-C	271			271			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	473	0.042	20	0.0	8.024	A
C-AB	28	762	0.037	28	0.1	4.974	A
C-A	275			275			
A-B	39			39			
A-C	331			331			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	473	0.042	20	0.0	8.024	A
C-AB	28	762	0.037	28	0.1	4.976	A
C-A	275			275			
A-B	39			39			
A-C	331			331			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	497	0.033	16	0.0	7.560	A
C-AB	21	741	0.028	21	0.0	5.069	A
C-A	226			226			
A-B	31			31			
A-C	271			271			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	515	0.026	14	0.0	7.255	A
C-AB	17	727	0.023	17	0.0	5.138	A
C-A	191			191			
A-B	26			26			
A-C	227			227			

2024 + Gladman Sensitivity, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J7 proposed access North	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2024 + Gladman Sensitivity	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Beyton Road South East		✓	279	100.000
B - Site Access		✓	45	100.000
C - Beyton Road North West		✓	299	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	12	267
	B - Site Access	27	0	18
	C - Beyton Road North West	294	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	1	2
	B - Site Access	1	0	1
	C - Beyton Road North West	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	8.33	0.1	A
C-AB	0.01	4.87	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	524	0.065	34	0.1	7.407	A
C-AB	5	754	0.007	5	0.0	4.871	A
C-A	220			220			
A-B	9			9			
A-C	201			201			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	508	0.080	40	0.1	7.770	A
C-AB	7	773	0.009	7	0.0	4.758	A
C-A	262			262			
A-B	11			11			
A-C	240			240			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	486	0.102	49	0.1	8.327	A
C-AB	9	801	0.012	9	0.0	4.607	A
C-A	320			320			
A-B	13			13			
A-C	294			294			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	486	0.102	50	0.1	8.330	A
C-AB	9	801	0.012	9	0.0	4.611	A
C-A	320			320			
A-B	13			13			
A-C	294			294			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	508	0.080	41	0.1	7.775	A
C-AB	7	773	0.009	7	0.0	4.761	A
C-A	262			262			
A-B	11			11			
A-C	240			240			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	524	0.065	34	0.1	7.418	A
C-AB	5	754	0.007	5	0.0	4.875	A
C-A	220			220			
A-B	9			9			
A-C	201			201			

2024 + Gladman Sensitivity, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J7 proposed access North	T-Junction	Two-way		0.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2024 + Gladman Sensitivity	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Beyton Road South East		✓	357	100.000
B - Site Access		✓	18	100.000
C - Beyton Road North West		✓	280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	35	322
	B - Site Access	11	0	7
	C - Beyton Road North West	264	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Beyton Road South East	B - Site Access	C - Beyton Road North West
From	A - Beyton Road South East	0	1	2
	B - Site Access	1	0	1
	C - Beyton Road North West	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	8.15	0.0	A
C-AB	0.04	5.14	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	510	0.027	13	0.0	7.316	A
C-AB	17	725	0.023	16	0.0	5.143	A
C-A	194			194			
A-B	26			26			
A-C	242			242			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	492	0.033	16	0.0	7.644	A
C-AB	21	740	0.029	21	0.0	5.075	A
C-A	230			230			
A-B	31			31			
A-C	289			289			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	466	0.043	20	0.0	8.148	A
C-AB	29	760	0.038	29	0.1	4.985	A
C-A	280			280			
A-B	39			39			
A-C	355			355			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	466	0.043	20	0.0	8.148	A
C-AB	29	760	0.038	29	0.1	4.987	A
C-A	280			280			
A-B	39			39			
A-C	355			355			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	492	0.033	16	0.0	7.648	A
C-AB	21	740	0.029	21	0.0	5.079	A
C-A	230			230			
A-B	31			31			
A-C	289			289			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	510	0.027	14	0.0	7.323	A
C-AB	17	725	0.023	17	0.0	5.145	A
C-A	194			194			
A-B	26			26			
A-C	242			242			