

Appendix O Sensitivity Test Technical Note



Technical Note

Land East of Woodgate Road

20-061-010 Rev A

Sensitivity Test – Technical Note

April 2021

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
-	Draft for Client Comment	PL	GAC	PL	GAC	13/04/21
A	Final	PL	GAC	PL	GAC	15/04/21

1 Introduction

1.1 Introduction

- 1.1.1 This Technical Note (TN) has been prepared by Charles & Associates Consulting Engineers Ltd (C&A), as a summary of the traffic impact assessment “sensitivity test” undertaken in relation to a proposed development on a site to the east of Woodgate Road, Aldingbourne, West Sussex.
- 1.1.2 As agreed with West Sussex County Council Highways in their response to the C&A scoping exercise dated 11th March 2021, the Transport Assessment (TA) supporting the planning application assesses the traffic impact of the proposed development for 2038 forecast year scenarios in which all the development traffic is assigned on to the existing A29 with no east to west link between the existing and the new realigned A29. For ease of reference, this assessment is referred as “core test” within this TN.
- 1.1.3 West Sussex County Council (WSCC) who are the local highway authority have requested that a sensitivity test is also carried out in which the east to west link is in place providing connection between the existing and the new realigned A29 through Woodgate Road.

- 1.1.4 This TN presents the results of the sensitivity test and demonstrates that having the east to west link would be contrary to the objectives of the A29 realignment i.e., to reduce the level of traffic on the existing A29 and the congestion particularly to the south and specifically at the Woodgate Level Crossing which experiences significant queueing and delays at present.
- 1.1.5 In the forecast year, the queues and delays at the level crossing would be exacerbated relative to the core test scenario, should the east to west link be introduced, even with the new A29 alignment in place. Thus, reducing the benefit that would be enjoyed by the existing A29 by the introduction of the new A29 realignment.

2 TA Capacity Assessment “Core Test”

- 2.1.1 The methodology adopted for the traffic impact assessment within the TA for the “core test” is summarised in this section. Reference should be made to the TA for detailed discussion of the methodology and results of the assessment.

2.1 Existing SATURN Models

- 2.1.2 The models, as obtained from WSCC, included two options: Option 1 (northern A29) and Option 2 (full A29 realignment) for two forecast years 2023 and 2038.
- 2.1.3 In Option 1, the proposed development was coded within zone 304 of the model and was connected to the existing A29 via an entry link at Woodgate Road.
- 2.1.4 In Option 2, the proposed development was connected to an entry link to a junction on the new A29 alignment and was no longer connected to Woodgate Road.

2.2 Forecast Year and Assessment Scenarios

- 2.2.1 The traffic impact assessment has been carried out for the 2038 forecast year AM and PM peak periods. This has been considered appropriate as the highway authority requested assessment of the scenario when the whole BEW allocation development and the A29 realignment scheme are complete.
- 2.2.2 This is also consistent with the modelling works carried out by WSP on behalf of WSCC for the purposes of the A29 Transport Business Case.
- 2.2.3 The assessment within the TA has been carried for the following two scenarios:

Scenario 1 – 2038 Do Minimum (DM)

- 2.2.4 The 2038 Do Minimum represents the 2038 future year scenario when the A29 realignment scheme is complete (both Phase 1 and 2) and the whole BEW allocation is built, with the exception of the proposed development. This will allow the assessment of the impact of the proposed development relative to the 'without the development' scenario.
- 2.2.5 The 2038 Option 2 represents the final scenario when the new A29 scheme and the BEW allocation are built, therefore, the model for this option was used for the assessment.
- 2.2.6 As mentioned before, the proposed development was coded in zone 304 within the SATURN model as a 160-unit scheme, connecting eastwards to/from a junction on the new A29 alignment.
- 2.2.7 However, due to (1) the proposals being urban extensions of Aldingbourne and (2) being delivered in advance of the full delivery of the realigned A29, as per the WSCCH modelled scenarios, the proposed development of 178 units, along with the 44 units on the Church Commissioners site (to the north of the proposed development site) should be served through Woodgate Road to/from the west, without a link to the new A29.
- 2.2.8 This access was agreed with WSCCH in the scoping exercise for the pending Transport Assessment and is enshrined within the BEW Allocation Master Plan
- 2.2.9 To reflect this in the model, the traffic flows associated with the 178 units proposed development site and the 44 units Church Commissioners site have been calculated using the trip rates obtained from WSCC Transport Business Case Forecast Report and removed from zone 304 which connects with the new A29.
- 2.2.10 The trips associated with the 44 units from the Church Commissioners site were added to zone 253 (which connects westwards to the existing A29) to derive the 2038 Do Minimum flows.

Scenario 2 – 2038 Do Something (DS)

- 2.2.11 In the 2038 Do Something scenario, the new A29 (both Phase 1 and 2) is complete and the whole BEW allocation including the proposed development is built. The 2038 Do Something traffic flows have been derived by adding the proposed development trips on to the 2038 Do Minimum scenario trips in zone 253.

3 Changes made to the “SATURN” model for Sensitivity Test

- 3.1.1 As stated above, the existing SATURN models obtained from WSCC did not have east to west link between the existing A29 and the new A29 through Woodgate Road coded within the models except the link through CALA Homes site.
- 3.1.2 Therefore, WSCC’s existing model has been amended to include the east to west link as requested by WSCC. C&A provided a connecting link between Woodgate Road and the spur which links to the new A29.
- 3.1.3 Additionally, it was also noted that at the junction with the existing A29, Woodgate Road was coded with turning capacities significantly higher than would be expected for the road type. Although this would not have made a difference in the absence of the east to west link, when the link is included, the higher capacity would make Woodgate Road more attractive to traffic than would be expected. Therefore, adjustments have been made to the Woodgate Road turning capacities to more appropriate levels, mirroring those of adjacent priority junctions.
- 3.1.4 In overall, the summary of the changes made to the model (2038 Forecast Year Option 2) are as follows. The model can be made available for review if required.
- Woodgate link added (connecting 50275 to 810018);
 - 32 kph link speed to match CALA link;
 - 700m length (1km in total but western spur =200m and eastern spur =100m);
 - corrected eastern spur length to 100m to match in each direction; and
 - A29/Woodgate junction turning capacities adjusted.

4 Sensitivity Test

4.1 Traffic Flows

- 4.1.1 The figures providing the traffic flows that have been used for this sensitivity test are provided within **Appendix A**.
- 4.1.2 The 2038 Do Minimum and Do Something flows are same as presented within the TA for the core test. Whereas the 2038 Do Something – Sensitivity flows have been extracted from the model after the above discussed changes were made. For completeness, figures showing the SATURN model network are provided within **Appendix B**.

4.2 Traffic Volume Comparison

4.2.1 Table 4.1 below provides comparison of volume of traffic between the core test and sensitivity test at the local highway network junctions that were reviewed within the TA.

Table 4.1: Traffic Volume Comparison at Local Highway Junctions

Junctions	AM Total Vehicles PCU			PM Total Vehicles PCU		
	CT ¹	ST ²	Diff	CT ¹	ST ²	Diff
1. A29/Woodgate Road	566	649	15%	504	637	26%
2. A29/Hook Ln Junction	651	690	6%	595	675	13%
3. A29/'Cala Homes' junction	790	705	-11%	459	434	-5%
4. A29/Nyton Rd Junction	1606	1534	-4%	1206	1166	-3%
5. A29/B2233 War Memorial Roundabout with Barnham Road	1220	1211	-1%	1033	995	-4%
6. A29/New A29 northern section Junction	2001	2015	1%	2107	2082	-1%
7. A29/Eastergate Lane Junction	1993	2007	1%	2082	2057	-1%
8. A29/Wandleys Lane Junction	1983	1995	1%	2049	2025	-1%
9. A29/A27 Junction	5021	5013	0%	5318	5281	-1%
10. A29/A259 (Rowan Way)	3812	3812	0%	4035	4035	0%
11. A29/A259 (Felpham Relief Road)	3760	3758	0%	4037	4034	0%
12. A29 – Proposed New Shripney Road connection	2126	2122	0%	2044	2030	-1%

¹CT = Core Test

²ST = Sensitivity Test

4.2.2 As can be seen from the above Table 4.1, the differences in the traffic level between the core test and sensitivity test are marginal in majority of the junctions except the A29/Woodgate Road junction and the A29/Hook Lane junction where the differences are noticeable. Moreover, these two junctions are located on either side of the Woodgate Level Crossing which, as mentioned before, experiences queuing and delays and are sensitive to increase in traffic.

4.2.3 The reduction at the A29/Cala Homes junction is due to the re-routing of the traffic through Woodgate Road which otherwise would have used the A29/Cala Homes junction.

- 4.2.4 Looking closely at the link flows north and south of the level crossing, provided in Table 4.2, the increases in traffic volumes are 13% in the AM peak and 29% in the PM peak in sensitivity test scenario relative to the core test scenario.

Table 4.2: Traffic Volume Comparison on Sensitive Links

Links	AM Total Vehicles PCU			PM Total Vehicles PCU		
	CT ¹	ST ²	Diff	CT ¹	ST ²	Diff
1. Woodgate Road	160	259	62%	150	307	105%
2. A29 South of Level Crossing	513	586	14%	459	594	29%
3. A29 North of Level Crossing	515	579	12%	447	576	29%

¹CT = Core Test

²ST = Sensitivity Test

- 4.2.5 It can also be seen that in sensitivity test scenario, the traffic flows on Woodgate Road increase by around 99 (62%) in the AM peak and 157 (105%) in the PM peak compared to the core test scenarios.
- 4.2.6 As discussed in the TA, Woodgate Road is a residential estate road and characteristics such as carriageway width of 4.8-5m and some on-street parking are expected on such roads.
- 4.2.7 The C&A analysis within the planning applications TA confirms that this road would continue to function adequately with the introduction of the proposed allocation sites to the west of the Rife, that are to be served from it.
- 4.2.8 That said there is some concern that the addition of a further 99 vehicle movements by provision of the bridge link may impair the function of Woodgate Road.
- 4.2.9 Furthermore, the introduction of a further 99 through movements to the Woodgate Road junction via the provision of the bridge does bring into question the 'material benefit' of the bridge itself. Particularly, apart from, the Woodgate Road junction and to a degree the level crossing, there is little if any change in impact on the local junctions with or without the bridge link in place. This can be seen in the capacity outputs within section 4.3 below. This is also supported by the model indicating that the bridge only carries 176 and 334 two-way trips in the AM and PM peaks respectively.
- 4.2.10 As such, having a through link route in an attempt to improve through vehicular traffic permeability, may have a detrimental effect on the southern area of the local highway network with little if any improvements to the overall local highway network.

4.3 Sensitivity Test Results

4.3.1 The capacity assessment results for each of the junctions assessed in the TA are discussed below and the full output reports are provided within **Appendix C**.

A29 / Woodgate Road Junction

4.3.2 The capacity assessment results of this junction are summarised in **Table 4.3** below.

Table 4.3: A29/Woodgate Road Junction Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
Woodgate Road	0.15	0.2	9.20	0.08	0.1	8.24
A29 Lidsey Road	0.02	0.0	5.37	0.03	0.0	5.47
2038 Do Something						
Woodgate Road	0.30	0.4	11.79	0.15	0.2	9.47
A29 Lidsey Road	0.03	0.0	6.10	0.04	0.0	6.12
2038 Do Something - Sensitivity						
Woodgate Road	0.47	0.9	16.00	0.21	0.3	10.68
A29 Lidsey Road	0.05	0.1	6.16	0.04	0.0	6.46

4.3.3 The results indicate that in the sensitivity test scenario with the east to west link in place, the junction will experience slight increase in RFCs, queues and delays in both peak hours. However, the impact will not be material and the junction will operate within capacity in the forecast year.

A29 / Hook Lane Junction

4.3.4 The capacity assessment results of this junction are summarised in **Table 4.4** below.

Table 4.4: A29/Hook Lane Junction Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
Hook Lane	0.27	0.4	10.44	0.47	0.9	12.68
A29 Lidsey Road North	0.15	0.2	6.64	0.05	0.1	5.93
2038 Do Something						

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
Hook Lane	0.31	0.5	11.33	0.54	1.2	14.91
A29 Lidsey Road North	0.16	0.2	6.84	0.05	0.1	5.96
2038 Do Something Sensitivity						
Hook Lane	0.34	0.5	11.87	0.74	2.8	28.62
A29 Lidsey Road North	0.11	0.2	6.61	0.05	0.1	6.02

- 4.3.1 The results indicate that in the sensitivity test scenario with the east to west link in place, the junction will experience slight increase in RFCs, queues and delays in both peak hours. However, the impact will not be material and the junction will operate within capacity in the forecast year.

A29 / Cala Homes Site Access Junction

- 4.3.2 The capacity assessment results of this junction are summarised in Table 4.5 below.

Table 4.5: A29/CALA Homes Site Access Junction Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
Cala Homes Access	0.55	1.2	16.57	0.03	0.0	6.23
A29 North	0.07	0.1	6.96	0.10	0.1	7.10
Meadow Way	0.24	0.3	9.67	0.18	0.2	8.14
A29 South	0.04	0.0	6.48	0.13	0.2	6.66
2038 Do Something						
Cala Homes Access	0.61	1.5	19.35	0.03	0.0	6.14
A29 North	0.08	0.1	6.98	0.10	0.1	7.13
Meadow Way	0.23	0.3	9.70	0.18	0.2	8.09
A29 South	0.04	0.0	6.47	0.12	0.1	6.55
2038 Do Something - Sensitivity						
Cala Homes Access	0.41	0.7	12.77	0.03	0.0	6.22
A29 North	0.08	0.1	7.00	0.09	0.1	6.94
Meadow Way	0.23	0.3	9.58	0.17	0.2	7.76
A29 South	0.03	0.0	6.59	0.05	0.1	6.36

- 4.3.3 The results indicate that in the sensitivity test scenario with the east to west link in place, the junction will generally experience slight reduction in RFCs, queues and delays in both peak hours.
- 4.3.4 As mentioned previously, this is due to the reduction traffic at this junction due to the re-routing of the traffic through Woodgate Road which otherwise would have used this junction.

A29 / B2233 Nyton Road Junction

- 4.3.5 The capacity assessment results of each of three junctions are summarised in Tables 4.6, 4.7 and 4.8 below. For the reasons discussed in the TA, RFCs are not calculated.

Table 4.6: A29/Nyton Road Eastern Junction Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
A29 Nyton Road South	-	0.0	0.00	-	0.0	0.00
B2233 Nyton Road West	-	0.6	8.51	-	1.8	13.61
A29 Nyton Road East	-	47.5	223.00	-	0.9	7.47
2038 Do Something						
A29 Nyton Road South	-	0.0	0.00	-	0.0	0.00
B2233 Nyton Road West	-	0.5	8.45	-	1.9	13.43
A29 Nyton Road East	-	52.9	255.35	-	0.7	6.86
2038 Do Something - Sensitivity						
A29 Nyton Road South	-	0.0	0.00	-	0.0	0.00
B2233 Nyton Road West	-	0.6	8.35	-	1.6	12.43
A29 Nyton Road East	-	51.2	246.07	-	0.7	6.68

Table 4.7: A29/Nyton Road Southern Junction Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
A29 Westergate Road South	-	1.4	7.53	-	0.0	0.00
B2233 North	-	0.2	8.79	-	0.5	9.35

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
A29 Nyton Road North	-	0.0	0.00	-	0.0	0.00
2038 So Something						
A29 Westergate Road South	-	4.1	18.34	-	0.0	0.00
B2233 North	-	0.2	8.89	-	0.4	9.30
A29 Nyton Road North	-	0.0	0.00	-	0.0	0.00
2038 Do Something - Sensitivity						
A29 Westergate Road South	-	0.3	1.97	-	0.0	0.00
B2233 North	-	0.2	8.70	-	0.4	9.05
A29 Nyton Road North	-	0.0	0.00	-	0.0	0.00

Table 4.8: B2233/Nyton Road Junction Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
B2233 Nyton Road East	-	0.0	0.00	-	0.0	0.00
B2233 South	-	3.0	23.56	-	0.7	8.40
B2233 Nyton Road West	-	0.5	5.60	-	1.9	8.44
2038 Do Something						
B2233 Nyton Road East	-	0.0	0.00	-	0.0	0.00
B2233 South	-	3.6	26.42	-	0.4	8.12
B2233 Nyton Road West	-	0.5	5.29	-	1.3	8.29
2038 Do Something - Sensitivity						
B2233 Nyton Road East	-	0.0	0.00	-	0.0	0.00
B2233 South	-	2.2	20.19	-	0.5	8.49
B2233 Nyton Road West	-	0.5	5.29	-	1.2	8.24

- 4.3.6 As with the A29/Cala Holmes junction, slight improvement in the junction can be achieved in the sensitivity test scenario compared to the core test scenario. However, this will only be marginal.

- 4.3.7 As stated within the TA, the junction is expected to operate over capacity and WSCC should investigate whether to realign this junction to better serve the west-east ahead flows. This would mean that Nyton Road forms the major arm from west to east, with Westergate Street to the south forming the minor arm.

A29 War Memorial Roundabout

- 4.3.8 The capacity assessment results of this roundabout are summarised in Table 4.9 below.

Table 4.9: A29 War Memorial Roundabout Capacity Assessment Results

Arm/Movement	AM Peak			PM Peak		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2038 Do Minimum						
Barnham Road	0.44	0.8	4.41	0.19	0.2	3.14
Nyton Road	0.22	0.3	2.49	0.30	0.4	2.65
Fontwell Avenue	0.33	0.5	7.98	0.49	1.0	12.51
2038 So Something						
Barnham Road	0.46	0.8	4.53	0.18	0.2	3.12
Nyton Road	0.23	0.3	2.50	0.29	0.4	2.64
Fontwell Avenue	0.33	0.5	7.98	0.49	1.0	12.66
2038 Do Something – Sensitivity						
Barnham Road	0.45	0.8	4.49	0.17	0.2	3.09
Nyton Road	0.22	0.3	2.49	0.28	0.4	2.59
Fontwell Avenue	0.34	0.5	8.08	0.48	1.0	11.89

- 4.3.9 The results indicate that in the sensitivity test scenario with the east to west link in place, the junction will generally experience slight reduction in RFCs and delays in both peak hours whereas the queues will remain unchanged. However, the improvements achieved are only marginal.

4.4 Woodgate Level Crossing Assessment

- 4.4.1 The mean maximum queue and average delay per pcu anticipated at the Woodgate Level Crossing are tabulated in Table 4.10 below.

Table 4.10: Woodgate Level Crossing Assessment Results

Arm/Movement	AM Peak			PM Peak		
	DoS	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	DoS	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)
2038 Do Minimum						
A29 Lidsey Road North	15.6%	9.1	26.7	20.5%	12.3	46.3
A29 Lidsey Road South	18.7%	12.3	27.2	15.2%	9.7	44.6
2038 So Something						
A29 Lidsey Road North	16.5%	9.8	26.9	23.5%	14.5	47.3
A29 Lidsey Road South	21.7%	14.6	27.9	17.1%	11.0	45.1
2038 Do Something - Sensitivity						
A29 Lidsey Road North	17.8%	10.7	27.2	34.0%	22.5	50.9
A29 Lidsey Road South	25.1%	17.5	28.7	18.7%	12.2	45.6

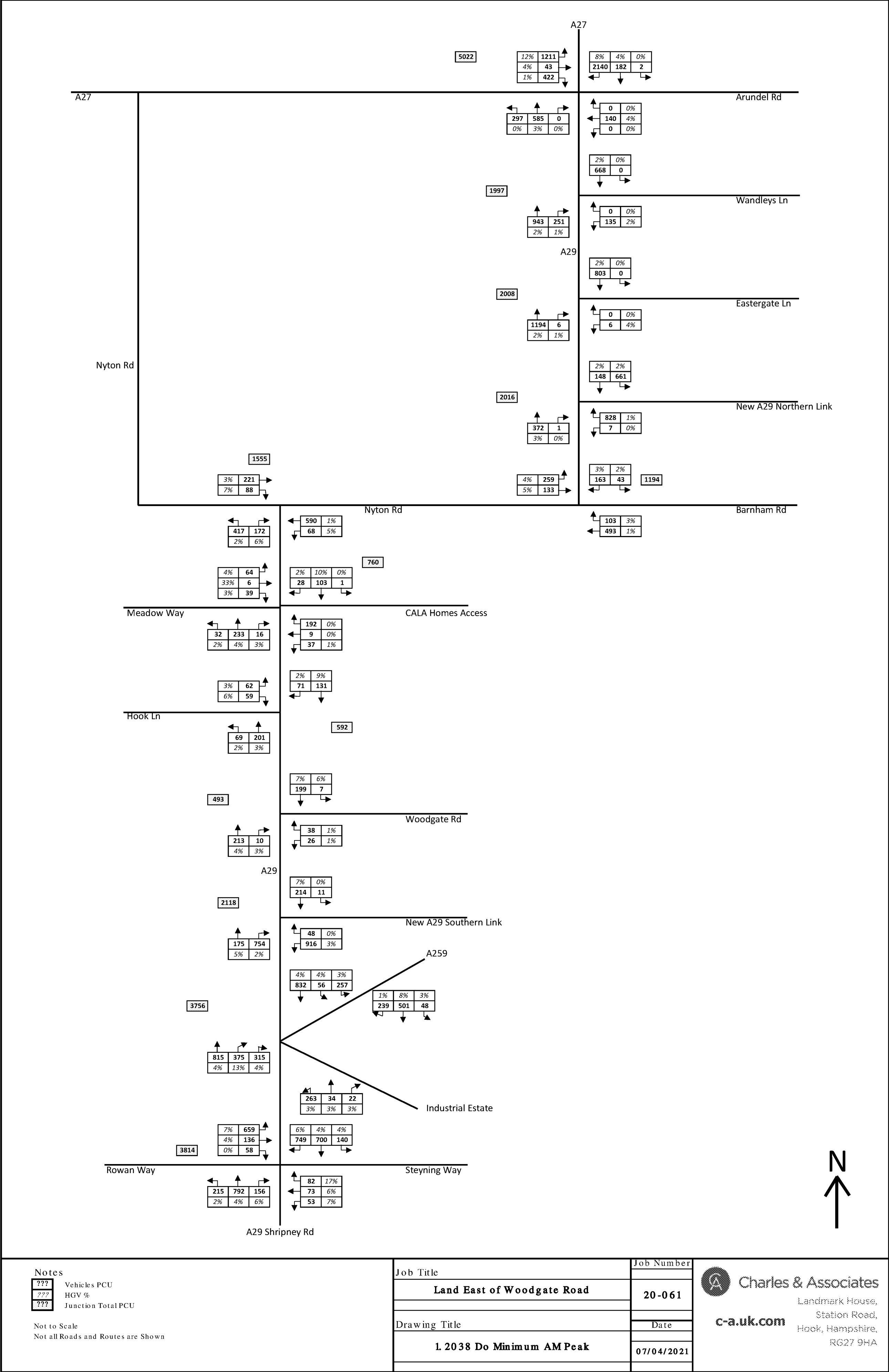
- 4.4.2 The results indicate that in the sensitivity test scenario, the northbound queue will increase by 3 PCUs in the AM peak relative to the core test scenario and by 6 PCUs relative to the Do minimum scenario.
- 4.4.3 The increase in queue is more perceptible in the PM peak. The southbound queue will increase by 8 PCUs relative to the core test scenario and by 11 PCUs relative to the Do minimum scenario.
- 4.4.4 These represent increases in queues in scenario when the east to west link is in place through Woodgate Road and further demonstrate that having this link will be contrary to the main purpose of the A29 realignment scheme.

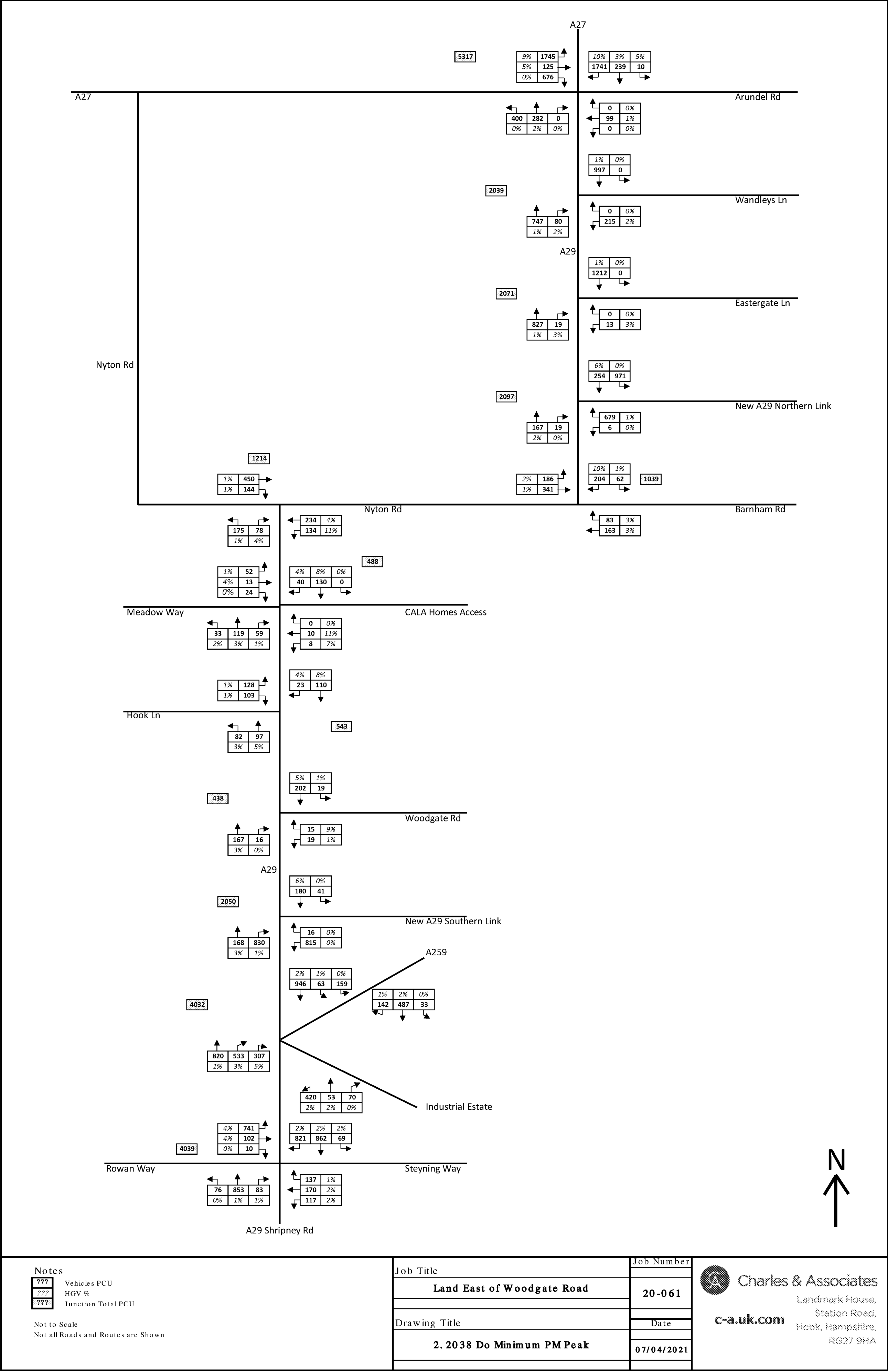
5 Conclusion

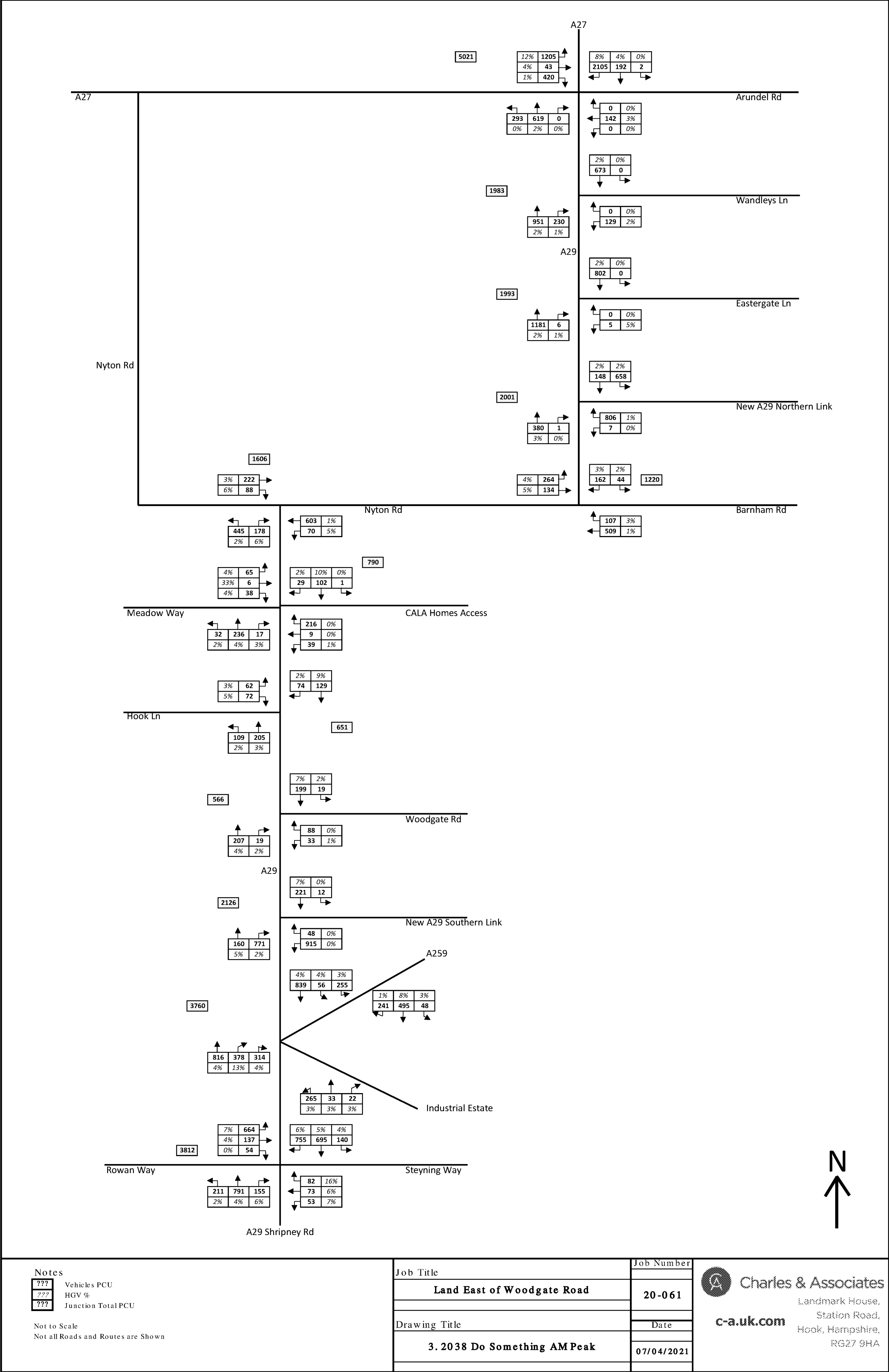
- 5.1.1 The capacity assessment results from the sensitivity assessment show that there will not be significant benefits in terms of junction performance for the entire local highway network by having an east to west link road bridge. Relative to the without the link road scenario.
- 5.1.2 On the contrary, it is evident that Woodgate Road and the level crossing will experience increases in the volume of traffic when the east to west link is in place.

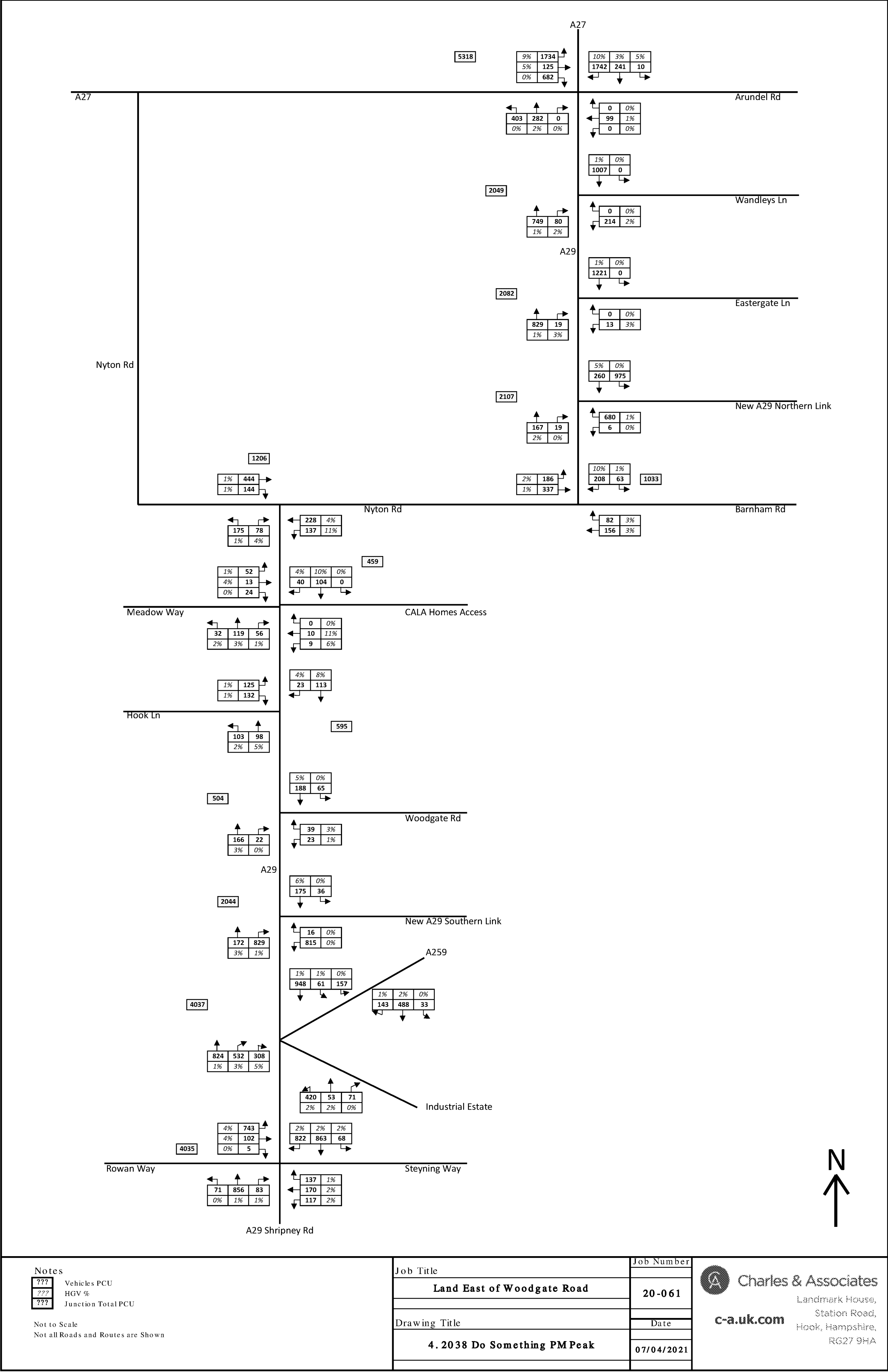
- 5.1.3 It is considered that having an east to west link through Woodgate Road will reduce the benefit that would be enjoyed by the existing A29 following the introduction of the new A29 realignment.
- 5.1.4 The characteristics of Woodgate Road are better suited for an extended residential estate road rather than a through link road for external traffic movements, particularly when it is anticipated that while the traffic flows would increase, they would not increase sufficiently to justify the need for the east/west link road.
- 5.1.5 This is supported by the analysis of the local highway network which confirms that the introduction of the link road provides little change, if any to the functionality of the network without it. While providing a detrimental effect on the southern elements of the local highway network.

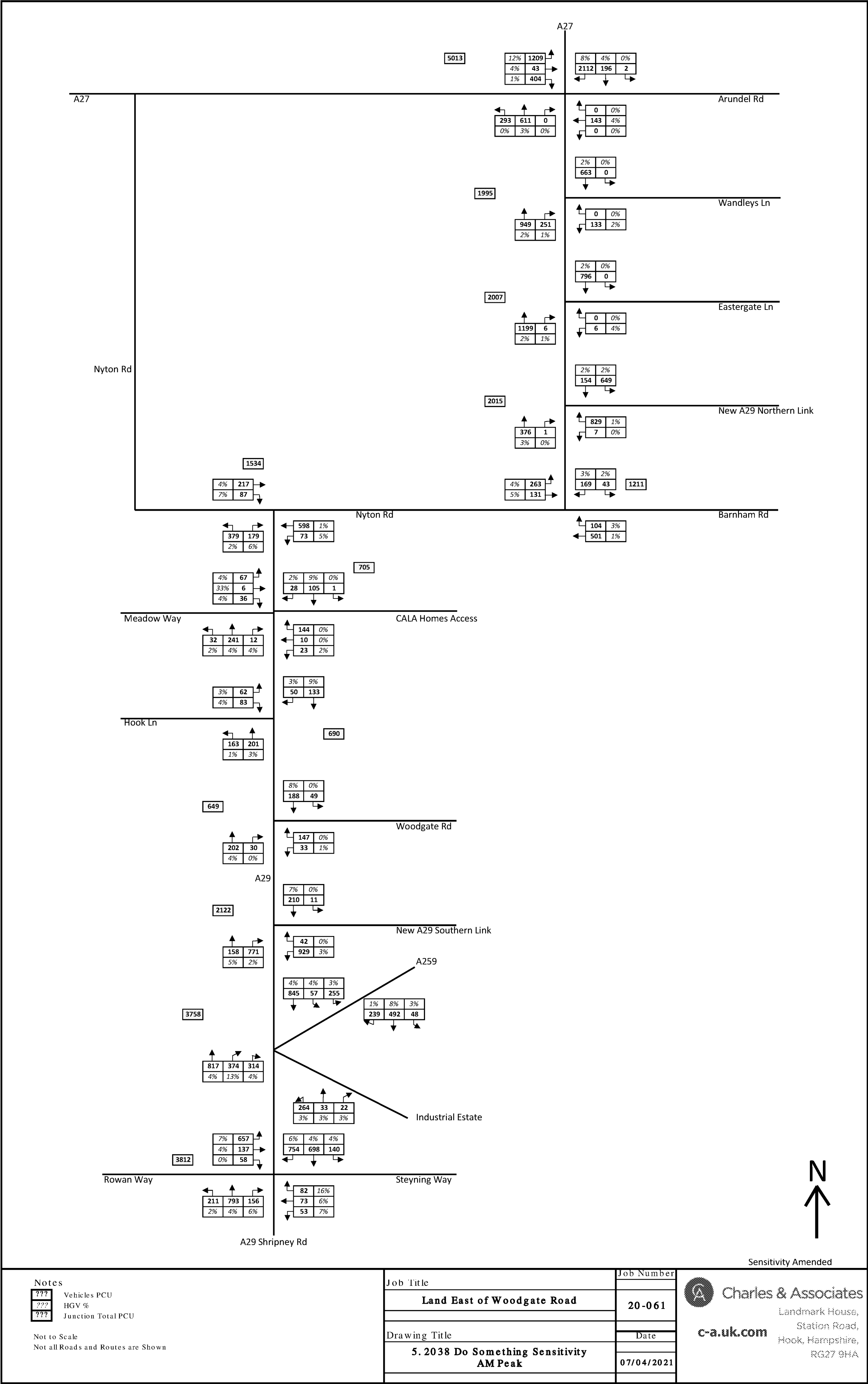
Appendix A Traffic Flow Figures

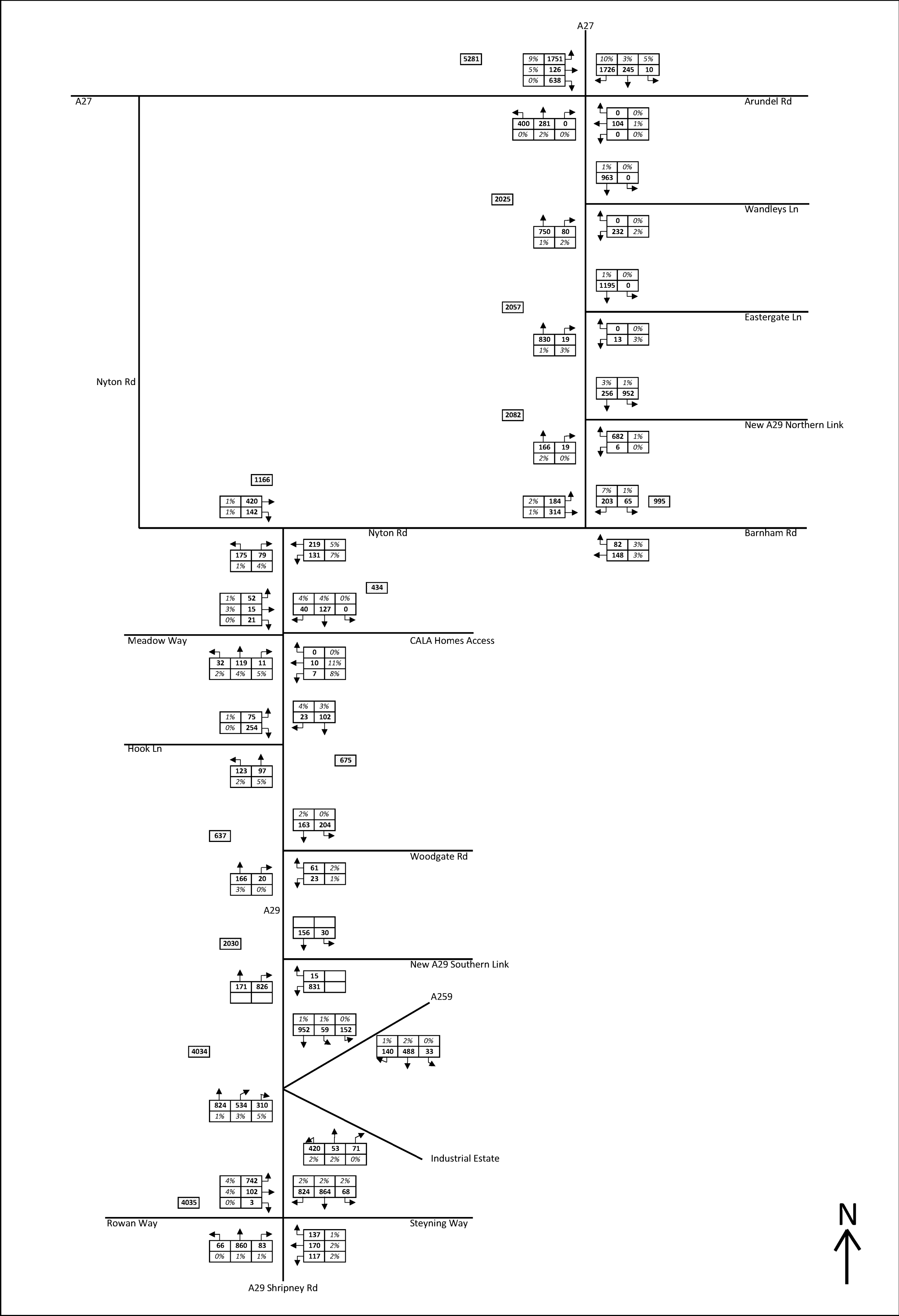








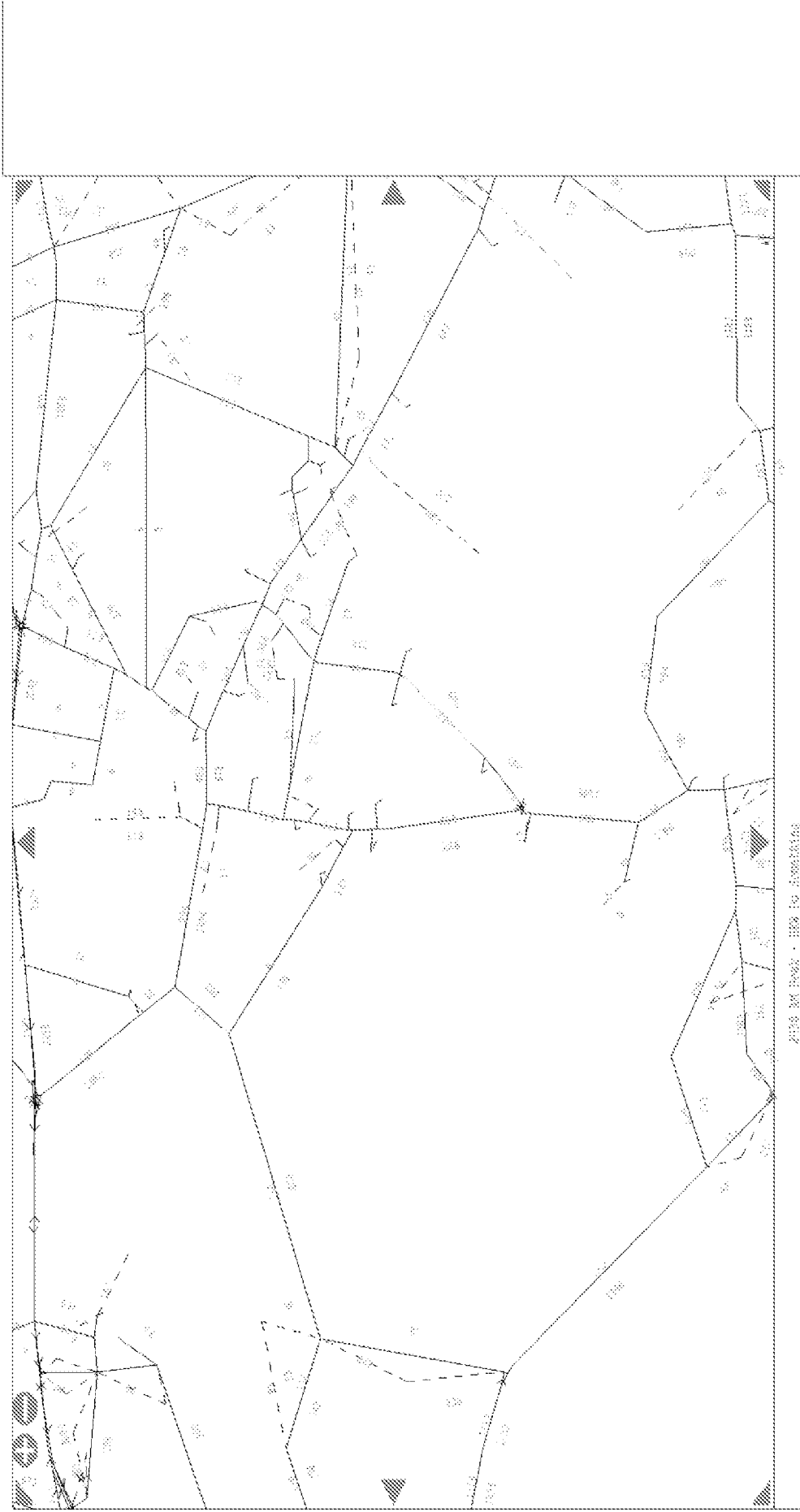




Notes ??? Vehicles PCU ??? HGV % ??? Junction Total PCU Not to Scale Not all Roads and Routes are Shown	Job Title	Job Number	Charles & Associates Landmark House, Station Road, Hook, Hampshire, RG27 9HA c-a.uk.com
	Land East of Woodgate Road	20-061	
	Drawing Title	Date	
	6. 2038 Do Something Sensitivity PM Peak	07/04/2021	

Appendix B SATURN Network



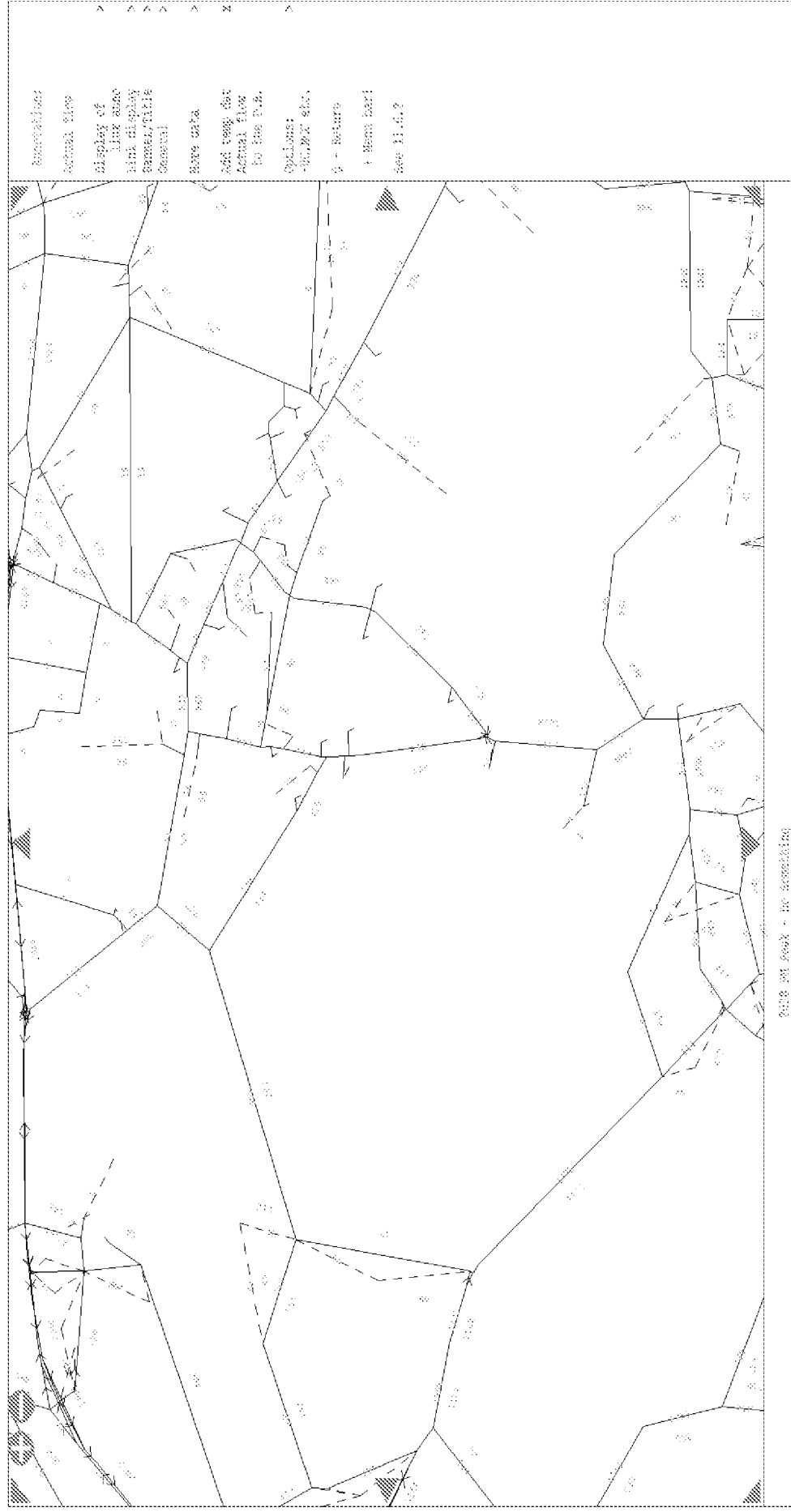


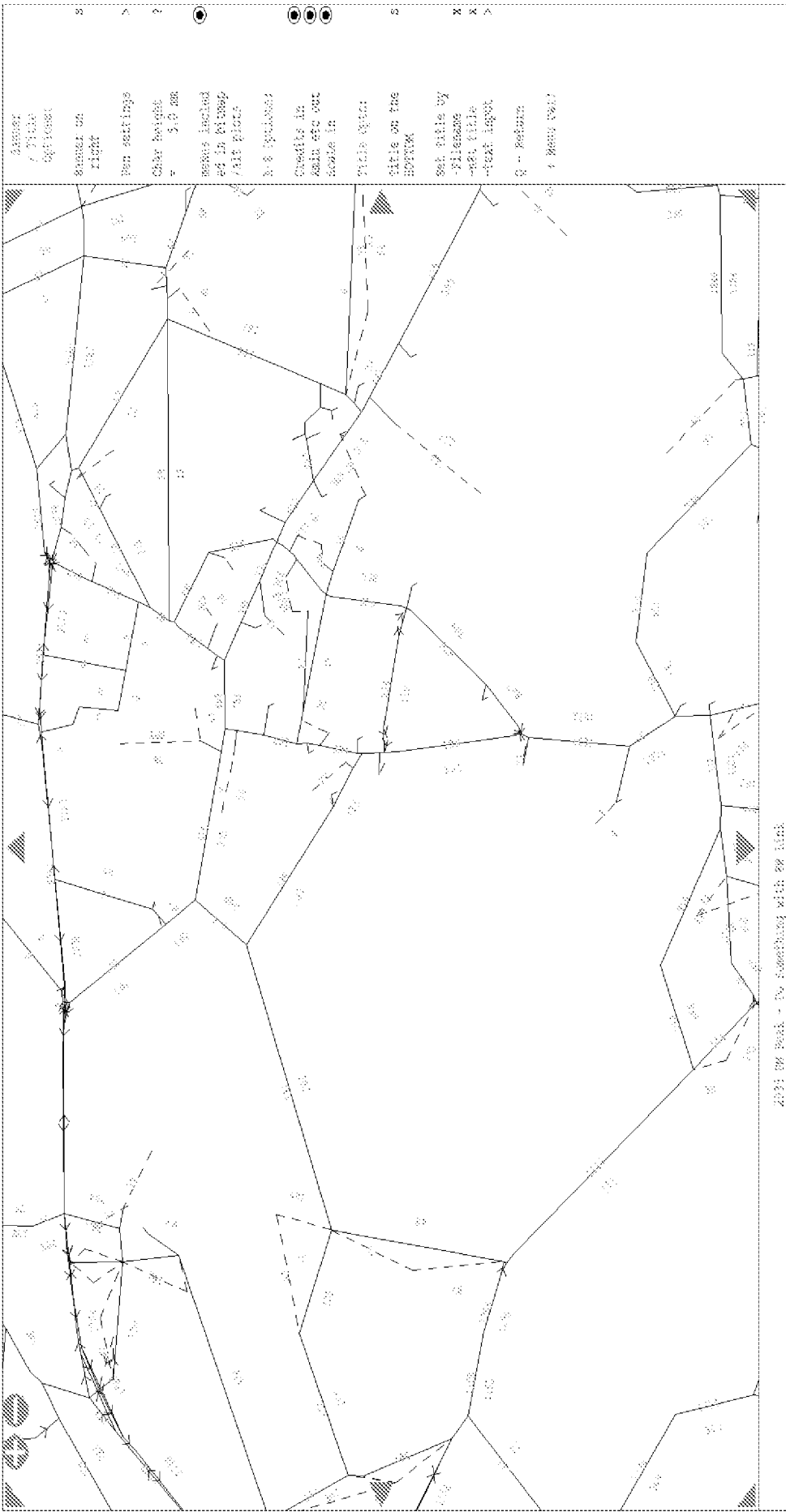


2011: 100 Feet - 800 On something with 100



Annotations
Actual flow
display of
link area
link display
symbol/title
General
More data
Add temp det
Actual flow
to the P.V.
Options:
- Run, etc.
Q - Return
+ Main bar:
See 12.6.2





2001 BW Road - No something with BW line

Appendix C Capacity Assessment Output Reports

Junctions 9										
PICADY 9 - Priority Intersection Module										
Version: 9.5.1.7462										
© Copyright TRL Limited, 2019										
For sales and distribution information, program advice and maintenance, contact TRL:										
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: A29 Cala Homes Access Junction - Sensitivity.j9

Path: P:\20-061 Land East of Woodgate Road\Trans\Picady

Report generation date: 06/04/2021 12:37:11

- »2038 Do Minimum, AM
- »2038 Do Minimum, PM
- »2038 With Development, AM
- »2038 With Development, PM
- »2038 With Development - Sensitivity, AM
- »2038 With Development - Sensitivity, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2038 Do Minimum									
Stream B-ACD	1.2	16.57	0.55	C	33 % [Stream B-ACD]	0.0	6.23	0.03	A	199 % [Stream D-ABC]
Stream AB-CD	0.1	6.96	0.07	A		0.1	7.10	0.10	A	
Stream D-ABC	0.3	9.67	0.24	A		0.2	8.14	0.18	A	
Stream CD-AB	0.0	6.48	0.04	A		0.2	6.66	0.13	A	
	2038 With Development									
Stream B-ACD	1.5	19.35	0.61	C	23 % [Stream B-ACD]	0.0	6.14	0.03	A	205 % [Stream D-ABC]
Stream AB-CD	0.1	6.98	0.08	A		0.1	7.13	0.10	A	
Stream D-ABC	0.3	9.70	0.23	A		0.2	8.09	0.18	A	
Stream CD-AB	0.0	6.47	0.04	A		0.1	6.55	0.12	A	
	2038 With Development - Sensitivity									
Stream B-ACD	0.7	12.77	0.41	B	64 % [Stream B-ACD]	0.0	6.22	0.03	A	234 % [Stream D-ABC]
Stream AB-CD	0.1	7.00	0.08	A		0.1	6.94	0.09	A	
Stream D-ABC	0.3	9.58	0.23	A		0.2	7.76	0.17	A	
Stream CD-AB	0.0	6.59	0.03	A		0.1	6.36	0.05	A	

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

File summary

File Description

Title	A29 Cala Homes Access Junction
Location	
Site number	
Date	29/03/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CA-PC06\PLimbu
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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)	Run automatically
D1	2038 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D3	2038 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D4	2038 With Development	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038 With Development - Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038 With Development - 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

2038 Do Minimum, 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	A29 Cala Homes Access Junction	Left-Right Stagger	Two-way		4.30	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	Stream B-ACD

Arms

Arms

Arm	Name	Description	Arm type
A	A29 N		Major
B	Cala Homes Access E		Minor
C	A29 S		Major
D	Meadow Way W		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A29 N	6.40		✓	2.50	61.9	✓	1.00
C - A29 S	6.40		✓	2.50	100.0	✓	1.00

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 - Cala Homes Access E	One lane	3.94	25	25
D - Meadow Way W	One lane	3.37	25	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-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
AB-D	630	-	-	-	-	-	0.240	0.240	0.240	-	-
B-A	545	0.097	0.246	0.246	-	-	0.155	0.352	-	0.155	0.352
B-CD	700	0.105	0.266	0.266	-	-	-	-	-	-	-
CD-B	653	0.248	0.248	0.248	-	-	-	-	-	-	-
D-AB	662	-	-	-	-	-	0.252	0.252	0.100	-	-
D-C	515	-	0.147	0.333	0.147	0.333	0.233	0.233	0.092	-	-

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	2038 Do Minimum	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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	132	100.000
B - Cala Homes Access E		ONE HOUR	✓	238	100.000
C - A29 S		ONE HOUR	✓	281	100.000
D - Meadow Way W		ONE HOUR	✓	109	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	1	103	28
	B - Cala Homes Access E	192	0	37	9
	C - A29 S	233	16	0	32
	D - Meadow Way W	64	6	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	10	2
	B - Cala Homes Access E	0	0	1	0
	C - A29 S	4	3	0	2
	D - Meadow Way W	4	33	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.55	16.57	1.2	C	218	328
AB					0.92	1
AC					95	142
AD					26	39
AB-CD	0.07	6.96	0.1	A	34	52
AB-C					128	192
D-ABC	0.24	9.67	0.3	A	100	150
C-D					29	44
C-A					214	321
C-B					15	22
CD-AB	0.04	6.48	0.0	A	21	31
CD-A					272	408

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	179	45	508	0.353	177	0.0	0.5	10.823	B
AB	0.75	0.19			0.75				
AC	78	19			78				
AD	21	5			21				
AB-CD	28	7	584	0.048	28	0.0	0.1	6.569	A
AB-C	105	26			105				
D-ABC	82	21	539	0.152	81	0.0	0.2	8.230	A
C-D	24	6			24				
C-A	175	44			175				
C-B	12	3			12				
CD-AB	17	4	636	0.026	17	0.0	0.0	6.373	A
CD-A	223	56			223				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	214	53	496	0.431	213	0.5	0.7	12.706	B
AB	0.90	0.22			0.90				
AC	93	23			93				
AD	25	6			25				
AB-CD	34	8	577	0.058	34	0.1	0.1	6.732	A
AB-C	125	31			125				
D-ABC	98	24	527	0.186	98	0.2	0.2	8.788	A
C-D	29	7			29				
C-A	209	52			209				
C-B	14	4			14				
CD-AB	20	5	635	0.032	20	0.0	0.0	6.422	A
CD-A	267	67			267				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	262	66	479	0.547	260	0.7	1.2	16.332	C
AB	1	0.28			1				
AC	113	28			113				
AD	31	8			31				
AB-CD	42	10	567	0.073	41	0.1	0.1	6.957	A
AB-C	153	38			153				
D-ABC	120	30	510	0.235	120	0.2	0.3	9.655	A
C-D	35	9			35				
C-A	257	64			257				
C-B	18	4			18				
CD-AB	25	6	634	0.039	25	0.0	0.0	6.480	A
CD-A	326	82			326				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	262	66	479	0.547	262	1.2	1.2	16.568	C
AB	1	0.28			1				
AC	113	28			113				
AD	31	8			31				
AB-CD	42	10	567	0.073	42	0.1	0.1	6.958	A
AB-C	153	38			153				
D-ABC	120	30	510	0.235	120	0.3	0.3	9.671	A
C-D	35	9			35				
C-A	257	64			257				
C-B	18	4			18				
CD-AB	25	6	634	0.039	25	0.0	0.0	6.483	A
CD-A	326	82			326				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	214	53	496	0.431	216	1.2	0.8	12.935	B
AB	0.90	0.22			0.90				
AC	93	23			93				
AD	25	6			25				
AB-CD	34	8	577	0.059	34	0.1	0.1	6.734	A
AB-C	126	31			126				
D-ABC	98	24	527	0.186	98	0.3	0.2	8.810	A
C-D	29	7			29				
C-A	209	52			209				
C-B	14	4			14				
CD-AB	20	5	634	0.032	20	0.0	0.0	6.424	A
CD-A	267	67			267				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	179	45	508	0.353	180	0.8	0.6	11.027	B
AB	0.75	0.19			0.75				
AC	78	19			78				
AD	21	5			21				
AB-CD	28	7	584	0.048	28	0.1	0.1	6.573	A
AB-C	105	26			105				
D-ABC	82	21	539	0.152	82	0.2	0.2	8.267	A
C-D	24	6			24				
C-A	175	44			175				
C-B	12	3			12				
CD-AB	17	4	636	0.026	17	0.0	0.0	6.377	A
CD-A	224	56			224				

2038 Do Minimum, 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	A29 Cala Homes Access Junction	Left-Right Stagger	Two-way		1.84	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	199	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)	Run automatically
D2	2038 Do Minimum	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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	170	100.000
B - Cala Homes Access E		ONE HOUR	✓	18	100.000
C - A29 S		ONE HOUR	✓	211	100.000
D - Meadow Way W		ONE HOUR	✓	89	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	130	40
	B - Cala Homes Access E	0	0	8	10
	C - A29 S	119	59	0	33
	D - Meadow Way W	52	13	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	8	4
	B - Cala Homes Access E	0	0	8	10
	C - A29 S	3	1	0	2
	D - Meadow Way W	1	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.03	6.23	0.0	A	17	25
AB					0	0
AC					119	179
AD					37	55
AB-CD	0.10	7.10	0.1	A	47	70
AB-C					126	188
D-ABC	0.18	8.14	0.2	A	82	123
C-D					30	45
C-A					109	164
C-B					54	81
CD-AB	0.13	6.66	0.2	A	68	102
CD-A					155	232

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	3	666	0.020	13	0.0	0.0	6.021	A
AB	0	0			0				
AC	98	24			98				
AD	30	8			30				
AB-CD	38	10	599	0.064	38	0.0	0.1	6.741	A
AB-C	103	26			103				
D-ABC	67	17	568	0.118	66	0.0	0.1	7.257	A
C-D	25	6			25				
C-A	90	22			90				
C-B	44	11			44				
CD-AB	55	14	632	0.087	55	0.0	0.1	6.325	A
CD-A	127	32			127				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	4	659	0.025	16	0.0	0.0	6.107	A
AB	0	0			0				
AC	117	29			117				
AD	36	9			36				
AB-CD	46	11	595	0.077	46	0.1	0.1	6.893	A
AB-C	123	31			123				
D-ABC	80	20	558	0.143	80	0.1	0.2	7.608	A
C-D	30	7			30				
C-A	107	27			107				
C-B	53	13			53				
CD-AB	66	17	631	0.105	66	0.1	0.1	6.471	A
CD-A	152	38			152				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	5	650	0.030	20	0.0	0.0	6.231	A
AB	0	0			0				
AC	143	36			143				
AD	44	11			44				
AB-CD	57	14	590	0.096	57	0.1	0.1	7.095	A
AB-C	150	38			150				
D-ABC	98	24	545	0.180	98	0.2	0.2	8.132	A
C-D	36	9			36				
C-A	131	33			131				
C-B	65	16			65				
CD-AB	83	21	631	0.131	82	0.1	0.2	6.658	A
CD-A	185	46			185				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	20	5	650	0.030	20	0.0	0.0	6.231	A
AB	0	0			0				
AC	143	36			143				
AD	44	11			44				
AB-CD	57	14	590	0.096	57	0.1	0.1	7.098	A
AB-C	150	38			150				
D-ABC	98	24	545	0.180	98	0.2	0.2	8.138	A
C-D	36	9			36				
C-A	131	33			131				
C-B	65	16			65				
CD-AB	83	21	631	0.131	83	0.2	0.2	6.664	A
CD-A	185	46			185				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	16	4	659	0.025	16	0.0	0.0	6.110	A
AB	0	0			0				
AC	117	29			117				
AD	36	9			36				
AB-CD	46	11	595	0.077	46	0.1	0.1	6.896	A
AB-C	123	31			123				
D-ABC	80	20	558	0.143	80	0.2	0.2	7.618	A
C-D	30	7			30				
C-A	107	27			107				
C-B	53	13			53				
CD-AB	67	17	631	0.105	67	0.2	0.1	6.478	A
CD-A	152	38			152				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	3	666	0.020	14	0.0	0.0	6.021	A
A-B	0	0			0				
A-C	98	24			98				
A-D	30	8			30				
AB-CD	38	10	599	0.064	38	0.1	0.1	6.752	A
AB-C	103	26			103				
D-ABC	67	17	568	0.118	67	0.2	0.1	7.277	A
C-D	25	6			25				
C-A	90	22			90				
C-B	44	11			44				
CD-AB	55	14	632	0.087	55	0.1	0.1	6.335	A
CD-A	128	32			128				

2038 With 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	A29 Cala Homes Access Junction	Left-Right Stagger	Two-way		5.09	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)	Run automatically
D3	2038 With 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	132	100.000
B - Cala Homes Access E		ONE HOUR	✓	264	100.000
C - A29 S		ONE HOUR	✓	285	100.000
D - Meadow Way W		ONE HOUR	✓	109	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	1	102	29
	B - Cala Homes Access E	216	0	39	9
	C - A29 S	236	17	0	32
	D - Meadow Way W	65	6	38	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	10	2
	B - Cala Homes Access E	0	0	1	0
	C - A29 S	4	3	0	2
	D - Meadow Way W	4	33	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.61	19.35	1.5	C	242	363
AB					0.92	1
AC					94	140
AD					27	40
AB-CD	0.08	6.98	0.1	A	35	53
AB-C					129	193
D-ABC	0.23	9.70	0.3	A	100	150
C-D					29	44
C-A					217	325
C-B					16	23
CD-AB	0.04	6.47	0.0	A	22	32
CD-A					276	414

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	199	50	506	0.393	196	0.0	0.6	11.559	B
AB	0.75	0.19			0.75				
AC	77	19			77				
AD	22	5			22				
AB-CD	29	7	584	0.049	29	0.0	0.1	6.585	A
AB-C	106	26			106				
D-ABC	82	21	540	0.152	81	0.0	0.2	8.246	A
C-D	24	6			24				
C-A	178	44			178				
C-B	13	3			13				
CD-AB	18	4	636	0.028	17	0.0	0.0	6.356	A
CD-A	226	56			226				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	237	59	493	0.481	236	0.6	0.9	13.958	B
AB	0.90	0.22			0.90				
AC	92	23			92				
AD	26	7			26				
AB-CD	35	9	576	0.060	35	0.1	0.1	6.751	A
AB-C	126	32			126				
D-ABC	98	24	528	0.186	98	0.2	0.2	8.808	A
C-D	29	7			29				
C-A	212	53			212				
C-B	15	4			15				
CD-AB	21	5	635	0.033	21	0.0	0.0	6.408	A
CD-A	270	68			270				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	291	73	477	0.610	288	0.9	1.5	18.911	C
AB	1	0.28			1				
AC	112	28			112				
AD	32	8			32				
AB-CD	43	11	567	0.075	43	0.1	0.1	6.982	A
AB-C	154	38			154				
D-ABC	120	30	511	0.235	120	0.2	0.3	9.680	A
C-D	35	9			35				
C-A	260	65			260				
C-B	19	5			19				
CD-AB	26	7	634	0.041	26	0.0	0.0	6.466	A
CD-A	330	83			330				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	291	73	476	0.610	291	1.5	1.5	19.346	C
AB	1	0.28			1				
AC	112	28			112				
AD	32	8			32				
AB-CD	43	11	567	0.075	43	0.1	0.1	6.982	A
AB-C	154	39			154				
D-ABC	120	30	511	0.235	120	0.3	0.3	9.696	A
C-D	35	9			35				
C-A	260	65			260				
C-B	19	5			19				
CD-AB	26	7	634	0.041	26	0.0	0.0	6.466	A
CD-A	331	83			331				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	237	59	493	0.481	240	1.5	1.0	14.336	B
AB	0.90	0.22			0.90				
AC	92	23			92				
AD	26	7			26				
AB-CD	35	9	576	0.060	35	0.1	0.1	6.756	A
AB-C	127	32			127				
D-ABC	98	24	528	0.186	98	0.3	0.2	8.829	A
C-D	29	7			29				
C-A	212	53			212				
C-B	15	4			15				
CD-AB	21	5	635	0.033	21	0.0	0.0	6.413	A
CD-A	270	68			270				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	199	50	506	0.393	200	1.0	0.7	11.843	E
A-B	0.75	0.19			0.75				
A-C	77	19			77				
A-D	22	5			22				
AB-CD	29	7	584	0.050	29	0.1	0.1	6.592	A
AB-C	106	27			106				
D-ABC	82	21	540	0.152	82	0.2	0.2	8.281	A
C-D	24	6			24				
C-A	178	44			178				
C-B	13	3			13				
CD-AB	18	4	636	0.028	18	0.0	0.0	6.363	A
CD-A	226	57			226				

2038 With 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	A29 Cala Homes Access Junction	Left-Right Stagger	Two-way		1.93	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	205	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)	Run automatically
D4	2038 With 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	144	100.000
B - Cala Homes Access E		ONE HOUR	✓	19	100.000
C - A29 S		ONE HOUR	✓	207	100.000
D - Meadow Way W		ONE HOUR	✓	89	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	104	40
	B - Cala Homes Access E	0	0	9	10
	C - A29 S	119	56	0	32
	D - Meadow Way W	52	13	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	10	4
	B - Cala Homes Access E	0	0	6	11
	C - A29 S	3	1	0	2
	D - Meadow Way W	1	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.03	6.14	0.0	A	17	26
AB					0	0
AC					95	143
AD					37	55
AB-CD	0.10	7.13	0.1	A	47	70
AB-C					103	154
D-ABC	0.18	8.09	0.2	A	82	123
C-D					29	44
C-A					109	164
C-B					51	77
CD-AB	0.12	6.55	0.1	A	65	98
CD-A					155	233

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	671	0.021	14	0.0	0.0	5.951	A
AB	0	0			0				
AC	78	20			78				
AD	30	8			30				
AB-CD	38	9	599	0.063	38	0.0	0.1	6.760	A
AB-C	85	21			85				
D-ABC	67	17	569	0.118	66	0.0	0.1	7.232	A
C-D	24	6			24				
C-A	90	22			90				
C-B	42	11			42				
CD-AB	53	13	637	0.083	52	0.0	0.1	6.254	A
CD-A	128	32			128				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	4	665	0.026	17	0.0	0.0	6.028	A
AB	0	0			0				
AC	93	23			93				
AD	36	9			36				
AB-CD	46	11	594	0.077	46	0.1	0.1	6.917	A
AB-C	101	25			101				
D-ABC	80	20	561	0.143	80	0.1	0.2	7.574	A
C-D	29	7			29				
C-A	107	27			107				
C-B	50	13			50				
CD-AB	64	16	636	0.100	64	0.1	0.1	6.384	A
CD-A	152	38			152				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	5	658	0.032	21	0.0	0.0	6.138	A
AB	0	0			0				
AC	115	29			115				
AD	44	11			44				
AB-CD	56	14	588	0.096	56	0.1	0.1	7.130	A
AB-C	123	31			123				
D-ABC	98	24	548	0.179	98	0.2	0.2	8.083	A
C-D	35	9			35				
C-A	131	33			131				
C-B	62	15			62				
CD-AB	79	20	637	0.124	79	0.1	0.1	6.547	A
CD-A	185	46			185				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	21	5	658	0.032	21	0.0	0.0	6.138	A
AB	0	0			0				
AC	115	29			115				
AD	44	11			44				
AB-CD	56	14	589	0.096	56	0.1	0.1	7.130	A
AB-C	123	31			123				
D-ABC	98	24	548	0.179	98	0.2	0.2	8.089	A
C-D	35	9			35				
C-A	131	33			131				
C-B	62	15			62				
CD-AB	79	20	637	0.124	79	0.1	0.1	6.552	A
CD-A	185	46			185				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	17	4	665	0.026	17	0.0	0.0	6.031	A
AB	0	0			0				
AC	93	23			93				
AD	36	9			36				
AB-CD	46	11	594	0.077	46	0.1	0.1	6.923	A
AB-C	101	25			101				
D-ABC	80	20	561	0.143	80	0.2	0.2	7.586	A
C-D	29	7			29				
C-A	107	27			107				
C-B	50	13			50				
CD-AB	64	16	636	0.100	64	0.1	0.1	6.390	A
CD-A	152	38			152				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	14	4	671	0.021	14	0.0	0.0	5.951	A
AB	0	0			0				
AC	78	20			78				
AD	30	8			30				
AB-CD	38	10	599	0.064	38	0.1	0.1	6.768	A
AB-C	85	21			85				
D-ABC	67	17	569	0.118	67	0.2	0.1	7.251	A
C-D	24	6			24				
C-A	90	22			90				
C-B	42	11			42				
CD-AB	53	13	637	0.083	53	0.1	0.1	6.264	A
CD-A	128	32			128				

2038 With Development - 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	A29 Cala Homes Access Junction	Left-Right Stagger	Two-way		3.09	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	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)	Run automatically
D5	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	134	100.000
B - Cala Homes Access E		ONE HOUR	✓	177	100.000
C - A29 S		ONE HOUR	✓	285	100.000
D - Meadow Way W		ONE HOUR	✓	109	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	1	105	28
	B - Cala Homes Access E	144	0	23	10
	C - A29 S	241	12	0	32
	D - Meadow Way W	67	6	36	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	9	2
	B - Cala Homes Access E	0	0	2	0
	C - A29 S	4	4	0	2
	D - Meadow Way W	4	33	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.41	12.77	0.7	B	162	244
AB					0.92	1
AC					96	145
AD					26	39
AB-CD	0.08	7.00	0.1	A	35	53
AB-C					117	175
D-ABC	0.23	9.58	0.3	A	100	150
C-D					29	44
C-A					221	332
C-B					11	17
CD-AB	0.03	6.59	0.0	A	17	25
CD-A					282	423

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33	506	0.263	132	0.0	0.4	9.599	A
AB	0.75	0.19			0.75				
AC	79	20			79				
AD	21	5			21				
AB-CD	29	7	583	0.049	29	0.0	0.1	6.587	A
AB-C	96	24			96				
D-ABC	82	21	544	0.151	81	0.0	0.2	8.174	A
C-D	24	6			24				
C-A	181	45			181				
C-B	9	2			9				
CD-AB	14	3	635	0.022	14	0.0	0.0	6.488	A
CD-A	231	58			231				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	159	40	494	0.322	159	0.4	0.5	10.739	B
AB	0.90	0.22			0.90				
AC	94	24			94				
AD	25	6			25				
AB-CD	35	9	575	0.060	35	0.1	0.1	6.756	A
AB-C	115	29			115				
D-ABC	98	24	532	0.184	98	0.2	0.2	8.720	A
C-D	29	7			29				
C-A	217	54			217				
C-B	11	3			11				
CD-AB	16	4	633	0.026	16	0.0	0.0	6.534	A
CD-A	276	69			276				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	195	49	477	0.408	194	0.5	0.7	12.699	E
AB	1	0.28			1				
AC	116	29			116				
AD	31	8			31				
AB-CD	43	11	565	0.075	43	0.1	0.1	6.992	A
AB-C	140	35			140				
D-ABC	120	30	516	0.233	120	0.2	0.3	9.565	A
C-D	35	9			35				
C-A	265	66			265				
C-B	13	3			13				
CD-AB	20	5	632	0.032	20	0.0	0.0	6.589	A
CD-A	338	85			338				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	195	49	477	0.408	195	0.7	0.7	12.770	E
AB	1	0.28			1				
AC	116	29			116				
AD	31	8			31				
AB-CD	43	11	566	0.075	43	0.1	0.1	6.995	A
AB-C	140	35			140				
D-ABC	120	30	515	0.233	120	0.3	0.3	9.581	A
C-D	35	9			35				
C-A	265	66			265				
C-B	13	3			13				
CD-AB	20	5	632	0.032	20	0.0	0.0	6.592	A
CD-A	339	85			339				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	159	40	494	0.322	160	0.7	0.5	10.822	E
AB	0.90	0.22			0.90				
AC	94	24			94				
AD	25	6			25				
AB-CD	35	9	576	0.060	35	0.1	0.1	6.759	A
AB-C	115	29			115				
D-ABC	98	24	532	0.184	98	0.3	0.2	8.740	A
C-D	29	7			29				
C-A	217	54			217				
C-B	11	3			11				
CD-AB	16	4	633	0.026	17	0.0	0.0	6.537	A
CD-A	277	69			277				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33	506	0.263	134	0.5	0.4	9.700	A
AB	0.75	0.19			0.75				
AC	79	20			79				
AD	21	5			21				
AB-CD	29	7	583	0.050	29	0.1	0.1	6.594	A
AB-C	96	24			96				
D-ABC	82	21	544	0.151	82	0.2	0.2	8.208	A
C-D	24	6			24				
C-A	181	45			181				
C-B	9	2			9				
CD-AB	14	3	635	0.022	14	0.0	0.0	6.495	A
CD-A	232	58			232				

2038 With Development - 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	A29 Cala Homes Access Junction	Left-Right Stagger	Two-way		1.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	234	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)	Run automatically
D6	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	167	100.000
B - Cala Homes Access E		ONE HOUR	✓	17	100.000
C - A29 S		ONE HOUR	✓	162	100.000
D - Meadow Way W		ONE HOUR	✓	88	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	127	40
	B - Cala Homes Access E	0	0	7	10
	C - A29 S	119	11	0	32
	D - Meadow Way W	52	15	21	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A29 N	B - Cala Homes Access E	C - A29 S	D - Meadow Way W
From	A - A29 N	0	0	4	4
	B - Cala Homes Access E	0	0	7	11
	C - A29 S	4	5	0	2
	D - Meadow Way W	1	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.03	6.22	0.0	A	16	23
AB					0	0
AC					117	175
AD					37	55
AB-CD	0.09	6.94	0.1	A	47	70
AB-C					122	183
D-ABC	0.17	7.76	0.2	A	81	121
C-D					29	44
C-A					109	164
C-B					10	15
CD-AB	0.05	6.36	0.1	A	24	36
CD-A					157	235

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	666	0.019	13	0.0	0.0	6.020	A
AB	0	0			0				
AC	96	24			96				
AD	30	8			30				
AB-CD	38	10	608	0.063	38	0.0	0.1	6.648	A
AB-C	100	25			100				
D-ABC	66	17	583	0.114	66	0.0	0.1	7.027	A
C-D	24	6			24				
C-A	90	22			90				
C-B	8	2			8				
CD-AB	20	5	626	0.031	19	0.0	0.0	6.163	A
CD-A	128	32			128				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	4	660	0.023	15	0.0	0.0	6.104	A
AB	0	0			0				
AC	114	29			114				
AD	36	9			36				
AB-CD	46	11	605	0.076	46	0.1	0.1	6.775	A
AB-C	120	30			120				
D-ABC	79	20	576	0.137	79	0.1	0.2	7.323	A
C-D	29	7			29				
C-A	107	27			107				
C-B	10	2			10				
CD-AB	24	6	622	0.038	24	0.0	0.0	6.247	A
CD-A	153	38			153				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	5	651	0.029	19	0.0	0.0	6.224	A
AB	0	0			0				
AC	140	35			140				
AD	44	11			44				
AB-CD	56	14	603	0.094	56	0.1	0.1	6.940	A
AB-C	146	37			146				
D-ABC	97	24	566	0.171	97	0.2	0.2	7.757	A
C-D	35	9			35				
C-A	131	33			131				
C-B	12	3			12				
CD-AB	29	7	617	0.047	29	0.0	0.1	6.359	A
CD-A	188	47			188				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	5	651	0.029	19	0.0	0.0	6.224	A
AB	0	0			0				
AC	140	35			140				
AD	44	11			44				
AB-CD	57	14	603	0.094	57	0.1	0.1	6.943	A
AB-C	146	37			146				
D-ABC	97	24	566	0.171	97	0.2	0.2	7.763	A
C-D	35	9			35				
C-A	131	33			131				
C-B	12	3			12				
CD-AB	29	7	617	0.047	29	0.1	0.1	6.361	A
CD-A	188	47			188				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	4	660	0.023	15	0.0	0.0	6.107	A
AB	0	0			0				
AC	114	29			114				
AD	36	9			36				
AB-CD	46	11	605	0.076	46	0.1	0.1	6.780	A
AB-C	120	30			120				
D-ABC	79	20	576	0.137	79	0.2	0.2	7.332	A
C-D	29	7			29				
C-A	107	27			107				
C-B	10	2			10				
CD-AB	24	6	622	0.038	24	0.1	0.0	6.249	A
CD-A	154	38			154				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	666	0.019	13	0.0	0.0	6.023	A
A-B	0	0			0				
A-C	96	24			96				
A-D	30	8			30				
AB-CD	38	10	608	0.063	38	0.1	0.1	6.656	A
AB-C	100	25			100				
D-ABC	66	17	583	0.114	66	0.2	0.1	7.047	A
C-D	24	6			24				
C-A	90	22			90				
C-B	8	2			8				
CD-AB	20	5	626	0.032	20	0.0	0.0	6.168	A
CD-A	129	32			129				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: A29 Hook Ln Junction - Sensitivity.j9
Path: P:\20-061 Land East of Woodgate Road\Trans\Picady
Report generation date: 06/04/2021 10:39:00

- »2038 Do Minimum, AM
- »2038 Do Minimum, PM
- »2038 With Development, AM
- »2038 With Development, PM
- »2038 With Development - Sensitivity, AM
- »2038 With Development - Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity
2038 Do Minimum								
Stream B-AC	0.4	10.44	0.27	111 %	0.9	12.68	0.47	61 %
Stream C-AB	0.2	6.64	0.15	[Stream B-AC]	0.1	5.93	0.05	[Stream B-AC]
2038 With Development								
Stream B-AC	0.5	11.33	0.31	90 %	1.2	14.91	0.54	43 %
Stream C-AB	0.2	6.84	0.16	[Stream B-AC]	0.1	5.96	0.05	[Stream B-AC]
2038 With Development - Sensitivity								
Stream B-AC	0.5	11.87	0.34	81 %	2.8	28.62	0.74	6 %
Stream C-AB	0.2	6.61	0.11	[Stream B-AC]	0.1	6.02	0.05	[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. 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	A29 Hook Ln Junction
Location	
Site number	
Date	29/03/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CA-PC06\PLimbu
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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)	Run automatically
D1	2038 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D3	2038 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D4	2038 With Development	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038 With Development - Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038 With Development - 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

2038 Do Minimum, 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	A29 Hook Ln Junction	T-Junction	Two-way		3.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	111	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	A29 S		Major
B	Hook Ln W		Minor
C	A29 N		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 - A29 N	6.87			100.0	✓	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 - Hook Ln W	One lane	3.53	19	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	518	0.091	0.229	0.144	0.327
B-C	667	0.098	0.249	-	-
C-B	632	0.236	0.236	-	-

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	2038 Do Minimum	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 (PCU/hr)	Scaling Factor (%)
A - A29 S		ONE HOUR	✓	270	100.000
B - Hook Ln W		ONE HOUR	✓	121	100.000
C - A29 N		ONE HOUR	✓	202	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	69	201
	B - Hook Ln W	59	0	62
	C - A29 N	131	71	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	2	3
	B - Hook Ln W	6	0	3
	C - A29 N	9	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.27	10.44	0.4	B	111	167
C-AB	0.15	6.64	0.2	A	80	121
C-A					105	157
AB					63	95
AC					184	277

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	523	0.174	90	0.0	0.2	8.675	A
C-AB	63	16	651	0.097	62	0.0	0.1	6.302	A
C-A	89	22			89				
AB	52	13			52				
AC	151	38			151				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	510	0.213	109	0.2	0.3	9.350	A
C-AB	78	19	655	0.119	78	0.1	0.2	6.431	A
C-A	104	26			104				
A-B	62	16			62				
A-C	181	45			181				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	33	493	0.270	133	0.3	0.4	10.419	E
C-AB	100	25	661	0.151	100	0.2	0.2	6.629	A
C-A	122	31			122				
A-B	76	19			76				
A-C	221	55			221				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	33	493	0.270	133	0.4	0.4	10.442	E
C-AB	100	25	661	0.152	100	0.2	0.2	6.645	A
C-A	122	31			122				
A-B	76	19			76				
A-C	221	55			221				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	510	0.213	109	0.4	0.3	9.381	A
C-AB	78	19	655	0.119	78	0.2	0.2	6.458	A
C-A	104	26			104				
A-B	62	16			62				
A-C	181	45			181				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	523	0.174	91	0.3	0.2	8.722	A
C-AB	63	16	651	0.097	63	0.2	0.1	6.325	A
C-A	89	22			89				
A-B	52	13			52				
A-C	151	38			151				

2038 Do Minimum, 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	A29 Hook Ln Junction	T-Junction	Two-way		5.69	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	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)	Run automatically
D2	2038 Do Minimum	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 (PCU/hr)	Scaling Factor (%)
A - A29 S		ONE HOUR	✓	179	100.000
B - Hook Ln W		ONE HOUR	✓	231	100.000
C - A29 N		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	82	97
	B - Hook Ln W	103	0	128
	C - A29 N	110	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	3	5
	B - Hook Ln W	1	0	1
	C - A29 N	8	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.47	12.68	0.9	E	212	318
C-AB	0.05	5.93	0.1	A	25	38
C-A					97	145
A-B					75	113
A-C					89	134

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	557	0.312	172	0.0	0.5	9.404	A
C-AB	20	5	655	0.030	20	0.0	0.0	5.916	A
C-A	80	20			80				
A-B	62	15			62				
A-C	73	18			73				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	208	52	550	0.377	207	0.5	0.6	10.575	E
C-AB	24	6	660	0.037	24	0.0	0.1	5.917	A
C-A	95	24			95				
A-B	74	18			74				
A-C	87	22			87				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	541	0.470	253	0.6	0.9	12.587	E
C-AB	31	8	667	0.046	31	0.1	0.1	5.923	A
C-A	115	29			115				
A-B	90	23			90				
A-C	107	27			107				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	254	64	541	0.470	254	0.9	0.9	12.676	E
C-AB	31	8	667	0.046	31	0.1	0.1	5.925	A
C-A	115	29			115				
A-B	90	23			90				
A-C	107	27			107				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	208	52	550	0.377	209	0.9	0.6	10.680	S
C-AB	24	6	660	0.037	24	0.1	0.1	5.928	A
C-A	95	24			95				
AB	74	18			74				
AC	87	22			87				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	557	0.312	175	0.6	0.5	9.524	A
C-AB	20	5	655	0.030	20	0.1	0.0	5.925	A
C-A	80	20			80				
AB	62	15			62				
AC	73	18			73				

2038 With 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	A29 Hook Ln Junction	T-Junction	Two-way		3.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	90	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)	Run automatically
D3	2038 With 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 (PCU/hr)	Scaling Factor (%)
A - A29 S		ONE HOUR	✓	314	100.000
B - Hook Ln W		ONE HOUR	✓	134	100.000
C - A29 N		ONE HOUR	✓	203	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	109	205
	B - Hook Ln W	72	0	62
	C - A29 N	129	74	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	2	3
	B - Hook Ln W	5	0	3
	C - A29 N	9	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.31	11.33	0.5	B	123	184
C-AB	0.16	6.84	0.2	A	84	126
C-A					102	154
A-B					100	150
A-C					188	282

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	101	25	510	0.198	100	0.0	0.3	9.108	A
C-AB	66	16	642	0.102	65	0.0	0.1	6.420	A
C-A	87	22			87				
A-B	82	21			82				
A-C	154	39			154				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	30	497	0.242	120	0.3	0.3	9.937	A
C-AB	81	20	645	0.126	81	0.1	0.2	6.582	A
C-A	101	25			101				
A-B	98	24			98				
A-C	184	46			184				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	37	478	0.308	147	0.3	0.5	11.289	B
C-AB	104	26	649	0.161	104	0.2	0.2	6.828	A
C-A	119	30			119				
A-B	120	30			120				
A-C	226	56			226				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	148	37	478	0.308	148	0.5	0.5	11.326	B
C-AB	105	26	649	0.161	105	0.2	0.2	6.845	A
C-A	119	30			119				
A-B	120	30			120				
A-C	226	56			226				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	30	497	0.242	121	0.5	0.3	9.983	A
C-AB	81	20	645	0.126	82	0.2	0.2	6.609	A
C-A	101	25			101				
A-B	98	24			98				
A-C	184	46			184				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	101	25	510	0.198	101	0.3	0.3	9.168	A
C-AB	66	16	642	0.102	66	0.2	0.1	6.444	A
C-A	87	22			87				
A-B	82	21			82				
A-C	154	39			154				

2038 With 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	A29 Hook Ln Junction	T-Junction	Two-way		6.73	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	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)	Run automatically
D4	2038 With 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 (PCU/hr)	Scaling Factor (%)
A - A29 S		ONE HOUR	✓	201	100.000
B - Hook Ln W		ONE HOUR	✓	257	100.000
C - A29 N		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	103	98
	B - Hook Ln W	132	0	125
	C - A29 N	113	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	2	5
	B - Hook Ln W	1	0	1
	C - A29 N	8	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.54	14.91	1.2	E	236	354
C-AB	0.05	5.96	0.1	A	25	38
C-A					100	149
A-B					95	142
A-C					90	135

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	544	0.356	191	0.0	0.5	10.248	E
C-AB	20	5	653	0.030	20	0.0	0.0	5.938	A
C-A	82	21			82				
A-B	78	19			78				
A-C	74	18			74				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	537	0.430	230	0.5	0.7	11.832	E
C-AB	24	6	658	0.037	24	0.0	0.1	5.944	A
C-A	98	24			98				
A-B	93	23			93				
A-C	88	22			88				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	527	0.537	281	0.7	1.1	14.733	E
C-AB	31	8	664	0.047	31	0.1	0.1	5.953	A
C-A	119	30			119				
A-B	113	28			113				
A-C	108	27			108				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	283	71	527	0.537	283	1.1	1.2	14.908	E
C-AB	31	8	664	0.047	31	0.1	0.1	5.957	A
C-A	119	30			119				
A-B	113	28			113				
A-C	108	27			108				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	231	58	537	0.431	233	1.2	0.8	12.015	E
C-AB	24	6	658	0.037	25	0.1	0.1	5.953	A
C-A	98	24			98				
A-B	93	23			93				
A-C	88	22			88				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	544	0.356	194	0.8	0.6	10.428	E
C-AB	20	5	653	0.031	20	0.1	0.0	5.947	A
C-A	82	21			82				
A-B	78	19			78				
A-C	74	18			74				

2038 With Development - 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	A29 Hook Ln Junction	T-Junction	Two-way		3.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	81	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)	Run automatically
D5	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
A - A29 S		ONE HOUR	✓	364	100.000
B - Hook Ln W		ONE HOUR	✓	145	100.000
C - A29 N		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	163	201
	B - Hook Ln W	83	0	62
	C - A29 N	133	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	1	3
	B - Hook Ln W	4	0	3
	C - A29 N	9	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.34	11.87	0.5	E	133	200
C-AB	0.11	6.61	0.2	A	57	86
C-A					111	166
A-B					150	224
A-C					184	277

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	505	0.216	108	0.0	0.3	9.360	A
C-AB	45	11	636	0.070	44	0.0	0.1	6.320	A
C-A	93	23			93				
A-B	123	31			123				
A-C	151	38			151				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	130	33	492	0.265	130	0.3	0.4	10.287	E
C-AB	55	14	638	0.087	55	0.1	0.1	6.430	A
C-A	109	27			109				
A-B	147	37			147				
A-C	181	45			181				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	474	0.337	159	0.4	0.5	11.829	E
C-AB	71	18	640	0.112	71	0.1	0.2	6.594	A
C-A	130	32			130				
A-B	179	45			179				
A-C	221	55			221				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	40	474	0.337	160	0.5	0.5	11.872	E
C-AB	72	18	640	0.112	72	0.2	0.2	6.606	A
C-A	130	32			130				
A-B	179	45			179				
A-C	221	55			221				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	130	33	492	0.265	131	0.5	0.4	10.343	E
C-AB	55	14	638	0.087	56	0.2	0.1	6.451	A
C-A	109	27			109				
A-B	147	37			147				
A-C	181	45			181				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	505	0.216	110	0.4	0.3	9.433	A
C-AB	45	11	636	0.070	45	0.1	0.1	6.337	A
C-A	93	23			93				
A-B	123	31			123				
A-C	151	38			151				

2038 With Development - 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	A29 Hook Ln Junction	T-Junction	Two-way		14.21	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	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)	Run automatically
D6	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
A - A29 S		ONE HOUR	✓	220	100.000
B - Hook Ln W		ONE HOUR	✓	329	100.000
C - A29 N		ONE HOUR	✓	125	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	123	97
	B - Hook Ln W	254	0	75
	C - A29 N	102	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 S	B - Hook Ln W	C - A29 N
From	A - A29 S	0	2	5
	B - Hook Ln W	0	0	1
	C - A29 N	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.74	28.62	2.8	D	302	453
C-AB	0.05	6.02	0.1	A	25	37
C-A					90	135
A-B					113	169
A-C					89	134

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	248	62	505	0.490	244	0.0	0.9	13.627	B
C-AB	20	5	644	0.031	19	0.0	0.0	5.983	A
C-A	74	19			74				
A-B	93	23			93				
A-C	73	18			73				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	296	74	497	0.595	294	0.9	1.4	17.562	D
C-AB	24	6	647	0.037	24	0.0	0.1	6.003	A
C-A	88	22			88				
A-B	111	28			111				
A-C	87	22			87				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	362	91	486	0.745	357	1.4	2.6	26.919	D
C-AB	31	8	651	0.047	31	0.1	0.1	6.022	A
C-A	107	27			107				
A-B	135	34			135				
A-C	107	27			107				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	362	91	486	0.745	362	2.6	2.8	28.623	D
C-AB	31	8	651	0.047	31	0.1	0.1	6.025	A
C-A	107	27			107				
A-B	135	34			135				
A-C	107	27			107				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	296	74	497	0.595	301	2.8	1.5	18.775	C
C-AB	24	6	647	0.037	24	0.1	0.1	6.003	A
C-A	88	22			88				
AB	111	28			111				
AC	87	22			87				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	248	62	505	0.490	250	1.5	1.0	14.255	B
C-AB	20	5	644	0.031	20	0.1	0.0	5.988	A
C-A	74	19			74				
AB	93	23			93				
AC	73	18			73				

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.5.1.7462											
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Filename: A29 Nyton Rd Junction - Linked - Sensitivity.j9
Path: P:\20-061 Land East of Woodgate Road\Trans\Picady
Report generation date: 08/04/2021 09:31:22

»2038 With Development - Sensitivity, AM
 »2038 With Development - Sensitivity, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
[Lane Simulation] - 2038 With Development - Sensitivity												
1 - East Junction - A - A29 Nyton Rd S	D1	0.0	0.00		A	% []	D2	0.0	0.00		A	% []
1 - East Junction - B - Nyton Rd W		0.6	8.35		A			1.6	12.43		B	
1 - East Junction - C - Nyton Rd E		51.2	246.07		F			0.7	6.68		A	
2 - South Junction - A - A29 Westergate Rd S		0.3	1.97		A			0.0	0.00		A	
2 - South Junction - B - B2233 N		0.2	8.70		A			0.4	9.05		A	
2 - South Junction - C - A29 Nyton Rd N		0.0	0.00		A			0.0	0.00		A	
3 - West Junction - A - Nyton Rd E		0.0	0.00		A			0.0	0.00		A	
3 - West Junction - B - B2233 S		2.2	20.19		C			0.5	8.49		A	
3 - West Junction - C - Nyton Rd W		0.5	5.29		A			1.2	8.24		A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tablet, 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. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

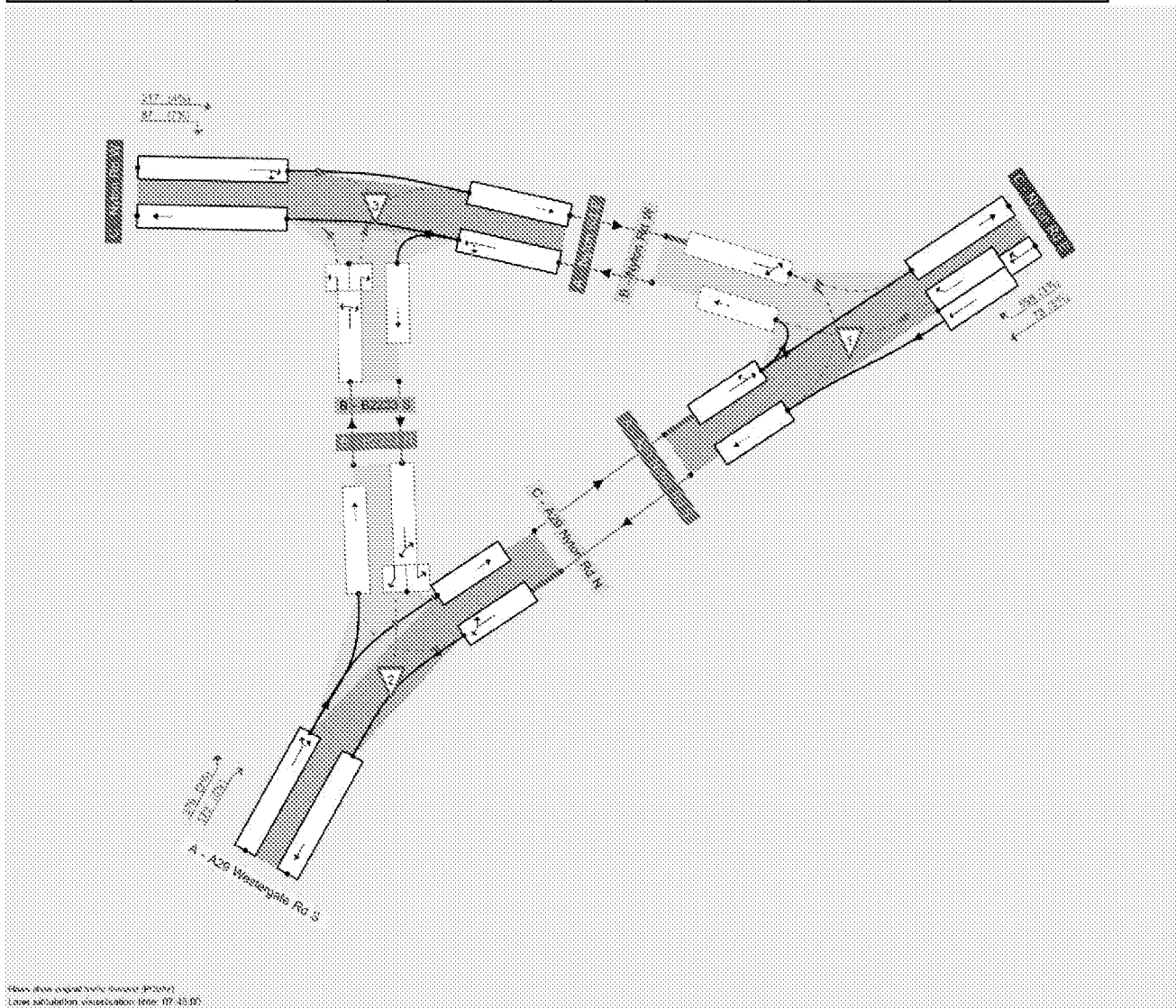
File summary

File Description

Title	
Location	
Site number	
Date	07/04/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CA-PC06\PLimbu
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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			35630148	282	20.98

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	2038 With Development - Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 With Development - Sensitivity	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AI	✓	✓	100.000	100.000

2038 With Development - Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	1 - East Junction - C - Nyton Rd E - Lane Simulation	Arm C: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Junction	T-Junction	Two-way		155.10	F
2	South Junction	T-Junction	Two-way		2.54	A
3	West Junction	T-Junction	Two-way		7.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - East Junction	A	A29 Nyton Rd S		Major
	B	Nyton Rd W		Minor
	C	Nyton Rd E		Major
2 - South Junction	A	A29 Westergate Rd S		Major
	B	B2233 N		Minor
	C	A29 Nyton Rd N		Major
3 - West Junction	A	Nyton Rd E		Major
	B	B2233 S		Minor
	C	Nyton Rd W		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1 - East Junction	C - Nyton Rd E	6.58		✓	2.43	80.0	✓	3.00
2 - South Junction	C - A29 Nyton Rd N	6.69				96.0	✓	0.00
3 - West Junction	C - Nyton Rd W	6.30				50.0	✓	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

Junction	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)
1 - East Junction	B - Nyton Rd W	One lane	3.72								76	93
2 - South Junction	B - B2233 N	One lane plus flare		10.00	7.09	4.01	3.11	3.04	✓	1.00	27	129
3 - West Junction	B - B2233 S	One lane plus flare		10.00	5.00	3.58	3.28	3.05	✓	1.00	35	13

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 - East Junction	B-A	588	0.104	0.264	0.166	0.377
	B-C	732	0.109	0.276	-	-
	C-B	636	0.240	0.240	-	-

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
2 - South Junction	B-A	606	0.107	0.271	0.170	0.387
	B-C	744	0.111	0.279	-	-
	C-B	630	0.237	0.237	-	-

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
3 - West Junction	B-A	470	0.085	0.214	0.134	0.305
	B-C	694	0.105	0.265	-	-
	C-B	603	0.231	0.231	-	-

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.

Lanes

Junction	Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	✓	3.00		0	99999	
		Exit	1	1		✓	3.00				
	B - Nyton Rd W	Entry	1	1	A, C	✓	4.00		0	99999	
		Exit	1	1		✓	3.00				
	C - Nyton Rd E	Entry	1	1	A	✓	3.00		0	99999	
				2	B	✓	3.00		0	99999	
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C		Infinity		0	99999	
		Exit	1	1			Infinity				
	B - B2233 N	Entry	1	1	C	✓	1.00		0	99999	
				2	A	✓	1.00		0	99999	
		Exit	1	1	(A, C)	✓	4.00				
				1		✓	4.00				
	C - A29 Nyton Rd N	Entry	1	1	A, B	✓	3.00		0	99999	
		Exit	1	1		✓	3.00				
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	✓	4.00		0	99999	
		Exit	1	1		✓	4.00				
	B - B2233 S	Entry	1	1	C	✓	1.00		0	99999	
				2	A	✓	1.00		0	99999	
		Exit	1	1	(A, C)	✓	4.00				
				1		✓	3.00				
	C - Nyton Rd W	Entry	1	1	A, B		Infinity		0	99999	
		Exit	1	1			Infinity				

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				A29 Nyton Rd S	Nyton Rd W	Nyton Rd E
1 - East Junction	A - A29 Nyton Rd S	1	1		✓	✓
	B - Nyton Rd W	1	1	✓		✓
	C - Nyton Rd E	1	1	✓		
			2		✓	
		2	1	✓	✓	

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				A29 Westergate Rd S	B2233 N	A29 Nyton Rd N
2 - South Junction	A - A29 Westergate Rd S	1	1		✓	✓
	B - B2233 N	1	1			✓
			2	✓		
		2	1	✓		✓
	C - A29 Nyton Rd N	1	1	✓	✓	

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				Nyton Rd E	B2233 S	Nyton Rd W
3 - West Junction	A - Nyton Rd E	1	1		✓	✓
	B - B2233 S	1	1			✓
			2	✓		
		2	1	✓		✓
	C - Nyton Rd W	1	1	✓	✓	

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	2038 With Development - 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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - East Junction	A - A29 Nyton Rd S	2	C	Simple (vertical queueing)	Normal	0	100.00	
	B - Nyton Rd W	3	A	Simple (vertical queueing)	Normal	0	100.00	
2 - South Junction	B - B2233 N	3	B	Simple (vertical queueing)	Normal	0	100.00	
	C - A29 Nyton Rd N	1	A	Simple (vertical queueing)	Normal	0	100.00	
3 - West Junction	A - Nyton Rd E	1	B	Simple (vertical queueing)	Normal	0	100.00	
	B - B2233 S	2	B	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - East Junction	A - A29 Nyton Rd S	✓				
	B - Nyton Rd W	✓				
	C - Nyton Rd E		ONE HOUR	✓	671	100.000
2 - South Junction	A - A29 Westergate Rd S		ONE HOUR	✓	558	100.000
	B - B2233 N	✓				
	C - A29 Nyton Rd N	✓				
3 - West Junction	A - Nyton Rd E	✓				
	B - B2233 S	✓				
	C - Nyton Rd W		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - East Junction

	To			
		A - A29 Nyton Rd S	B - Nyton Rd W	C - Nyton Rd E
From	A - A29 Nyton Rd S	0	0	100
	B - Nyton Rd W	0	0	100
	C - Nyton Rd E	73	598	0

Demand (PCU/hr)

2 - South Junction

	To			
		A - A29 Westergate Rd S	B - B2233 N	C - A29 Nyton Rd N
From	A - A29 Westergate Rd S	0	379	179
	B - B2233 N	100	0	0
	C - A29 Nyton Rd N	100	0	0

Demand (PCU/hr)

3 - West Junction

	To			
		A - Nyton Rd E	B - B2233 S	C - Nyton Rd W
From	A - Nyton Rd E	0	0	100
	B - B2233 S	0	0	100
	C - Nyton Rd W	217	87	0

Vehicle Mix

Heavy Vehicle Percentages

1 - East Junction

	To			
		A - A29 Nyton Rd S	B - Nyton Rd W	C - Nyton Rd E
	From	A - A29 Nyton Rd S	0	0
	B - Nyton Rd W	0	0	0
	C - Nyton Rd E	5	1	0

Heavy Vehicle Percentages

2 - South Junction

	To			
		A - A29 Westergate Rd S	B - B2233 N	C - A29 Nyton Rd N
	From	A - A29 Westergate Rd S	0	2
	B - B2233 N	0	0	0
	C - A29 Nyton Rd N	0	0	0

Heavy Vehicle Percentages

3 - West Junction

	To			
From		A - Nyton Rd E	B - B2233 S	C - Nyton Rd W
	A - Nyton Rd E	0	0	0
	B - B2233 S	0	0	0
	C - Nyton Rd W	4	7	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - East Junction	A - A29 Nyton Rd S	0.00	0.0	A	155	233
	B - Nyton Rd W	8.35	0.6	A	190	285
	C - Nyton Rd E	246.07	51.2	F	613	920
2 - South Junction	A - A29 Westergate Rd S	1.97	0.3	A	514	770
	B - B2233 N	8.70	0.2	A	74	111
	C - A29 Nyton Rd N	0.00	0.0	A	63	94
3 - West Junction	A - Nyton Rd E	0.00	0.0	A	535	802
	B - B2233 S	20.19	2.2	C	342	513
	C - Nyton Rd W	5.29	0.5	A	276	413

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	127	32	127	128	55	0.0	0.0	0.000	A
	B - Nyton Rd W	157	39	157	156	448	0.0	0.3	6.744	A
	C - Nyton Rd E	506	126	503	494	284	0.0	3.2	20.881	C
2 - South Junction	A - A29 Westergate Rd S	418	104	418	422	115	0.0	0.0	0.008	A
	B - B2233 N	64	16	63	61	283	0.0	0.1	7.882	A
	C - A29 Nyton Rd N	52	13	52	52	135	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	443	111	443	436	163	0.0	0.0	0.000	A
	B - B2233 S	278	70	278	276	68	0.0	1.1	11.754	B
	C - Nyton Rd W	230	58	231	230	721	0.0	0.2	3.940	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	155	39	155	151	61	0.0	0.0	0.000	A
	B - Nyton Rd W	185	46	185	187	524	0.3	0.4	7.253	A
	C - Nyton Rd E	598	149	585	579	340	3.2	8.0	38.844	E
2 - South Junction	A - A29 Westergate Rd S	503	126	502	496	132	0.0	0.0	0.092	A
	B - B2233 N	74	18	74	71	339	0.1	0.2	7.940	A
	C - A29 Nyton Rd N	58	15	58	59	164	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	519	130	519	511	192	0.0	0.0	0.000	A
	B - B2233 S	332	83	333	328	79	1.1	1.4	14.509	B
	C - Nyton Rd W	271	68	271	271	851	0.2	0.4	4.253	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	183	46	183	185	73	0.0	0.0	0.000	A
	B - Nyton Rd W	224	56	224	226	580	0.4	0.6	8.158	A
	C - Nyton Rd E	729	182	653	647	407	8.0	28.8	112.883	F
2 - South Junction	A - A29 Westergate Rd S	614	154	614	613	153	0.0	0.3	1.173	A
	B - B2233 N	84	21	84	87	418	0.2	0.2	8.703	A
	C - A29 Nyton Rd N	69	17	69	67	196	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	575	144	575	570	232	0.0	0.0	0.000	A
	B - B2233 S	409	102	408	403	91	1.4	2.2	18.957	C
	C - Nyton Rd W	324	81	323	330	983	0.4	0.5	5.291	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	190	48	190	187	70	0.0	0.0	0.000	A
	B - Nyton Rd W	224	56	224	227	582	0.6	0.5	8.353	A
	C - Nyton Rd E	740	185	652	655	414	23.8	51.2	226.789	F
2 - South Junction	A - A29 Westergate Rd S	622	156	625	618	152	0.3	0.2	1.966	A
	B - B2233 N	86	22	86	88	423	0.2	0.2	8.647	A
	C - A29 Nyton Rd N	67	17	67	68	202	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	577	144	577	578	233	0.0	0.0	0.000	A
	B - B2233 S	414	104	414	412	92	2.2	2.2	20.185	C
	C - Nyton Rd W	323	81	325	330	991	0.5	0.3	5.040	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	153	38	153	154	72	0.0	0.0	0.000	A
	B - Nyton Rd W	191	48	191	193	588	0.5	0.4	7.542	A
	C - Nyton Rd E	603	151	661	663	344	51.2	37.5	248.063	F
2 - South Junction	A - A29 Westergate Rd S	509	127	510	511	144	0.2	0.0	0.372	A
	B - B2233 N	75	19	75	74	349	0.2	0.2	8.027	A
	C - A29 Nyton Rd N	69	17	69	69	161	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	583	146	583	585	199	0.0	0.0	0.000	A
	B - B2233 S	342	85	341	344	80	2.2	1.6	17.034	C
	C - Nyton Rd W	277	69	279	279	923	0.3	0.4	4.631	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	124	31	124	126	65	0.0	0.0	0.000	A
	B - Nyton Rd W	158	39	157	158	518	0.4	0.3	6.813	A
	C - Nyton Rd E	504	126	583	601	281	37.5	12.8	124.746	F
2 - South Junction	A - A29 Westergate Rd S	415	104	415	420	122	0.0	0.0	0.044	A
	B - B2233 N	59	15	60	61	283	0.2	0.1	7.494	A
	C - A29 Nyton Rd N	62	15	62	63	131	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	512	128	512	530	164	0.0	0.0	0.000	A
	B - B2233 S	278	69	279	284	63	1.6	1.0	13.126	B
	C - Nyton Rd W	228	57	227	229	791	0.4	0.3	3.888	A

Lane Results

Lane Level notation. Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	127	127	128	0.0	0.0	0.000	A
		Exit	1	1		55	55	54	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	157	157	156	0.0	0.3	6.744	A
		Exit	1	1		448	448	440	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	55	55	54	0.0	0.0	0.000	A
				2	B	447	448	440	0.0	1.7	13.472	B
		Exit	1	1	(A, B)	506	502	501	0.0	1.6	8.757	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	418	418	422	0.0	0.0	0.008	A
		Exit	1	1		115	115	113	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	64	63	61	0.0	0.1	6.974	A
		Exit	1	1	(A, C)	64	64	62	0.0	0.0	0.905	A
	C - A29 Nyton Rd N	Entry	1	1		283	283	286	0.0	0.0	0.266	A
		Exit	1	1	A, B	52	52	52	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1		135	135	136	0.0	0.0	0.000	A
		Exit	1	1		163	163	164	0.0	0.0	0.039	A
	B - B2233 S	Entry	1	1	C	278	278	276	0.0	0.5	6.221	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	278	278	278	0.0	0.5	5.531	A
	C - Nyton Rd W	Entry	1	1		68	68	66	0.0	0.0	0.000	A
		Exit	1	1	A, B	230	231	230	0.0	0.2	3.940	A
		Entry	1	1		721	721	712	0.0	0.0	0.000	A
		Exit	1	1		721	721	712	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	155	155	151	0.0	0.0	0.000	A
		Exit	1	1		61	61	62	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	185	185	187	0.3	0.4	7.253	A
		Exit	1	1		524	524	516	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	61	61	62	0.0	0.0	0.000	A
				2	B	526	524	516	1.7	2.4	15.635	C
		Exit	1	1	(A, B)	598	587	582	1.6	5.6	25.759	C
				1		340	340	338	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	503	502	496	0.0	0.0	0.092	A
		Exit	1	1		132	132	130	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	74	74	71	0.1	0.1	6.898	A
		Exit	1	1	(A, C)	74	74	71	0.0	0.0	1.047	A
				1		339	339	336	0.0	0.1	0.904	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	58	58	59	0.0	0.0	0.000	A
		Exit	1	1		164	164	160	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	519	519	511	0.0	0.0	0.000	A
		Exit	1	1		192	192	194	0.0	0.0	0.055	A
	B - B2233 S	Entry	1	1	C	332	333	328	0.5	0.6	6.478	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	332	332	328	0.5	0.8	8.030	A
				1		79	79	77	0.0	0.0	0.000	A
	C - Nyton Rd W	Entry	1	1	A, B	271	271	271	0.2	0.4	4.253	A
		Exit	1	1		851	851	839	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	183	183	185	0.0	0.0	0.000	A
		Exit	1	1		73	73	71	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	224	224	226	0.4	0.6	8.158	A
		Exit	1	1		580	580	576	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	73	73	71	0.0	0.0	0.000	A
				2	B	580	580	576	2.4	3.0	17.654	C
		Exit	1	1	(A, B)	729	654	649	5.6	28.8	97.008	F
				1		407	407	411	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	614	614	613	0.0	0.3	1.173	A
		Exit	1	1		153	153	154	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	84	84	87	0.1	0.2	7.296	A
		Exit	1	1	(A, C)	84	84	87	0.0	0.0	1.407	A
				1		419	418	415	0.1	0.5	3.354	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	69	69	67	0.0	0.0	0.000	A
		Exit	1	1		196	196	196	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	575	575	570	0.0	0.0	0.000	A
		Exit	1	1		232	232	236	0.0	0.0	0.132	A
	B - B2233 S	Entry	1	1	C	408	408	403	0.6	0.7	6.549	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	409	408	403	0.8	1.5	12.410	B
				1		91	91	94	0.0	0.0	0.001	A
	C - Nyton Rd W	Entry	1	1	A, B	324	323	330	0.4	0.5	5.291	A
		Exit	1	1		983	983	973	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	190	190	187	0.0	0.0	0.000	A
		Exit	1	1		70	70	71	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	224	224	227	0.6	0.5	8.353	A
		Exit	1	1		582	582	584	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	70	70	71	0.0	0.0	0.000	A
				2	B	582	582	584	3.0	3.0	18.203	C
		Exit	1	1	(A, B)	740	653	655	26.9	48.2	219.489	F
				1		414	414	414	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	622	625	618	0.3	0.2	1.966	A
		Exit	1	1		152	152	156	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	86	86	88	0.2	0.2	7.269	A
		Exit	1	1	(A, C)	86	86	88	0.0	0.0	1.378	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	67	67	68	0.0	0.0	0.000	A
		Exit	1	1		202	202	198	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	577	577	578	0.0	0.0	0.000	A
		Exit	1	1		233	233	236	0.0	0.0	0.159	A
	B - B2233 S	Entry	1	1	C	415	414	412	0.7	0.8	6.587	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	414	415	412	1.5	1.4	13.597	B
	C - Nyton Rd W	Entry	1	1	A, B	323	325	330	0.5	0.3	5.040	A
		Exit	1	1		991	991	990	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	153	153	154	0.0	0.0	0.000	A
		Exit	1	1		72	72	72	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	191	191	193	0.5	0.4	7.542	A
		Exit	1	1		588	588	591	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	72	72	72	0.0	0.0	0.000	A
				2	B	588	588	591	3.0	2.9	17.784	C
		Exit	1	1	(A, B)	603	660	663	43.2	34.6	238.148	F
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	509	510	511	0.2	0.0	0.372	A
		Exit	1	1		144	144	143	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	75	75	74	0.2	0.2	6.981	A
		Exit	1	1	(A, C)	75	75	74	0.0	0.0	1.038	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	69	69	69	0.0	0.0	0.000	A
		Exit	1	1		161	161	163	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	583	583	585	0.0	0.0	0.000	A
		Exit	1	1		199	199	200	0.0	0.0	0.111	A
	B - B2233 S	Entry	1	1	C	341	341	344	0.8	0.6	6.699	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	342	341	343	1.4	1.0	10.335	B
	C - Nyton Rd W	Entry	1	1	A, B	277	279	279	0.3	0.4	4.631	A
		Exit	1	1		923	923	929	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	124	124	126	0.0	0.0	0.000	A
		Exit	1	1		65	65	66	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	158	157	158	0.4	0.3	6.813	A
		Exit	1	1		518	518	535	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	65	65	66	0.0	0.0	0.000	A
				2	B	516	518	535	2.9	2.2	16.374	D
		Exit	1	1	(A, B)	504	581	598	34.8	10.6	119.283	F
				1		281	281	284	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	415	415	420	0.0	0.0	0.044	A
		Exit	1	1		122	122	124	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	60	60	61	0.2	0.1	6.699	A
		Exit	1	1	(A, C)	59	60	61	0.0	0.0	0.804	A
				1		283	283	286	0.2	0.1	0.509	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	62	62	63	0.0	0.0	0.000	A
		Exit	1	1		131	131	134	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	512	512	530	0.0	0.0	0.000	A
		Exit	1	1		164	164	163	0.0	0.0	0.028	A
	B - B2233 S	Entry	1	1	C	278	279	284	0.6	0.5	6.558	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	278	278	283	1.0	0.5	6.568	A
				1		63	63	65	0.0	0.0	0.000	A
	C - Nyton Rd W	Entry	1	1	A, B	228	227	229	0.4	0.3	3.888	A
		Exit	1	1		791	791	813	0.0	0.0	0.000	A

2038 With Development - Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Junction	T-Junction	Two-way		8.90	A
2	South Junction	T-Junction	Two-way		2.46	A
3	West Junction	T-Junction	Two-way		6.45	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	2038 With Development - 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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - East Junction	A - A29 Nyton Rd S	2	C	Simple (vertical queueing)	Normal	0	100.00	
	B - Nyton Rd W	3	A	Simple (vertical queueing)	Normal	0	100.00	
2 - South Junction	B - B2233 N	3	B	Simple (vertical queueing)	Normal	0	100.00	
	C - A29 Nyton Rd N	1	A	Simple (vertical queueing)	Normal	0	100.00	
3 - West Junction	A - Nyton Rd E	1	B	Simple (vertical queueing)	Normal	0	100.00	
	B - B2233 S	2	B	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - East Junction	A - A29 Nyton Rd S	✓				
	B - Nyton Rd W	✓				
	C - Nyton Rd E		ONE HOUR	✓	350	100.000
2 - South Junction	A - A29 Westergate Rd S		ONE HOUR	✓	254	100.000
	B - B2233 N	✓				
	C - A29 Nyton Rd N	✓				
3 - West Junction	A - Nyton Rd E	✓				
	B - B2233 S	✓				
	C - Nyton Rd W		ONE HOUR	✓	562	100.000

Origin-Destination Data

Demand (PCU/hr)

1 - East Junction	To			
		A - A29 Nyton Rd S	B - Nyton Rd W	C - Nyton Rd E
	From	A - A29 Nyton Rd S	0	100
		B - Nyton Rd W	0	100
		C - Nyton Rd E	131	0

Demand (PCU/hr)

2 - South Junction	To			
		A - A29 Westergate Rd S	B - B2233 N	C - A29 Nyton Rd N
	From	A - A29 Westergate Rd S	0	175
		B - B2233 N	100	0
		C - A29 Nyton Rd N	100	0

Demand (PCU/hr)

3 - West Junction	To			
		A - Nyton Rd E	B - B2233 S	C - Nyton Rd W
	From	A - Nyton Rd E	0	100
		B - B2233 S	0	100
		C - Nyton Rd W	420	0

Vehicle Mix

Heavy Vehicle Percentages

1 - East Junction	To			
		A - A29 Nyton Rd S	B - Nyton Rd W	C - Nyton Rd E
	From	A - A29 Nyton Rd S	0	0
		B - Nyton Rd W	0	0
		C - Nyton Rd E	7	0

Heavy Vehicle Percentages

2 - South Junction	To			
		A - A29 Westergate Rd S	B - B2233 N	C - A29 Nyton Rd N
	From	A - A29 Westergate Rd S	0	4
		B - B2233 N	0	0
		C - A29 Nyton Rd N	0	0

Heavy Vehicle Percentages

3 - West Junction

	To			
		A - Nyton Rd E	B - B2233 S	C - Nyton Rd W
From	A - Nyton Rd E	0	0	0
	B - B2233 S	0	0	0
	C - Nyton Rd W	1	1	0

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - East Junction	A - A29 Nyton Rd S	0.00	0.0	A	71	106
	B - Nyton Rd W	12.43	1.6	B	382	573
	C - Nyton Rd E	6.68	0.7	A	324	486
2 - South Junction	A - A29 Westergate Rd S	0.00	0.0	A	235	352
	B - B2233 N	9.05	0.4	A	129	194
	C - A29 Nyton Rd N	0.00	0.0	A	112	169
3 - West Junction	A - Nyton Rd E	0.00	0.0	A	193	289
	B - B2233 S	8.49	0.5	A	160	240
	C - Nyton Rd W	8.24	1.2	A	514	771

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	61	15	61	59	104	0.0	0.0	0.000	A
	B - Nyton Rd W	312	78	312	311	167	0.0	0.7	9.081	A
	C - Nyton Rd E	272	68	270	275	373	0.0	0.4	5.173	A
2 - South Junction	A - A29 Westergate Rd S	197	49	197	192	202	0.0	0.0	0.000	A
	B - B2233 N	104	26	104	106	134	0.0	0.2	7.751	A
	C - A29 Nyton Rd N	98	25	98	99	63	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	160	40	160	161	315	0.0	0.0	0.000	A
	B - B2233 S	134	33	132	129	104	0.0	0.3	6.896	A
	C - Nyton Rd W	422	105	421	425	292	0.0	0.4	3.590	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	66	17	66	68	117	0.0	0.0	0.000	A
	B - Nyton Rd W	381	95	382	373	208	0.7	1.1	10.589	B
	C - Nyton Rd E	323	81	325	313	448	0.4	0.4	5.889	A
2 - South Junction	A - A29 Westergate Rd S	228	57	228	228	240	0.0	0.0	0.000	A
	B - B2233 N	129	32	130	125	159	0.2	0.3	8.528	A
	C - A29 Nyton Rd N	111	28	111	106	69	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	198	49	198	191	384	0.0	0.0	0.000	A
	B - B2233 S	157	39	155	155	131	0.3	0.4	7.331	A
	C - Nyton Rd W	512	128	514	504	353	0.4	0.4	4.831	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	85	21	85	84	143	0.0	0.0	0.000	A
	B - Nyton Rd W	450	113	454	451	260	1.1	1.4	12.351	E
	C - Nyton Rd E	405	101	403	387	539	0.4	0.7	6.612	A
2 - South Junction	A - A29 Westergate Rd S	283	71	283	287	285	0.0	0.0	0.000	A
	B - B2233 N	154	38	151	154	194	0.3	0.4	8.694	A
	C - A29 Nyton Rd N	134	33	134	134	89	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	245	61	245	233	453	0.0	0.0	0.000	A
	B - B2233 S	193	48	194	197	155	0.4	0.5	8.491	A
	C - Nyton Rd W	604	151	606	613	439	0.4	1.2	7.884	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	88	22	88	85	138	0.0	0.0	0.000	A
	B - Nyton Rd W	460	115	457	454	234	1.4	1.6	12.435	E
	C - Nyton Rd E	372	93	372	380	546	0.7	0.7	6.677	A
2 - South Junction	A - A29 Westergate Rd S	275	69	275	284	284	0.0	0.0	0.000	A
	B - B2233 N	156	39	156	158	184	0.4	0.3	9.052	A
	C - A29 Nyton Rd N	128	32	128	133	91	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	222	56	222	227	464	0.0	0.0	0.000	A
	B - B2233 S	182	46	182	194	157	0.5	0.4	8.165	A
	C - Nyton Rd W	615	154	623	619	404	1.2	1.0	8.243	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	64	16	64	69	119	0.0	0.0	0.000	A
	B - Nyton Rd W	363	91	362	372	188	1.6	1.2	10.335	E
	C - Nyton Rd E	306	77	307	316	426	0.7	0.4	5.274	A
2 - South Junction	A - A29 Westergate Rd S	227	57	227	233	240	0.0	0.0	0.000	A
	B - B2233 N	130	32	131	127	160	0.3	0.3	8.331	A
	C - A29 Nyton Rd N	109	27	109	111	67	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	179	45	179	186	367	0.0	0.0	0.000	A
	B - B2233 S	158	40	158	160	131	0.4	0.3	7.102	A
	C - Nyton Rd W	498	124	499	501	337	1.0	0.6	5.208	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	59	15	59	57	102	0.0	0.0	0.000	A
	B - Nyton Rd W	325	81	324	315	161	1.2	0.7	8.684	A
	C - Nyton Rd E	263	66	264	262	383	0.4	0.3	5.189	A
2 - South Junction	A - A29 Westergate Rd S	200	50	200	194	197	0.0	0.0	0.000	A
	B - B2233 N	103	26	103	108	138	0.3	0.3	7.769	A
	C - A29 Nyton Rd N	94	24	94	93	62	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	153	38	153	155	329	0.0	0.0	0.000	A
	B - B2233 S	136	34	136	133	105	0.3	0.2	7.161	A
	C - Nyton Rd W	431	108	434	425	289	0.6	0.5	3.956	A

Lane Results

Lane Level notation. Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	61	61	59	0.0	0.0	0.000	A
		Exit	1	1		104	104	106	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	312	312	311	0.0	0.7	9.081	A
		Exit	1	1		167	167	169	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	104	104	106	0.0	0.0	0.000	A
				2	B	169	167	169	0.0	0.4	8.038	A
		Exit	1	1	(A, B)	272	272	277	0.0	0.0	0.177	A
				1		373	373	369	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	197	197	192	0.0	0.0	0.000	A
		Exit	1	1		202	202	205	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	104	104	106	0.0	0.1	6.432	A
		Exit	1	1	(A, C)	104	104	107	0.0	0.0	1.316	A
				1		134	134	131	0.0	0.0	0.000	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	98	98	99	0.0	0.0	0.000	A
		Exit	1	1		63	63	61	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	160	160	161	0.0	0.0	0.000	A
		Exit	1	1		316	315	317	0.0	0.1	0.347	A
	B - B2233 S	Entry	1	1	C	133	132	129	0.0	0.3	5.553	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	134	133	130	0.0	0.1	1.343	A
				1		104	104	108	0.0	0.0	0.006	A
	C - Nyton Rd W	Entry	1	1	A, B	422	421	425	0.0	0.4	3.590	A
		Exit	1	1		292	292	290	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	66	66	68	0.0	0.0	0.000	A
		Exit	1	1		117	117	113	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	381	382	373	0.7	1.1	10.589	B
		Exit	1	1		208	208	200	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	117	117	113	0.0	0.0	0.000	A
				2	B	207	208	200	0.4	0.4	8.566	A
		Exit	1	1	(A, B)	323	325	313	0.0	0.0	0.390	A
				1		448	448	441	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	228	228	228	0.0	0.0	0.000	A
		Exit	1	1		240	240	231	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	129	130	125	0.1	0.2	6.574	A
		Exit	1	1	(A, C)	129	129	125	0.0	0.1	1.962	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	111	111	106	0.0	0.0	0.000	A
		Exit	1	1		69	69	71	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	198	198	191	0.0	0.0	0.000	A
		Exit	1	1		384	384	378	0.1	0.1	1.208	A
	B - B2233 S	Entry	1	1	C	156	155	155	0.3	0.2	5.583	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	157	156	155	0.1	0.1	1.750	A
	C - Nyton Rd W	Entry	1	1	A, B	512	514	504	0.4	0.4	4.831	A
		Exit	1	1		353	353	346	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	85	85	84	0.0	0.0	0.000	A
		Exit	1	1		143	143	142	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	450	454	451	1.1	1.4	12.351	B
		Exit	1	1		260	260	245	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	143	143	142	0.0	0.0	0.000	A
				2	B	260	260	245	0.4	0.6	9.254	A
		Exit	1	1	(A, B)	405	403	388	0.0	0.2	0.714	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	283	283	287	0.0	0.0	0.000	A
		Exit	1	1		285	285	287	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	153	151	154	0.2	0.3	6.529	A
		Exit	1	1	(A, C)	154	153	154	0.1	0.1	2.168	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	134	134	134	0.0	0.0	0.000	A
		Exit	1	1		89	89	88	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	245	245	233	0.0	0.0	0.000	A
		Exit	1	1		451	453	457	0.1	0.2	2.348	A
	B - B2233 S	Entry	1	1	C	193	194	197	0.2	0.3	5.728	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	193	193	197	0.1	0.2	2.769	A
	C - Nyton Rd W	Entry	1	1	A, B	604	606	613	0.4	1.2	7.884	A
		Exit	1	1		439	439	429	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	88	88	85	0.0	0.0	0.000	A
		Exit	1	1		138	138	142	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	460	457	454	1.4	1.6	12.435	B
		Exit	1	1		234	234	238	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	138	138	142	0.0	0.0	0.000	A
				2	B	234	234	238	0.6	0.7	9.435	A
		Exit	1	1	(A, B)	372	371	380	0.2	0.0	0.744	A
				1		546	546	539	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	275	275	284	0.0	0.0	0.000	A
		Exit	1	1		284	284	292	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	156	156	158	0.3	0.3	6.631	A
		Exit	1	1	(A, C)	156	156	158	0.1	0.0	2.404	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	128	128	133	0.0	0.0	0.000	A
		Exit	1	1		91	91	89	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	222	222	227	0.0	0.0	0.000	A
		Exit	1	1		466	464	459	0.2	0.3	2.407	A
	B - B2233 S	Entry	1	1	C	182	182	194	0.3	0.2	5.603	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	182	182	193	0.2	0.1	2.554	A
	C - Nyton Rd W	Entry	1	1	A, B	615	623	619	1.2	1.0	8.243	A
		Exit	1	1		404	404	420	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	64	64	69	0.0	0.0	0.000	A
		Exit	1	1		119	119	120	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	363	362	372	1.6	1.2	10.335	B
		Exit	1	1		188	188	196	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	119	119	120	0.0	0.0	0.000	A
				2	B	188	188	196	0.7	0.4	8.128	A
		Exit	1	1	(A, B)	306	307	315	0.0	0.0	0.199	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	227	227	233	0.0	0.0	0.000	A
		Exit	1	1		240	240	238	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	131	131	127	0.3	0.2	6.574	A
		Exit	1	1	(A, C)	130	131	126	0.0	0.0	1.756	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	109	109	111	0.0	0.0	0.000	A
		Exit	1	1		67	67	72	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	179	179	186	0.0	0.0	0.000	A
		Exit	1	1		367	367	374	0.3	0.1	1.119	A
	B - B2233 S	Entry	1	1	C	158	158	160	0.2	0.3	5.435	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	158	158	160	0.1	0.1	1.664	A
	C - Nyton Rd W	Entry	1	1	A, B	498	499	501	1.0	0.6	5.208	A
		Exit	1	1		337	337	346	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - East Junction	A - A29 Nyton Rd S	Entry	1	1	B, C	59	59	57	0.0	0.0	0.000	A
		Exit	1	1		102	102	100	0.0	0.0	0.000	A
	B - Nyton Rd W	Entry	1	1	A, C	325	324	315	1.2	0.7	8.684	A
		Exit	1	1		161	161	163	0.0	0.0	0.000	A
	C - Nyton Rd E	Entry	1	1	A	102	102	100	0.0	0.0	0.000	A
				2	B	161	161	163	0.4	0.3	8.009	A
		Exit	1	1	(A, B)	263	263	262	0.0	0.0	0.211	A
				1		383	383	373	0.0	0.0	0.000	A
2 - South Junction	A - A29 Westergate Rd S	Entry	1	1	B, C	200	200	194	0.0	0.0	0.000	A
		Exit	1	1		197	197	201	0.0	0.0	0.000	A
	B - B2233 N	Entry	1	1	C	0	0	0	0.0	0.0	0.000	A
				2	A	103	103	108	0.2	0.2	6.418	A
		Exit	1	1	(A, C)	103	103	108	0.0	0.1	1.369	A
				1		138	138	134	0.0	0.0	0.005	A
	C - A29 Nyton Rd N	Entry	1	1	A, B	94	94	93	0.0	0.0	0.000	A
		Exit	1	1		62	62	60	0.0	0.0	0.000	A
3 - West Junction	A - Nyton Rd E	Entry	1	1	B, C	153	153	155	0.0	0.0	0.000	A
		Exit	1	1		329	329	317	0.1	0.0	0.300	A
	B - B2233 S	Entry	1	1	C	137	136	133	0.3	0.2	5.621	A
				2	A	0	0	0	0.0	0.0	0.000	A
		Exit	1	1	(A, C)	136	137	133	0.1	0.0	1.542	A
				1		105	105	109	0.0	0.0	0.008	A
	C - Nyton Rd W	Entry	1	1	A, B	431	434	425	0.6	0.5	3.956	A
		Exit	1	1		289	289	288	0.0	0.0	0.000	A

Junctions 9
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Filename: A29 Woodgate Road Junction DM.j9
Path: P:\20-061 Land East of Woodgate Road\Trans\Picady
Report generation date: 09/04/2021 09:29:52

»2038 DM, AM
 »2038 DM, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity
2038 DM								
Stream B-AC	0.2	9.20	0.15	193 %	0.1	8.24	0.08	299 %
Stream C-AB	0.0	5.37	0.02	[Stream B-AC]	0.0	5.47	0.03	[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. 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	A29 Woodgate Road Junction
Location	
Site number	
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	20-061
Enumerator	CA-PC06\PLimbu
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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)	Run automatically
D1	2038 DM	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 DM	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

2038 DM, 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	A29 Woodgate Road Junction	T-Junction	Two-way		1.36	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	193	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	A29 N		Major
B	Woodgate Road		Minor
C	A29 S		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 - A29 S	6.95			100.0	✓	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 - Woodgate Road	One lane	3.04	19	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	494	0.086	0.218	0.137	0.311
B-C	637	0.094	0.237	-	-
C-B	632	0.235	0.235	-	-

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	2038 DM	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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	206	100.000
B - Woodgate Road		ONE HOUR	✓	65	100.000
C - A29 S		ONE HOUR	✓	223	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	7	199
	B - Woodgate Road	38	0	26
	C - A29 S	213	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	6	7
	B - Woodgate Road	1	0	1
	C - A29 S	4	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.15	9.20	0.2	A	59	89
C-AB	0.02	5.37	0.0	A	13	20
C-A					192	288
AB					7	10
AC					183	274

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	491	0.099	48	0.0	0.1	8.204	A
C-AB	10	3	703	0.014	10	0.0	0.0	5.364	A
C-A	158	40			158				
AB	6	1			6				
AC	150	37			150				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	58	15	481	0.121	58	0.1	0.1	8.602	A
C-AB	13	3	717	0.018	13	0.0	0.0	5.274	A
C-A	188	47			188				
A-B	7	2			7				
A-C	179	45			179				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	18	466	0.153	71	0.1	0.2	9.195	A
C-AB	17	4	738	0.023	17	0.0	0.0	5.156	A
C-A	229	57			229				
A-B	8	2			8				
A-C	219	55			219				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	18	466	0.153	71	0.2	0.2	9.202	A
C-AB	17	4	738	0.023	17	0.0	0.0	5.160	A
C-A	229	57			229				
A-B	8	2			8				
A-C	219	55			219				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	58	15	481	0.121	58	0.2	0.1	8.614	A
C-AB	13	3	717	0.018	13	0.0	0.0	5.279	A
C-A	188	47			188				
A-B	7	2			7				
A-C	179	45			179				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	12	491	0.099	49	0.1	0.1	8.227	A
C-AB	10	3	703	0.014	10	0.0	0.0	5.368	A
C-A	158	40			158				
A-B	6	1			6				
A-C	150	37			150				

2038 DM, 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	A29 Woodgate Road Junction	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	299	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)	Run automatically
D2	2038 DM	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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	221	100.000
B - Woodgate Road		ONE HOUR	✓	34	100.000
C - A29 S		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	19	202
	B - Woodgate Road	15	0	19
	C - A29 S	167	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	1	5
	B - Woodgate Road	9	0	1
	C - A29 S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.24	0.1	A	31	47
C-AB	0.03	5.47	0.0	A	19	29
C-A					149	223
A-B					18	26
A-C					185	278

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	6	516	0.050	26	0.0	0.1	7.651	A
C-AB	15	4	677	0.022	15	0.0	0.0	5.464	A
C-A	123	31			123				
A-B	14	4			14				
A-C	152	38			152				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	507	0.061	31	0.1	0.1	7.891	A
C-AB	18	5	687	0.027	18	0.0	0.0	5.420	A
C-A	146	37			146				
A-B	17	4			17				
A-C	182	45			182				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	9	493	0.076	38	0.1	0.1	8.241	A
C-AB	24	6	700	0.034	24	0.0	0.0	5.363	A
C-A	178	44			178				
A-B	21	5			21				
A-C	222	56			222				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	9	493	0.076	38	0.1	0.1	8.243	A
C-AB	24	6	700	0.034	24	0.0	0.0	5.367	A
C-A	178	44			178				
A-B	21	5			21				
A-C	222	56			222				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	507	0.061	31	0.1	0.1	7.895	A
C-AB	18	5	687	0.027	18	0.0	0.0	5.429	A
C-A	146	37			146				
A-B	17	4			17				
A-C	182	45			182				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	6	516	0.050	26	0.1	0.1	7.662	A
C-AB	15	4	677	0.022	15	0.0	0.0	5.468	A
C-A	123	31			123				
A-B	14	4			14				
A-C	152	38			152				

Junctions 9
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Filename: A29 Woodgate Road Junction DS - Sensitivity.j9

Path: P:\20-061 Land East of Woodgate Road\Trans\Picady

Report generation date: 09/04/2021 09:32:03

- »2038 With Development, AM
- »2038 With Development, PM
- »2038 With Development - Sensitivity, AM
- »2038 With Development - Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity
2038 With Development								
Stream B-AC	0.4	11.79	0.30	93 %	0.2	9.47	0.15	185 %
Stream C-AB	0.0	6.10	0.03	[Stream B-AC]	0.0	6.12	0.04	[Stream B-AC]
2038 With Development - Sensitivity								
Stream B-AC	0.9	16.00	0.47	43 %	0.3	10.68	0.21	130 %
Stream C-AB	0.1	6.16	0.05	[Stream B-AC]	0.0	6.46	0.04	[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. 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	A29 Woodgate Road Junction
Location	
Site number	
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	20-061
Enumerator	CA-PC06/PLimbu
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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)	Run automatically
D1	2038 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 With Development	PM	ONE HOUR	16:45	18:15	15	✓
D3	2038 With Development - Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D4	2038 With Development - 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

2038 With 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	A29 Woodgate Road Junction	T-Junction	Two-way		2.74	A

Junction Network Options

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

Arms

Arms

Arm	Name	Description	Arm type
A	A29 N		Major
B	Woodgate Road		Minor
C	A29 S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A29 S	6.00		✓	3.00	100.0	✓	5.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Woodgate Road	One lane	3.04	19	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	494	0.090	0.227	0.143	0.325
B-C	637	0.098	0.247	-	-
C-B	687	0.266	0.266	-	-

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	2038 With 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	218	100.000
B - Woodgate Road		ONE HOUR	✓	121	100.000
C - A29 S		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - A29 N	B - Woodgate Road	C - A29 S
A - A29 N		0	19	199
B - Woodgate Road		88	0	33
C - A29 S		207	19	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A29 N	B - Woodgate Road	C - A29 S
A - A29 N		0	2	7
B - Woodgate Road		0	0	1
C - A29 S		4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.30	11.79	0.4	B	111	167
C-AB	0.03	6.10	0.0	A	18	27
C-A					190	285
AB					18	27
AC					183	274

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	467	0.195	90	0.0	0.2	9.555	A
C-AB	15	4	643	0.023	14	0.0	0.0	5.841	A
C-A	156	39			156				
AB	15	4			15				
AC	150	37			150				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	456	0.239	109	0.2	0.3	10.398	B
C-AB	17	4	635	0.027	17	0.0	0.0	5.948	A
C-A	186	47			186				
A-B	17	4			17				
A-C	179	45			179				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	33	440	0.304	133	0.3	0.4	11.759	B
C-AB	21	5	623	0.034	21	0.0	0.0	6.103	A
C-A	228	57			228				
A-B	21	5			21				
A-C	219	55			219				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	134	33	440	0.304	134	0.4	0.4	11.794	B
C-AB	21	5	623	0.034	21	0.0	0.0	6.103	A
C-A	228	57			228				
A-B	21	5			21				
A-C	219	55			219				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	456	0.239	110	0.4	0.3	10.445	B
C-AB	17	4	635	0.027	17	0.0	0.0	5.949	A
C-A	186	47			186				
A-B	17	4			17				
A-C	179	45			179				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	467	0.196	92	0.3	0.2	9.618	A
C-AB	15	4	643	0.023	15	0.0	0.0	5.841	A
C-A	156	39			156				
A-B	15	4			15				
A-C	150	37			150				

2038 With 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	A29 Woodgate Road Junction	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	185	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)	Run automatically
D2	2038 With 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	253	100.000
B - Woodgate Road		ONE HOUR	✓	62	100.000
C - A29 S		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	65	188
	B - Woodgate Road	39	0	23
	C - A29 S	166	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	0	5
	B - Woodgate Road	3	0	1
	C - A29 S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.15	9.47	0.2	A	57	86
C-AB	0.04	6.12	0.0	A	20	30
C-A					152	228
A-B					60	89
A-C					173	259

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	12	483	0.097	46	0.0	0.1	8.416	A
C-AB	17	4	636	0.026	16	0.0	0.0	5.809	A
C-A	125	31			125				
A-B	49	12			49				
A-C	142	35			142				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	14	472	0.118	56	0.1	0.1	8.836	A
C-AB	20	5	626	0.032	20	0.0	0.0	5.934	A
C-A	149	37			149				
A-B	58	15			58				
A-C	169	42			169				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	69	17	457	0.150	68	0.1	0.2	9.463	A
C-AB	24	6	613	0.040	24	0.0	0.0	6.116	A
C-A	183	46			183				
A-B	72	18			72				
A-C	207	52			207				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	69	17	457	0.150	69	0.2	0.2	9.471	A
C-AB	24	6	613	0.040	24	0.0	0.0	6.116	A
C-A	183	46			183				
A-B	72	18			72				
A-C	207	52			207				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	14	472	0.118	56	0.2	0.1	8.848	A
C-AB	20	5	626	0.032	20	0.0	0.0	5.937	A
C-A	149	37			149				
A-B	58	15			58				
A-C	169	42			169				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	12	483	0.097	47	0.1	0.1	8.438	A
C-AB	17	4	636	0.026	17	0.0	0.0	5.809	A
C-A	125	31			125				
A-B	49	12			49				
A-C	142	35			142				

2038 With Development - 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	A29 Woodgate Road Junction	T-Junction	Two-way		4.73	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	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)	Run automatically
D3	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	237	100.000
B - Woodgate Road		ONE HOUR	✓	180	100.000
C - A29 S		ONE HOUR	✓	232	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	49	188
	B - Woodgate Road	147	0	33
	C - A29 S	202	30	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	0	8
	B - Woodgate Road	0	0	1
	C - A29 S	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.47	16.00	0.9	C	165	248
C-AB	0.05	6.16	0.1	A	28	41
C-A					185	278
A-B					45	67
A-C					173	259

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	136	34	453	0.300	134	0.0	0.4	11.256	E
C-AB	23	6	639	0.035	22	0.0	0.0	5.833	A
C-A	152	38			152				
A-B	37	9			37				
A-C	142	35			142				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	162	41	441	0.368	162	0.4	0.6	12.890	E
C-AB	27	7	630	0.043	27	0.0	0.0	5.967	A
C-A	182	45			182				
A-B	44	11			44				
A-C	169	42			169				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	50	424	0.469	197	0.6	0.9	15.849	C
C-AB	33	8	617	0.054	33	0.0	0.1	6.159	A
C-A	222	56			222				
A-B	54	13			54				
A-C	207	52			207				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	199	50	424	0.469	198	0.9	0.9	16.000	C
C-AB	33	8	617	0.054	33	0.1	0.1	6.159	A
C-A	222	56			222				
A-B	54	13			54				
A-C	207	52			207				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	162	41	441	0.368	163	0.9	0.6	13.052	E
C-AB	27	7	630	0.043	27	0.1	0.0	5.968	A
C-A	182	45			182				
A-B	44	11			44				
A-C	169	42			169				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	136	34	453	0.300	136	0.6	0.4	11.422	E
C-AB	23	6	639	0.035	23	0.0	0.0	5.836	A
C-A	152	38			152				
A-B	37	9			37				
A-C	142	35			142				

2038 With Development - 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	A29 Woodgate Road Junction	T-Junction	Two-way		1.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	130	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)	Run automatically
D4	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
A - A29 N		ONE HOUR	✓	367	100.000
B - Woodgate Road		ONE HOUR	✓	84	100.000
C - A29 S		ONE HOUR	✓	186	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	204	163
	B - Woodgate Road	61	0	23
	C - A29 S	166	20	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A29 N	B - Woodgate Road	C - A29 S
From	A - A29 N	0	0	2
	B - Woodgate Road	2	0	1
	C - A29 S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.21	10.68	0.3	B	77	116
C-AB	0.04	6.46	0.0	A	18	28
C-A					152	228
A-B					187	281
A-C					150	224

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	63	16	464	0.137	63	0.0	0.2	9.117	A
C-AB	15	4	613	0.025	15	0.0	0.0	6.016	A
C-A	125	31			125				
A-B	154	38			154				
A-C	123	31			123				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	452	0.167	76	0.2	0.2	9.715	A
C-AB	18	4	599	0.030	18	0.0	0.0	6.194	A
C-A	149	37			149				
A-B	183	46			183				
A-C	147	37			147				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	436	0.213	92	0.2	0.3	10.666	B
C-AB	22	6	579	0.038	22	0.0	0.0	6.458	A
C-A	183	46			183				
A-B	225	56			225				
A-C	179	45			179				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	436	0.213	93	0.3	0.3	10.683	B
C-AB	22	6	579	0.038	22	0.0	0.0	6.458	A
C-A	183	46			183				
A-B	225	56			225				
A-C	179	45			179				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	76	19	452	0.167	76	0.3	0.2	9.739	A
C-AB	18	4	599	0.030	18	0.0	0.0	6.197	A
C-A	149	37			149				
A-B	183	46			183				
A-C	147	37			147				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	63	16	464	0.137	64	0.2	0.2	9.141	A
C-AB	15	4	613	0.025	15	0.0	0.0	6.019	A
C-A	125	31			125				
A-B	154	38			154				
A-C	123	31			123				

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.1.7462 © Copyright TRL Limited, 2019			
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Filename: War Memorial Roundabout - Sensitivity.j9
Path: P:\20-061 Land East of Woodgate Road\Trans\Arcady
Report generation date: 06/04/2021 09:49:44

»2038 Do Minimum, AM
 »2038 Do Minimum, PM
 »2038 With Development, AM
 »2038 With Development, PM
 »2038 With Development - Sensitivity, AM
 »2038 With Development - Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	Network Residual Capacity
	2038 Do Minimum							
1 - Barnham Rd	0.8	4.41	0.44	95 % [1 - Barnham Rd]	0.2	3.14	0.19	47 % [3 - Fontwell Ave]
2 - Nyton Rd	0.3	2.49	0.22		0.4	2.65	0.30	
3 - Fontwell Ave	0.5	7.98	0.33		1.0	12.51	0.49	
	2038 With Development							
1 - Barnham Rd	0.8	4.53	0.46	90 % [1 - Barnham Rd]	0.2	3.12	0.18	45 % [3 - Fontwell Ave]
2 - Nyton Rd	0.3	2.50	0.23		0.4	2.64	0.29	
3 - Fontwell Ave	0.5	7.98	0.33		1.0	12.66	0.49	
	2038 With Development - Sensivity							
1 - Barnham Rd	0.8	4.49	0.45	92 % [1 - Barnham Rd]	0.2	3.09	0.17	50 % [3 - Fontwell Ave]
2 - Nyton Rd	0.3	2.49	0.22		0.4	2.59	0.28	
3 - Fontwell Ave	0.5	8.08	0.34		1.0	11.89	0.48	

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

File summary

File Description

Title	War Memorial Roundabout
Location	
Site number	
Date	30/03/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	20-061
Enumerator	CA-PC06PLimbu
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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)	Run automatically
D1	2038 Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	2038 Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D3	2038 With Development	AM	ONE HOUR	07:45	09:15	15	✓
D4	2038 With Development	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038 With Development - Sensitivity	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038 With Development - 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

2038 Do Minimum, 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	War Memorial Roundabout	Standard Roundabout		1, 2, 3	4.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	95	1 - Barnham Rd

Arms

Arms

Arm	Name	Description
1	Barnham Rd	
2	Nyton Rd	
3	Fontwell Ave	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Barnham Rd	3.37	5.30	18.7	331.8	25.0	15.0	
2 - Nyton Rd	4.17	6.48	30.0	133.4	25.0	10.0	
3 - Fontwell Ave	3.23	3.75	0.5	6.3	25.0	75.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Barnham Rd	0.673	1604
2 - Nyton Rd	0.764	2028
3 - Fontwell Ave	0.384	747

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	2038 Do Minimum	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 (PCU/hr)	Scaling Factor (%)
1 - Barnham Rd		ONE HOUR	✓	596	100.000
2 - Nyton Rd		ONE HOUR	✓	392	100.000
3 - Fontwell Ave		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	493	103
	2 - Nyton Rd	133	0	259
	3 - Fontwell Ave	43	163	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	1	3
	2 - Nyton Rd	5	0	4
	3 - Fontwell Ave	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Barnham Rd	0.44	4.41	0.8	A	547	820
2 - Nyton Rd	0.22	2.49	0.3	A	360	540
3 - Fontwell Ave	0.33	7.98	0.5	A	189	284

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	449	112	122	1522	0.295	447	132	0.0	0.4	3.394	A
2 - Nyton Rd	295	74	77	1969	0.150	294	492	0.0	0.2	2.242	A
3 - Fontwell Ave	155	39	100	709	0.219	154	272	0.0	0.3	6.658	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	536	134	146	1506	0.356	535	158	0.4	0.6	3.757	A
2 - Nyton Rd	352	88	93	1957	0.180	352	589	0.2	0.2	2.340	A
3 - Fontwell Ave	185	46	120	701	0.264	185	325	0.3	0.4	7.163	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	656	164	179	1484	0.442	655	194	0.6	0.8	4.398	A
2 - Nyton Rd	432	108	113	1941	0.222	431	721	0.2	0.3	2.487	A
3 - Fontwell Ave	227	57	146	691	0.328	226	398	0.4	0.5	7.958	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	656	164	179	1483	0.442	656	194	0.8	0.8	4.410	A
2 - Nyton Rd	432	108	113	1941	0.222	432	722	0.3	0.3	2.488	A
3 - Fontwell Ave	227	57	146	691	0.328	227	399	0.5	0.5	7.975	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	536	134	147	1505	0.356	537	158	0.8	0.6	3.772	A
2 - Nyton Rd	352	88	93	1957	0.180	353	591	0.3	0.2	2.343	A
3 - Fontwell Ave	185	46	120	701	0.264	186	326	0.5	0.4	7.186	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	449	112	123	1521	0.295	449	133	0.6	0.4	3.406	A
2 - Nyton Rd	295	74	78	1968	0.150	295	495	0.2	0.2	2.245	A
3 - Fontwell Ave	155	39	100	709	0.219	155	273	0.4	0.3	6.696	A

2038 Do Minimum, 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	War Memorial Roundabout	Standard Roundabout		1, 2, 3	5.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	3 - Fontwell Ave

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	2038 Do Minimum	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 (PCU/hr)	Scaling Factor (%)
1 - Barnham Rd		ONE HOUR	✓	246	100.000
2 - Nyton Rd		ONE HOUR	✓	527	100.000
3 - Fontwell Ave		ONE HOUR	✓	266	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	163	83
	2 - Nyton Rd	341	0	186
	3 - Fontwell Ave	62	204	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	3	3
	2 - Nyton Rd	1	0	2
	3 - Fontwell Ave	1	10	0

Results

Results Summary for whole modelled period

Am	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Barnham Rd	0.19	3.14	0.2	A	226	339
2 - Nyton Rd	0.30	2.65	0.4	A	484	725
3 - Fontwell Ave	0.49	12.51	1.0	B	244	366

Main Results for each time segment

16:45 - 17:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	185	46	152	1502	0.123	185	302	0.0	0.1	2.813	A
2 - Nyton Rd	397	99	62	1980	0.200	396	274	0.0	0.3	2.302	A
3 - Fontwell Ave	200	50	256	649	0.309	198	202	0.0	0.5	8.580	A

17:00 - 17:15

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	221	55	183	1481	0.149	221	362	0.1	0.2	2.942	A
2 - Nyton Rd	474	118	75	1971	0.240	473	329	0.3	0.3	2.437	A
3 - Fontwell Ave	239	60	306	629	0.380	238	242	0.5	0.6	9.905	A

17:15 - 17:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	271	68	224	1454	0.186	271	443	0.2	0.2	3.134	A
2 - Nyton Rd	580	145	91	1958	0.296	580	403	0.3	0.4	2.648	A
3 - Fontwell Ave	293	73	375	603	0.486	291	296	0.6	1.0	12.400	B

17:30 - 17:45

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	271	68	225	1453	0.186	271	444	0.2	0.2	3.136	A
2 - Nyton Rd	580	145	91	1958	0.296	580	404	0.4	0.4	2.648	A
3 - Fontwell Ave	293	73	375	603	0.486	293	296	1.0	1.0	12.507	B

17:45 - 18:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	221	55	184	1480	0.149	221	363	0.2	0.2	2.948	A
2 - Nyton Rd	474	118	75	1971	0.240	474	331	0.4	0.3	2.438	A
3 - Fontwell Ave	239	60	307	629	0.380	240	242	1.0	0.7	10.015	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	185	46	154	1500	0.123	185	304	0.2	0.1	2.821	A
2 - Nyton Rd	397	99	63	1980	0.200	397	277	0.3	0.3	2.306	A
3 - Fontwell Ave	200	50	257	648	0.309	201	203	0.7	0.5	8.687	A

2038 With Development, 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	War Memorial Roundabout	Standard Roundabout		1, 2, 3	4.45	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	90	1 - Barnham Rd

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	2038 With 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 (PCU/hr)	Scaling Factor (%)
1 - Barnham Rd		ONE HOUR	✓	616	100.000
2 - Nyton Rd		ONE HOUR	✓	398	100.000
3 - Fontwell Ave		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	509	107
	2 - Nyton Rd	134	0	264
	3 - Fontwell Ave	44	162	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	1	3
	2 - Nyton Rd	5	0	4
	3 - Fontwell Ave	2	3	0

Results

Results Summary for whole modelled period

Am	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Barnham Rd	0.46	4.53	0.8	A	565	848
2 - Nyton Rd	0.23	2.50	0.3	A	365	548
3 - Fontwell Ave	0.33	7.98	0.5	A	189	284

Main Results for each time segment

07:45 - 08:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	464	116	121	1523	0.305	462	134	0.0	0.4	3.434	A
2 - Nyton Rd	300	75	80	1966	0.152	299	503	0.0	0.2	2.251	A
3 - Fontwell Ave	155	39	101	708	0.219	154	279	0.0	0.3	6.661	A

08:00 - 08:15

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	554	138	145	1506	0.368	553	160	0.4	0.6	3.826	A
2 - Nyton Rd	358	89	96	1954	0.183	358	602	0.2	0.2	2.352	A
3 - Fontwell Ave	185	46	120	701	0.264	185	333	0.3	0.4	7.167	A

08:15 - 08:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	678	170	178	1484	0.457	677	196	0.6	0.8	4.515	A
2 - Nyton Rd	438	110	118	1938	0.226	438	738	0.2	0.3	2.504	A
3 - Fontwell Ave	227	57	147	690	0.329	226	408	0.4	0.5	7.964	A

08:30 - 08:45

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	678	170	178	1484	0.457	678	196	0.8	0.8	4.527	A
2 - Nyton Rd	438	110	118	1938	0.226	438	739	0.3	0.3	2.504	A
3 - Fontwell Ave	227	57	148	690	0.329	227	408	0.5	0.5	7.982	A

08:45 - 09:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	554	138	146	1506	0.368	555	160	0.8	0.6	3.840	A
2 - Nyton Rd	358	89	96	1954	0.183	358	604	0.3	0.2	2.353	A
3 - Fontwell Ave	185	46	121	701	0.264	186	334	0.5	0.4	7.194	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	464	116	122	1522	0.305	464	134	0.6	0.4	3.453	A
2 - Nyton Rd	300	75	81	1966	0.152	300	506	0.2	0.2	2.255	A
3 - Fontwell Ave	155	39	101	708	0.219	155	280	0.4	0.3	6.699	A

2038 With Development, 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	War Memorial Roundabout	Standard Roundabout		1, 2, 3	5.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	45	3 - Fontwell Ave

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	2038 With 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 (PCU/hr)	Scaling Factor (%)
1 - Barnham Rd		ONE HOUR	✓	238	100.000
2 - Nyton Rd		ONE HOUR	✓	523	100.000
3 - Fontwell Ave		ONE HOUR	✓	271	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	156	82
	2 - Nyton Rd	337	0	186
	3 - Fontwell Ave	63	208	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	3	3
	2 - Nyton Rd	1	0	2
	3 - Fontwell Ave	1	10	0

Results

Results Summary for whole modelled period

Am	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Barnham Rd	0.18	3.12	0.2	A	218	328
2 - Nyton Rd	0.29	2.64	0.4	A	480	720
3 - Fontwell Ave	0.49	12.66	1.0	B	249	373

Main Results for each time segment

16:45 - 17:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	179	45	155	1500	0.119	179	300	0.0	0.1	2.805	A
2 - Nyton Rd	394	98	62	1981	0.199	393	272	0.0	0.3	2.297	A
3 - Fontwell Ave	204	51	253	650	0.314	202	201	0.0	0.5	8.629	A

17:00 - 17:15

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	214	53	186	1479	0.145	214	359	0.1	0.2	2.931	A
2 - Nyton Rd	470	118	74	1971	0.239	470	327	0.3	0.3	2.430	A
3 - Fontwell Ave	244	61	303	631	0.386	243	241	0.5	0.7	9.984	A

17:15 - 17:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	262	66	228	1451	0.181	262	440	0.2	0.2	3.118	A
2 - Nyton Rd	576	144	90	1959	0.294	575	400	0.3	0.4	2.638	A
3 - Fontwell Ave	298	75	371	605	0.493	297	295	0.7	1.0	12.548	B

17:30 - 17:45

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	262	66	229	1450	0.181	262	440	0.2	0.2	3.120	A
2 - Nyton Rd	576	144	90	1959	0.294	576	401	0.4	0.4	2.638	A
3 - Fontwell Ave	298	75	371	605	0.494	298	295	1.0	1.0	12.663	B

17:45 - 18:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	214	53	188	1477	0.145	214	360	0.2	0.2	2.937	A
2 - Nyton Rd	470	118	74	1971	0.239	471	328	0.4	0.3	2.431	A
3 - Fontwell Ave	244	61	303	631	0.386	245	241	1.0	0.7	10.099	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	179	45	157	1498	0.120	179	301	0.2	0.1	2.813	A
2 - Nyton Rd	394	98	62	1980	0.199	394	275	0.3	0.3	2.300	A
3 - Fontwell Ave	204	51	254	650	0.314	205	202	0.7	0.5	8.740	A

2038 With Development - 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	War Memorial Roundabout	Standard Roundabout		1, 2, 3	4.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	92	1 - Barnham Rd

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	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
1 - Barnham Rd		ONE HOUR	✓	605	100.000
2 - Nyton Rd		ONE HOUR	✓	394	100.000
3 - Fontwell Ave		ONE HOUR	✓	212	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	501	104
	2 - Nyton Rd	131	0	263
	3 - Fontwell Ave	43	169	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	1	3
	2 - Nyton Rd	5	0	4
	3 - Fontwell Ave	2	3	0

Results

Results Summary for whole modelled period

Am	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Barnham Rd	0.45	4.49	0.8	A	555	833
2 - Nyton Rd	0.22	2.49	0.3	A	362	542
3 - Fontwell Ave	0.34	8.08	0.5	A	195	292

Main Results for each time segment

07:45 - 08:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	455	114	126	1519	0.300	454	131	0.0	0.4	3.418	A
2 - Nyton Rd	297	74	78	1968	0.151	296	502	0.0	0.2	2.245	A
3 - Fontwell Ave	160	40	98	709	0.225	158	276	0.0	0.3	6.706	A

08:00 - 08:15

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	544	136	152	1502	0.362	543	156	0.4	0.6	3.803	A
2 - Nyton Rd	354	89	93	1956	0.181	354	602	0.2	0.2	2.344	A
3 - Fontwell Ave	191	48	118	702	0.272	190	330	0.3	0.4	7.229	A

08:15 - 08:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	666	167	186	1479	0.450	665	191	0.6	0.8	4.476	A
2 - Nyton Rd	434	108	114	1940	0.224	434	736	0.2	0.3	2.492	A
3 - Fontwell Ave	233	58	144	692	0.337	233	404	0.4	0.5	8.056	A

08:30 - 08:45

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	666	167	186	1479	0.450	666	192	0.8	0.8	4.488	A
2 - Nyton Rd	434	108	115	1940	0.224	434	738	0.3	0.3	2.492	A
3 - Fontwell Ave	233	58	144	692	0.338	233	404	0.5	0.5	8.076	A

08:45 - 09:00

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	544	136	152	1502	0.362	545	157	0.8	0.6	3.816	A
2 - Nyton Rd	354	89	94	1956	0.181	354	604	0.3	0.2	2.346	A
3 - Fontwell Ave	191	48	118	702	0.272	191	330	0.5	0.4	7.254	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	455	114	128	1518	0.300	456	131	0.6	0.4	3.435	A
2 - Nyton Rd	297	74	78	1968	0.151	297	505	0.2	0.2	2.247	A
3 - Fontwell Ave	160	40	99	709	0.225	160	277	0.4	0.3	6.742	A

2038 With Development - 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	War Memorial Roundabout	Standard Roundabout		1, 2, 3	5.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	3 - Fontwell Ave

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	2038 With Development - 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 (PCU/hr)	Scaling Factor (%)
1 - Barnham Rd		ONE HOUR	✓	230	100.000
2 - Nyton Rd		ONE HOUR	✓	498	100.000
3 - Fontwell Ave		ONE HOUR	✓	268	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	148	82
	2 - Nyton Rd	314	0	184
	3 - Fontwell Ave	65	203	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Barnham Rd	2 - Nyton Rd	3 - Fontwell Ave
From	1 - Barnham Rd	0	3	3
	2 - Nyton Rd	1	0	2
	3 - Fontwell Ave	1	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Barnham Rd	0.17	3.09	0.2	A	211	317
2 - Nyton Rd	0.28	2.59	0.4	A	457	685
3 - Fontwell Ave	0.48	11.89	1.0	B	246	369

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	173	43	151	1502	0.115	173	284	0.0	0.1	2.787	A
2 - Nyton Rd	375	94	62	1981	0.189	374	263	0.0	0.2	2.270	A
3 - Fontwell Ave	202	50	236	656	0.307	200	200	0.0	0.5	8.285	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	207	52	182	1482	0.140	207	340	0.1	0.2	2.908	A
2 - Nyton Rd	448	112	74	1971	0.227	447	315	0.2	0.3	2.394	A
3 - Fontwell Ave	241	60	282	639	0.377	240	239	0.5	0.6	9.514	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	253	63	223	1454	0.174	253	417	0.2	0.2	3.086	A
2 - Nyton Rd	548	137	90	1959	0.280	548	385	0.3	0.4	2.586	A
3 - Fontwell Ave	295	74	345	614	0.480	294	293	0.6	1.0	11.797	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	253	63	223	1454	0.174	253	417	0.2	0.2	3.088	A
2 - Nyton Rd	548	137	90	1959	0.280	548	386	0.4	0.4	2.587	A
3 - Fontwell Ave	295	74	346	614	0.480	295	293	1.0	1.0	11.891	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	207	52	183	1481	0.140	207	341	0.2	0.2	2.911	A
2 - Nyton Rd	448	112	74	1971	0.227	448	317	0.4	0.3	2.396	A
3 - Fontwell Ave	241	60	283	639	0.377	242	239	1.0	0.6	9.612	A

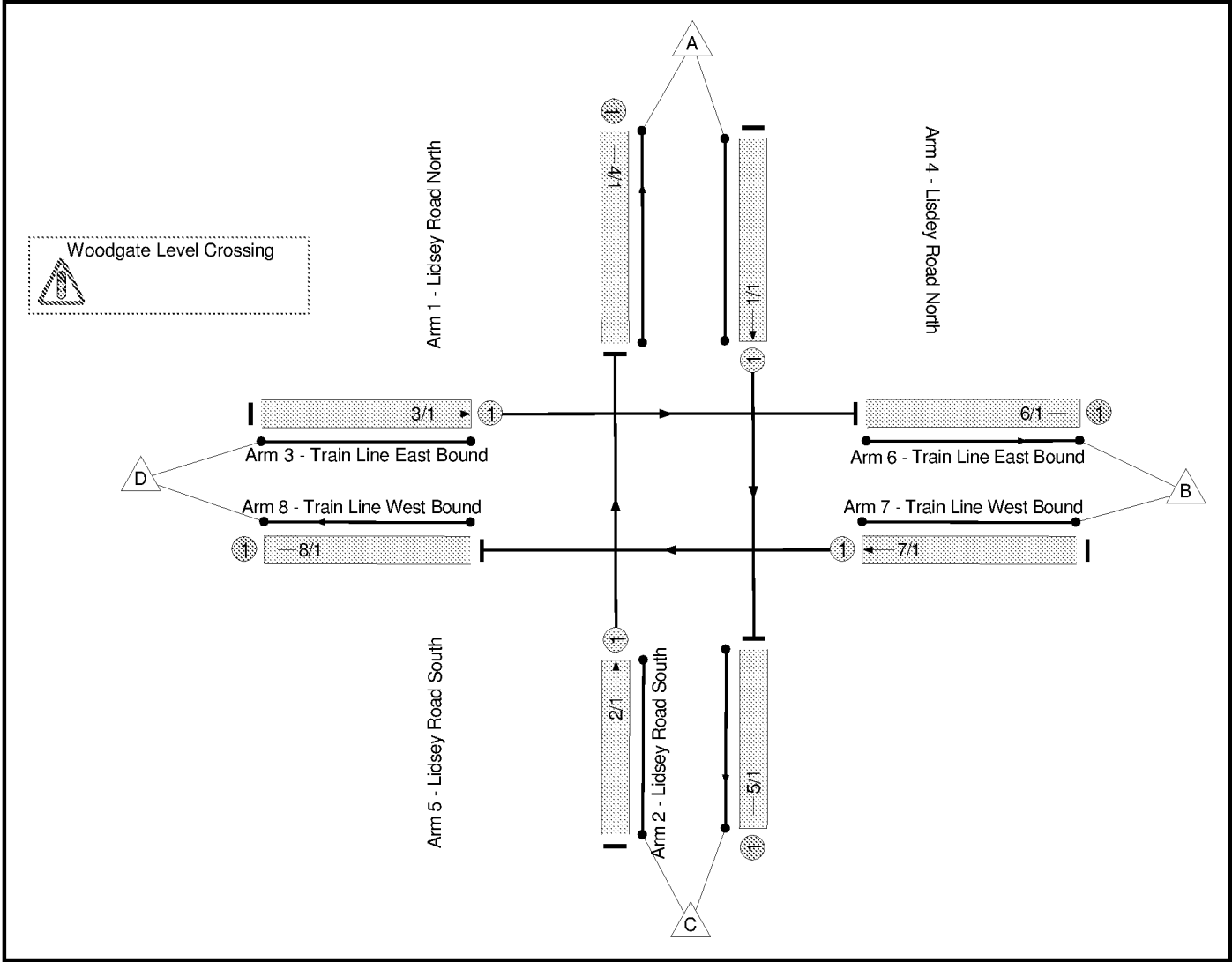
18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Barnham Rd	173	43	153	1501	0.115	173	286	0.2	0.1	2.792	A
2 - Nyton Rd	375	94	62	1980	0.189	375	265	0.3	0.2	2.273	A
3 - Fontwell Ave	202	50	237	656	0.307	202	200	0.6	0.5	8.382	A

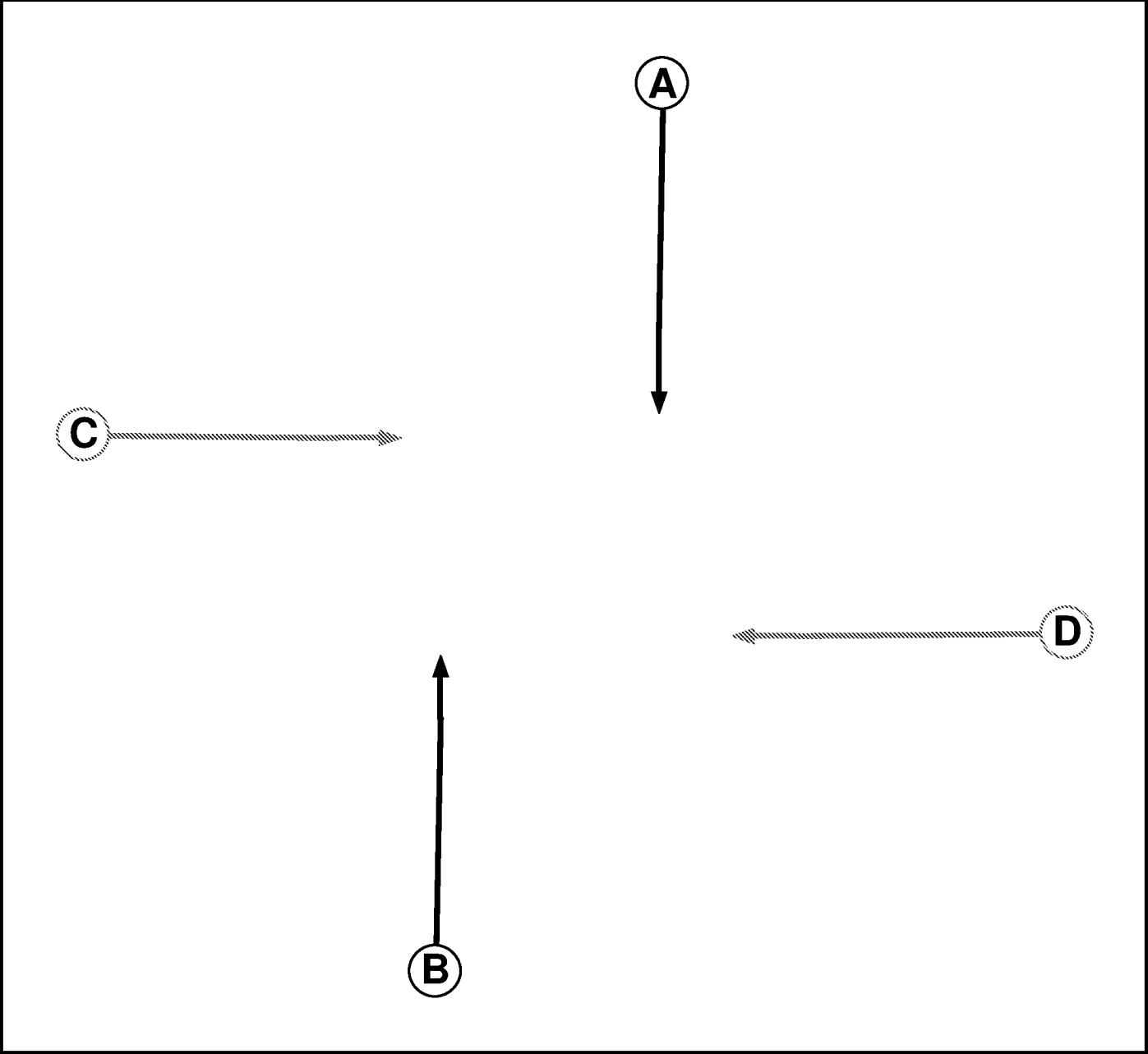
User and Project Details

Project:	Land East of Woodgate Road
Title:	Woodgate Level Crossing
Location:	
Site Ref(s):	20-061
Additional detail:	
File name:	Woodgate Level Crossing - Sensitivity.lsg3x
Author:	
Company:	C&A
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	LRT		7	7
D	LRT		7	7

Full Input Data And Results

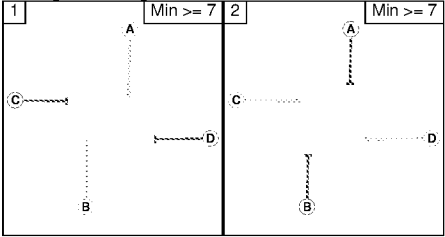
Phase Intergreens Matrix

Terminating Phase	Starting Phase				
		A	B	C	D
	A		-	-	10
	B	-		10	-
	C	-	10		-
	D	10	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage	
	1	2
	1	10
2	10	

Give-Way Lane Input Data

Junction: Woodgate Level Crossing
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Woodgate Level Crossing												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Lidsey Road North)	U	A	2	3	60.0	User	1935	-	-	-	-	-
2/1 (Lidsey Road South)	U	B	2	3	60.0	User	2115	-	-	-	-	-
3/1 (Train Line East Bound)	U	C	2	3	60.0	User	2020	-	-	-	-	-
4/1 (Lidsey Road North)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Lidsey Road South)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Train Line East Bound)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Train Line West Bound)	U	D	2	3	60.0	User	2020	-	-	-	-	-
8/1 (Train Line West Bound)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2038 DM AM'	08:00	09:00	01:00	
2: '2038 DM PM'	17:00	18:00	01:00	
3: '2038 With Dev AM'	08:00	09:00	01:00	
4: '2038 With Dev PM'	17:00	18:00	01:00	
5: '2038 With Dev Sensitivity AM'	08:00	09:00	01:00	
6: '2038 With Dev Sensitivity PM'	17:00	18:00	01:00	

Scenario 1: '2038 DM AM' (FG1: '2038 DM AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	206	0	206
	B	0	0	0	0	0
	C	270	0	0	0	270
	D	0	0	0	0	0
	Tot.	270	0	206	0	476

Traffic Lane Flows

Lane	Scenario 1: 2038 DM AM
Junction: Woodgate Level Crossing	
1/1	206
2/1	270
3/1	0
4/1	270
5/1	206
6/1	0
7/1	0
8/1	0

Lane Saturation Flows

Junction: Woodgate Level Crossing								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Lidsey Road North Lane 1)	This lane uses a directly entered Saturation Flow						1935	1935
2/1 (Lidsey Road South Lane 1)	This lane uses a directly entered Saturation Flow						2115	2115
3/1 (Train Line East Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
4/1 (Lidsey Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Lidsey Road South Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Train Line East Bound Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Train Line West Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
8/1 (Train Line West Bound Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2038 DM PM' (FG2: '2038 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	221	0	221
	B	0	0	0	0	0
	C	179	0	0	0	179
	D	0	0	0	0	0
	Tot.	179	0	221	0	400

Traffic Lane Flows

Lane	Scenario 2: 2038 DM PM
Junction: Woodgate Level Crossing	
1/1	221
2/1	179
3/1	0
4/1	179
5/1	221
6/1	0
7/1	0
8/1	0

Lane Saturation Flows

Junction: Woodgate Level Crossing								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Lidsey Road North Lane 1)	This lane uses a directly entered Saturation Flow						1935	1935
2/1 (Lidsey Road South Lane 1)	This lane uses a directly entered Saturation Flow						2115	2115
3/1 (Train Line East Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
4/1 (Lidsey Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Lidsey Road South Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Train Line East Bound Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Train Line West Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
8/1 (Train Line West Bound Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2038 With Dev AM' (FG3: '2038 With Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	218	0	218
	B	0	0	0	0	0
	C	314	0	0	0	314
	D	0	0	0	0	0
	Tot.	314	0	218	0	532

Traffic Lane Flows

Lane	Scenario 3: 2038 With Dev AM
Junction: Woodgate Level Crossing	
1/1	218
2/1	314
3/1	0
4/1	314
5/1	218
6/1	0
7/1	0
8/1	0

Lane Saturation Flows

Junction: Woodgate Level Crossing								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Lidsey Road North Lane 1)	This lane uses a directly entered Saturation Flow						1935	1935
2/1 (Lidsey Road South Lane 1)	This lane uses a directly entered Saturation Flow						2115	2115
3/1 (Train Line East Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
4/1 (Lidsey Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Lidsey Road South Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Train Line East Bound Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Train Line West Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
8/1 (Train Line West Bound Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2038 With Dev PM' (FG4: '2038 With Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	254	0	254
	B	0	0	0	0	0
	C	202	0	0	0	202
	D	0	0	0	0	0
	Tot.	202	0	254	0	456

Traffic Lane Flows

Lane	Scenario 4: 2038 With Dev PM
Junction: Woodgate Level Crossing	
1/1	254
2/1	202
3/1	0
4/1	202
5/1	254
6/1	0
7/1	0
8/1	0

Lane Saturation Flows

Junction: Woodgate Level Crossing								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Lidsey Road North Lane 1)	This lane uses a directly entered Saturation Flow						1935	1935
2/1 (Lidsey Road South Lane 1)	This lane uses a directly entered Saturation Flow						2115	2115
3/1 (Train Line East Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
4/1 (Lidsey Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Lidsey Road South Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Train Line East Bound Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Train Line West Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
8/1 (Train Line West Bound Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2038 With Dev Sensitivity AM' (FG5: '2038 With Dev Sensitivity AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	236	0	236
	B	0	0	0	0	0
	C	364	0	0	0	364
	D	0	0	0	0	0
	Tot.	364	0	236	0	600

Traffic Lane Flows

Lane	Scenario 5: 2038 With Dev Sensitivity AM
Junction: Woodgate Level Crossing	
1/1	236
2/1	364
3/1	0
4/1	364
5/1	236
6/1	0
7/1	0
8/1	0

Lane Saturation Flows

Junction: Woodgate Level Crossing								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Lidsey Road North Lane 1)	This lane uses a directly entered Saturation Flow						1935	1935
2/1 (Lidsey Road South Lane 1)	This lane uses a directly entered Saturation Flow						2115	2115
3/1 (Train Line East Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
4/1 (Lidsey Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Lidsey Road South Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Train Line East Bound Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Train Line West Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
8/1 (Train Line West Bound Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2038 With Dev Sensitivity PM' (FG6: '2038 With Dev Sensitivity PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	367	0	367
	B	0	0	0	0	0
	C	220	0	0	0	220
	D	0	0	0	0	0
	Tot.	220	0	367	0	587

Traffic Lane Flows

Lane	Scenario 6: 2038 With Dev Sensitivity PM
Junction: Woodgate Level Crossing	
1/1	367
2/1	220
3/1	0
4/1	220
5/1	367
6/1	0
7/1	0
8/1	0

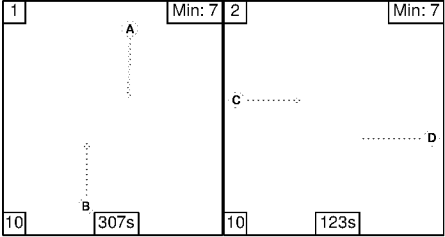
Lane Saturation Flows

Junction: Woodgate Level Crossing								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Lidsey Road North Lane 1)	This lane uses a directly entered Saturation Flow						1935	1935
2/1 (Lidsey Road South Lane 1)	This lane uses a directly entered Saturation Flow						2115	2115
3/1 (Train Line East Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
4/1 (Lidsey Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Lidsey Road South Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Train Line East Bound Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Train Line West Bound Lane 1)	This lane uses a directly entered Saturation Flow						2020	2020
8/1 (Train Line West Bound Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2038 DM AM' (FG1: '2038 DM AM', Plan 1: 'Network Control Plan 1')

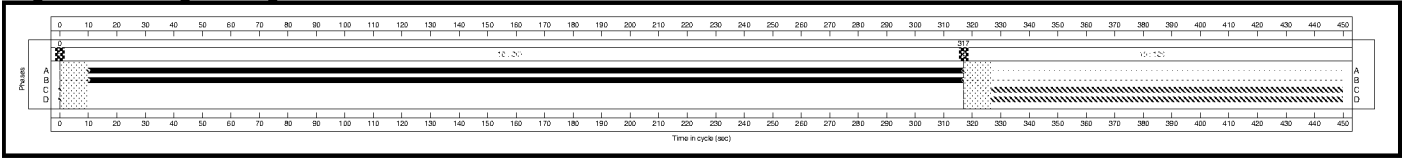
Stage Sequence Diagram



Stage Timings

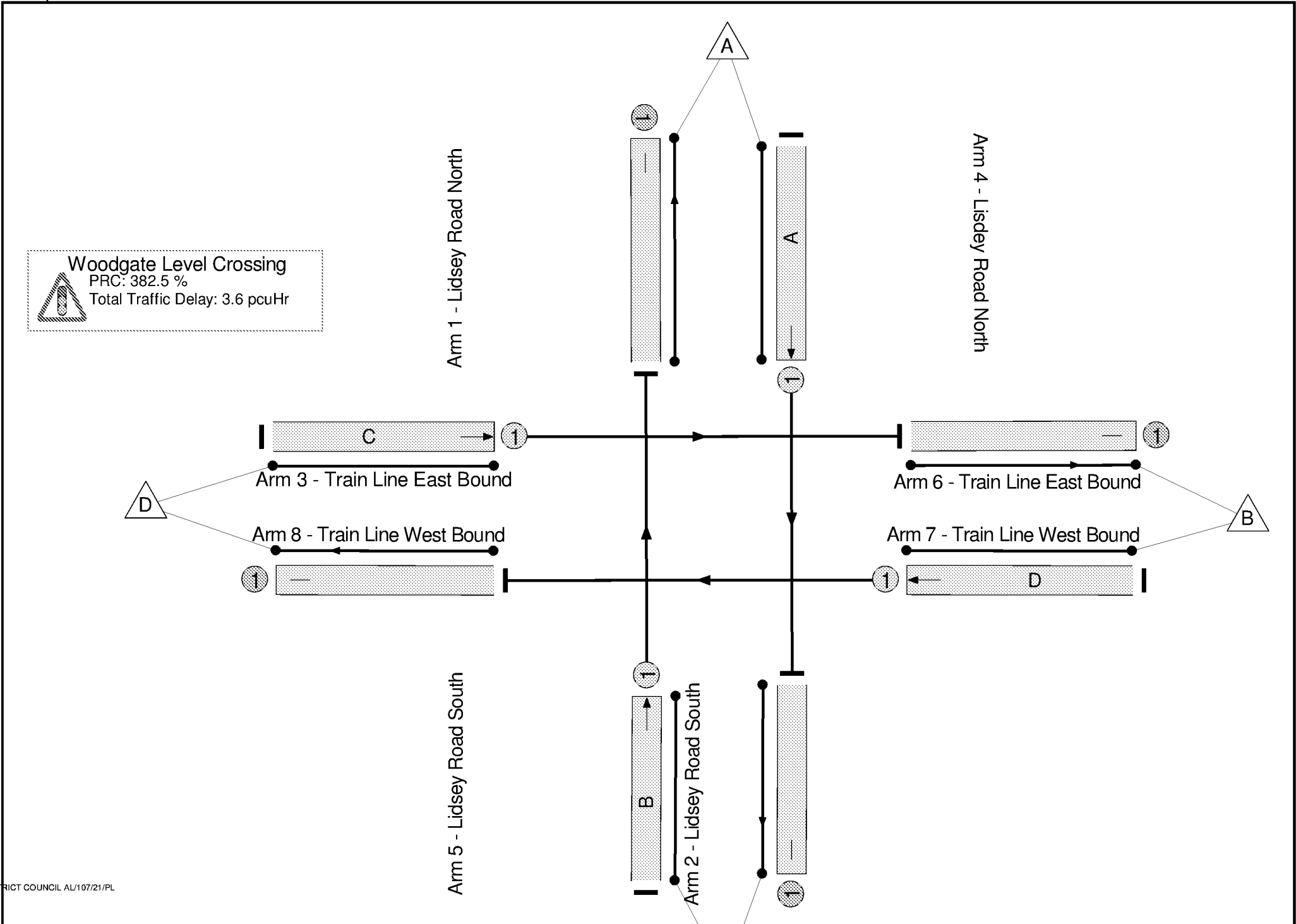
Stage	1	2
Duration	307	123
Change Point	0	317

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	18.7%
Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	18.7%
1/1	Lidsey Road North Ahead	U	N/A	N/A	A		1	307	-	206	1935	1324	15.6%
2/1	Lidsey Road South Ahead	U	N/A	N/A	B		1	307	-	270	2115	1448	18.7%
3/1	Train Line East Bound Ahead	U	N/A	N/A	C		1	123	-	0	2020	557	0.0%
4/1	Lidsey Road North	U	N/A	N/A	-		-	-	-	270	Inf	Inf	0.0%
5/1	Lidsey Road South	U	N/A	N/A	-		-	-	-	206	Inf	Inf	0.0%
6/1	Train Line East Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
7/1	Train Line West Bound Ahead	U	N/A	N/A	D		1	123	-	0	2020	557	0.0%
8/1	Train Line West Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

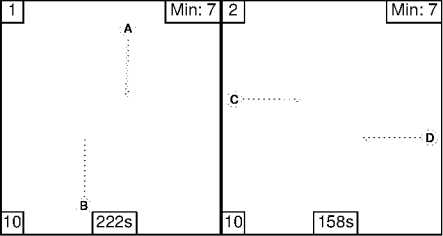
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Woodgate Level Crossing	-	-	0	0	0	3.4	0.2	0.0	3.6	-	-	-	-
Woodgate Level Crossing	-	-	0	0	0	3.4	0.2	0.0	3.6	-	-	-	-
1/1	206	206	-	-	-	1.4	0.1	-	1.5	26.7	9.0	0.1	9.1
2/1	270	270	-	-	-	1.9	0.1	-	2.0	27.2	12.2	0.1	12.3
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	270	270	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 382.5 PRC Over All Lanes (%): 382.5 Total Delay for Signalled Lanes (pcuHr): 3.57 Total Delay Over All Lanes(pcuHr): 3.57 Cycle Time (s): 450													

Full Input Data And Results

Scenario 2: '2038 DM PM' (FG2: '2038 DM PM', Plan 1: 'Network Control Plan 1')

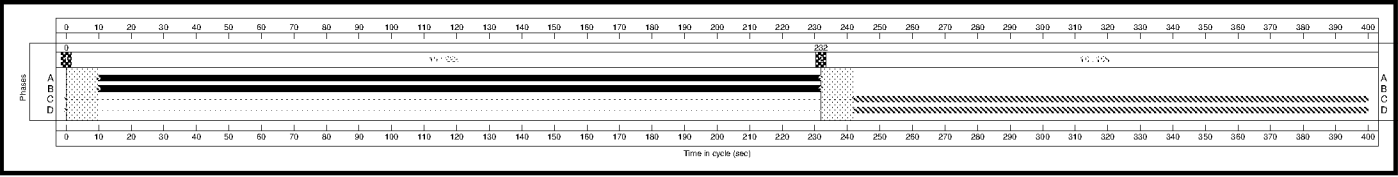
Stage Sequence Diagram



Stage Timings

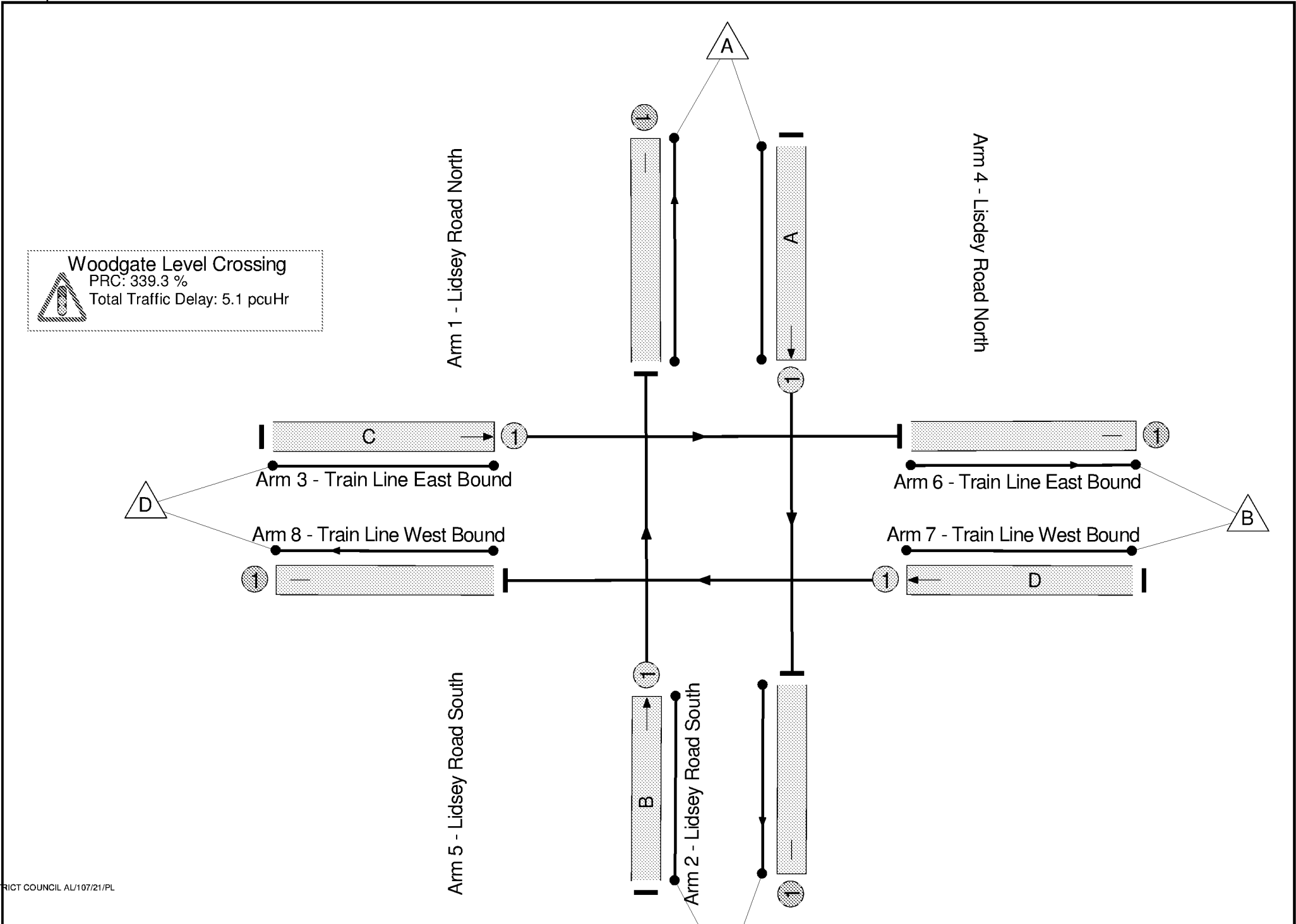
Stage	1	2
Duration	222	158
Change Point	0	232

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

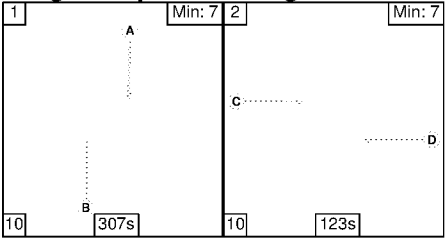
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	20.5%
Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	20.5%
1/1	Lidsey Road North Ahead	U	N/A	N/A	A		1	222	-	221	1935	1079	20.5%
2/1	Lidsey Road South Ahead	U	N/A	N/A	B		1	222	-	179	2115	1179	15.2%
3/1	Train Line East Bound Ahead	U	N/A	N/A	C		1	158	-	0	2020	803	0.0%
4/1	Lidsey Road North	U	N/A	N/A	-		-	-	-	179	Inf	Inf	0.0%
5/1	Lidsey Road South	U	N/A	N/A	-		-	-	-	221	Inf	Inf	0.0%
6/1	Train Line East Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
7/1	Train Line West Bound Ahead	U	N/A	N/A	D		1	158	-	0	2020	803	0.0%
8/1	Train Line West Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Woodgate Level Crossing	-	-	0	0	0	4.8	0.2	0.0	5.1	-	-	-	-
Woodgate Level Crossing	-	-	0	0	0	4.8	0.2	0.0	5.1	-	-	-	-
1/1	221	221	-	-	-	2.7	0.1	-	2.8	46.3	12.2	0.1	12.3
2/1	179	179	-	-	-	2.1	0.1	-	2.2	44.6	9.6	0.1	9.7
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	221	221	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 339.3 PRC Over All Lanes (%): 339.3 Total Delay for Signalled Lanes (pcuHr): 5.06 Total Delay Over All Lanes(pcuHr): 5.06 Cycle Time (s): 400													

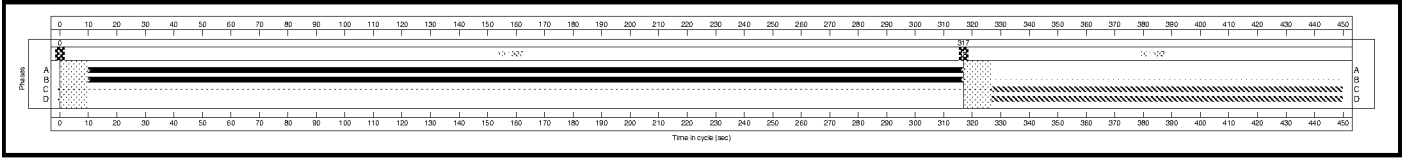
Full Input Data And Results
Scenario 3: '2038 With Dev AM' (FG3: '2038 With Dev AM', Plan 1: 'Network Control Plan 1')
Stage Sequence Diagram



Stage Timings

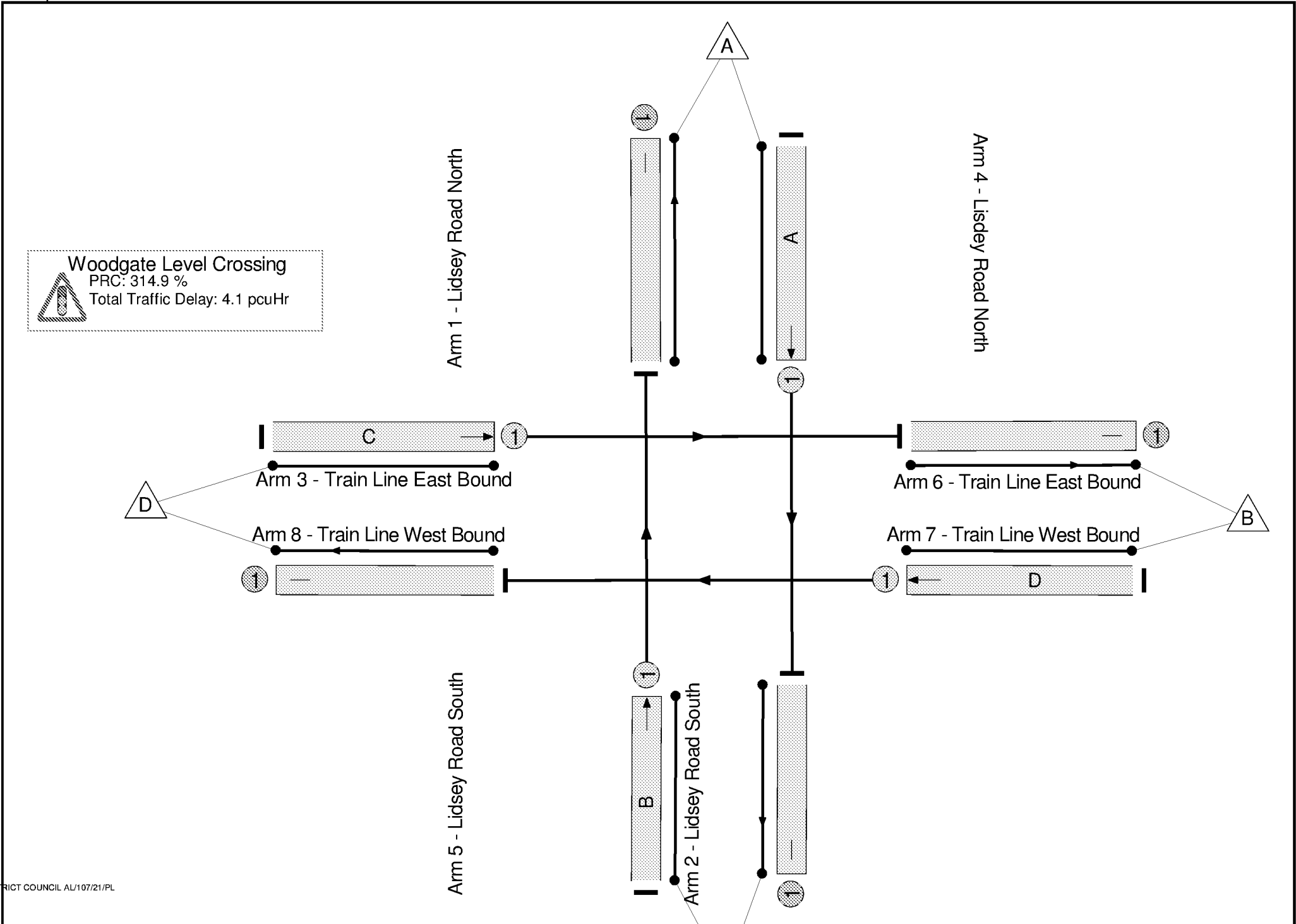
Stage	1	2
Duration	307	123
Change Point	0	317

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	21.7%
Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	21.7%
1/1	Lidsey Road North Ahead	U	N/A	N/A	A		1	307	-	218	1935	1324	16.5%
2/1	Lidsey Road South Ahead	U	N/A	N/A	B		1	307	-	314	2115	1448	21.7%
3/1	Train Line East Bound Ahead	U	N/A	N/A	C		1	123	-	0	2020	557	0.0%
4/1	Lidsey Road North	U	N/A	N/A	-		-	-	-	314	Inf	Inf	0.0%
5/1	Lidsey Road South	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
6/1	Train Line East Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
7/1	Train Line West Bound Ahead	U	N/A	N/A	D		1	123	-	0	2020	557	0.0%
8/1	Train Line West Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

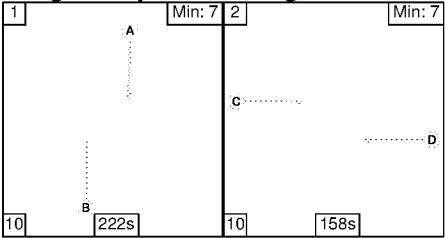
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Woodgate Level Crossing	-	-	0	0	0	3.8	0.2	0.0	4.1	-	-	-	-
Woodgate Level Crossing	-	-	0	0	0	3.8	0.2	0.0	4.1	-	-	-	-
1/1	218	218	-	-	-	1.5	0.1	-	1.6	26.9	9.7	0.1	9.8
2/1	314	314	-	-	-	2.3	0.1	-	2.4	27.9	14.5	0.1	14.6
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 314.9 PRC Over All Lanes (%): 314.9 Total Delay for Signalled Lanes (pcuHr): 4.06 Total Delay Over All Lanes(pcuHr): 4.06 Cycle Time (s): 450													

Full Input Data And Results

Scenario 4: '2038 With Dev PM' (FG4: '2038 With Dev PM', Plan 1: 'Network Control Plan 1')

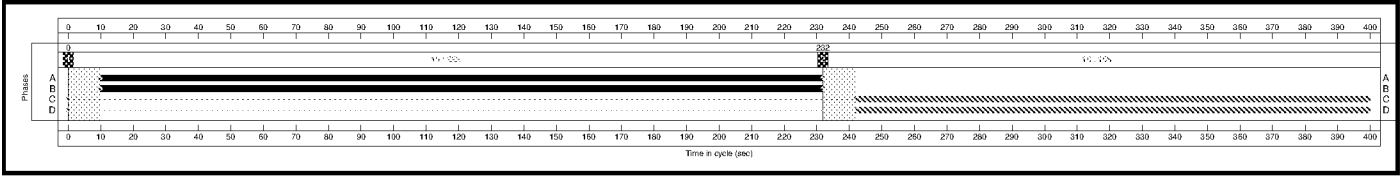
Stage Sequence Diagram



Stage Timings

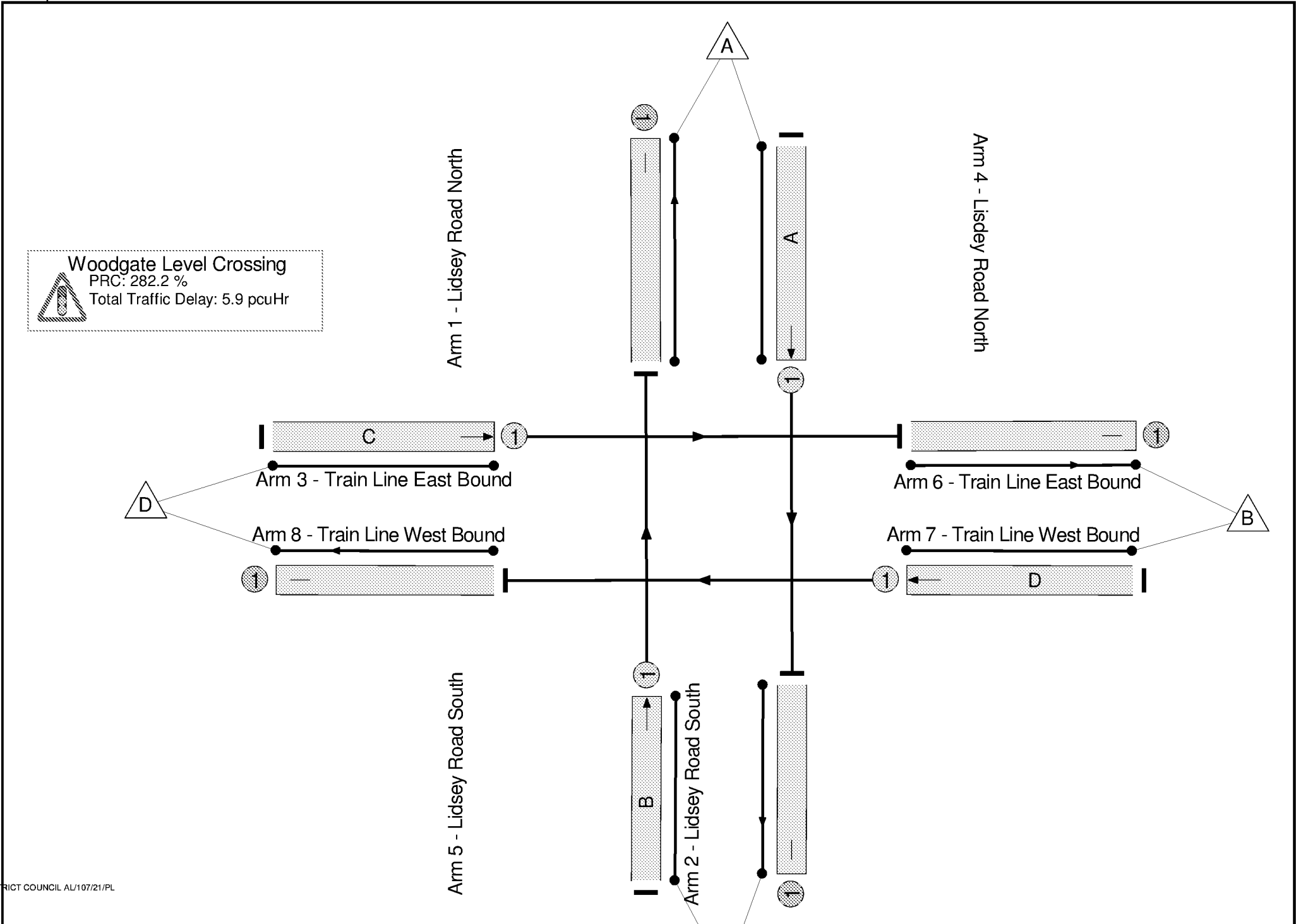
Stage	1	2
Duration	222	158
Change Point	0	232

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	23.5%
Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	23.5%
1/1	Lidsey Road North Ahead	U	N/A	N/A	A		1	222	-	254	1935	1079	23.5%
2/1	Lidsey Road South Ahead	U	N/A	N/A	B		1	222	-	202	2115	1179	17.1%
3/1	Train Line East Bound Ahead	U	N/A	N/A	C		1	158	-	0	2020	803	0.0%
4/1	Lidsey Road North	U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
5/1	Lidsey Road South	U	N/A	N/A	-		-	-	-	254	Inf	Inf	0.0%
6/1	Train Line East Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
7/1	Train Line West Bound Ahead	U	N/A	N/A	D		1	158	-	0	2020	803	0.0%
8/1	Train Line West Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

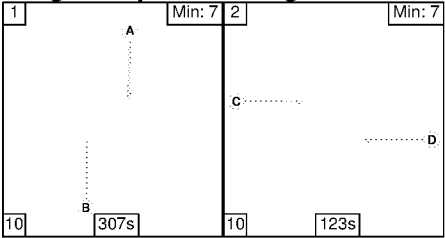
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Woodgate Level Crossing	-	-	0	0	0	5.6	0.3	0.0	5.9	-	-	-	-
Woodgate Level Crossing	-	-	0	0	0	5.6	0.3	0.0	5.9	-	-	-	-
1/1	254	254	-	-	-	3.2	0.2	-	3.3	47.3	14.3	0.2	14.5
2/1	202	202	-	-	-	2.4	0.1	-	2.5	45.1	10.9	0.1	11.0
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	254	254	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 282.2 PRC Over All Lanes (%): 282.2 Total Delay for Signalled Lanes (pcuHr): 5.87 Total Delay Over All Lanes(pcuHr): 5.87 Cycle Time (s): 400													

Full Input Data And Results

Scenario 5: '2038 With Dev Sensitivity AM' (FG5: '2038 With Dev Sensitivity AM', Plan 1: 'Network Control Plan 1')

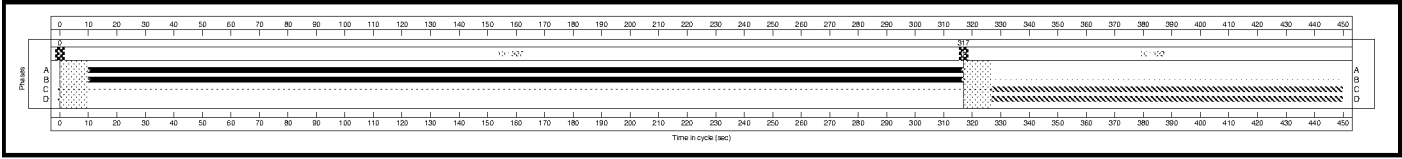
Stage Sequence Diagram



Stage Timings

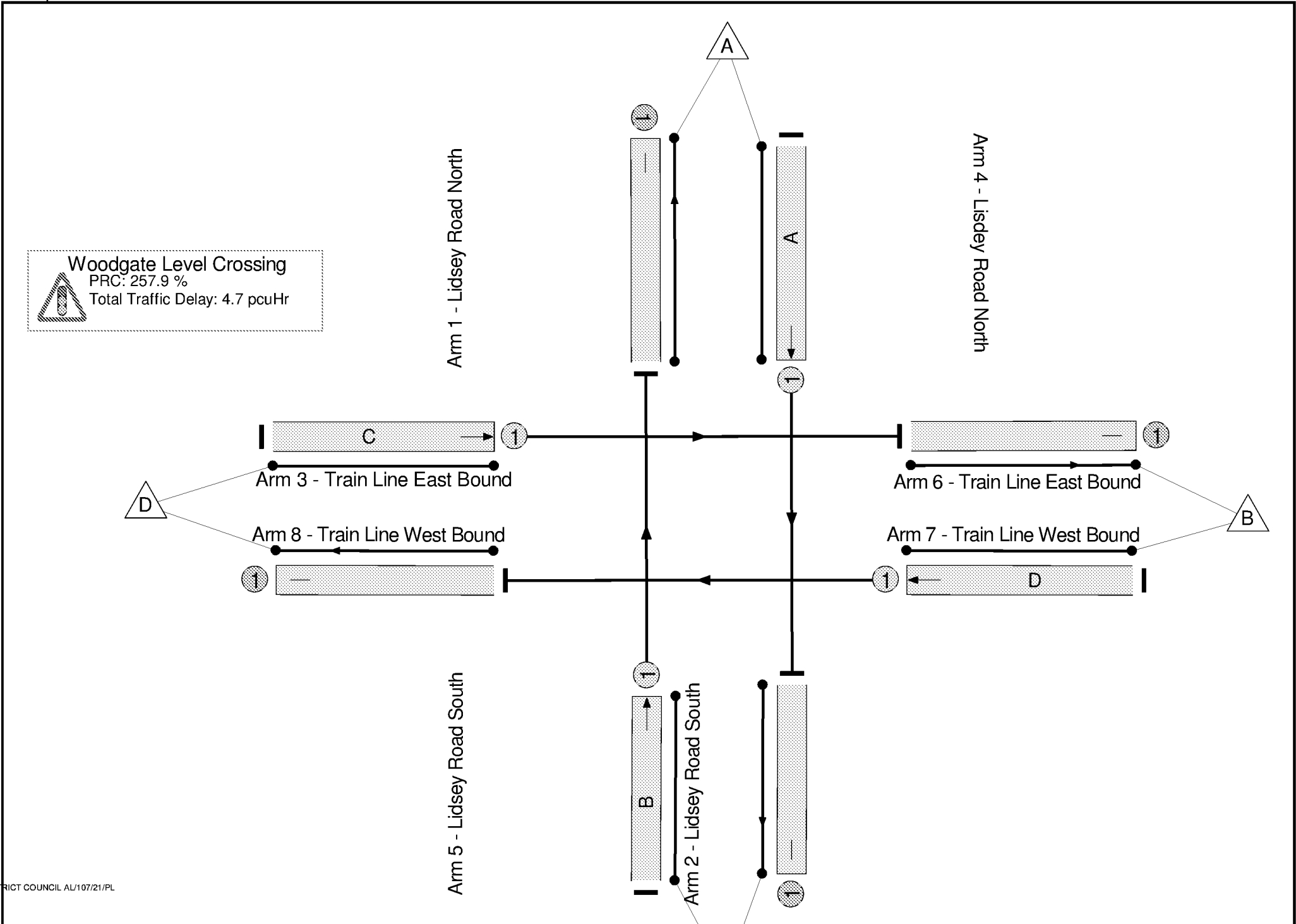
Stage	1	2
Duration	307	123
Change Point	0	317

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	25.1%
Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	25.1%
1/1	Lidsey Road North Ahead	U	N/A	N/A	A		1	307	-	236	1935	1324	17.8%
2/1	Lidsey Road South Ahead	U	N/A	N/A	B		1	307	-	364	2115	1448	25.1%
3/1	Train Line East Bound Ahead	U	N/A	N/A	C		1	123	-	0	2020	557	0.0%
4/1	Lidsey Road North	U	N/A	N/A	-		-	-	-	364	Inf	Inf	0.0%
5/1	Lidsey Road South	U	N/A	N/A	-		-	-	-	236	Inf	Inf	0.0%
6/1	Train Line East Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
7/1	Train Line West Bound Ahead	U	N/A	N/A	D		1	123	-	0	2020	557	0.0%
8/1	Train Line West Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

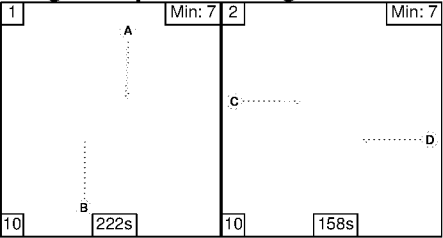
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Woodgate Level Crossing	-	-	0	0	0	4.4	0.3	0.0	4.7	-	-	-	-
Woodgate Level Crossing	-	-	0	0	0	4.4	0.3	0.0	4.7	-	-	-	-
1/1	236	236	-	-	-	1.7	0.1	-	1.8	27.2	10.6	0.1	10.7
2/1	364	364	-	-	-	2.7	0.2	-	2.9	28.7	17.3	0.2	17.5
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	364	364	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 257.9 PRC Over All Lanes (%): 257.9 Total Delay for Signalled Lanes (pcuHr): 4.69 Total Delay Over All Lanes(pcuHr): 4.69 Cycle Time (s): 450													

Full Input Data And Results

Scenario 6: '2038 With Dev Sensitivity PM' (FG6: '2038 With Dev Sensitivity PM', Plan 1: 'Network Control Plan 1')

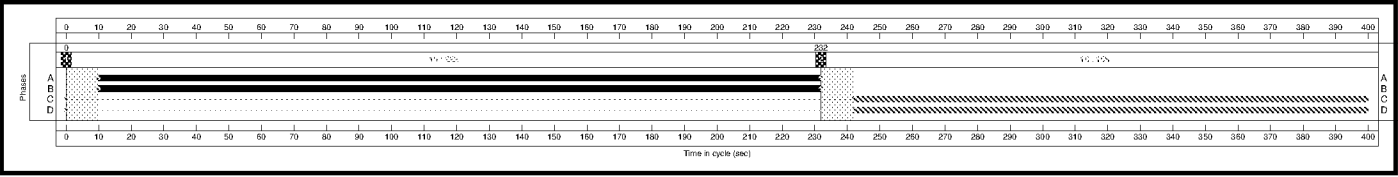
Stage Sequence Diagram



Stage Timings

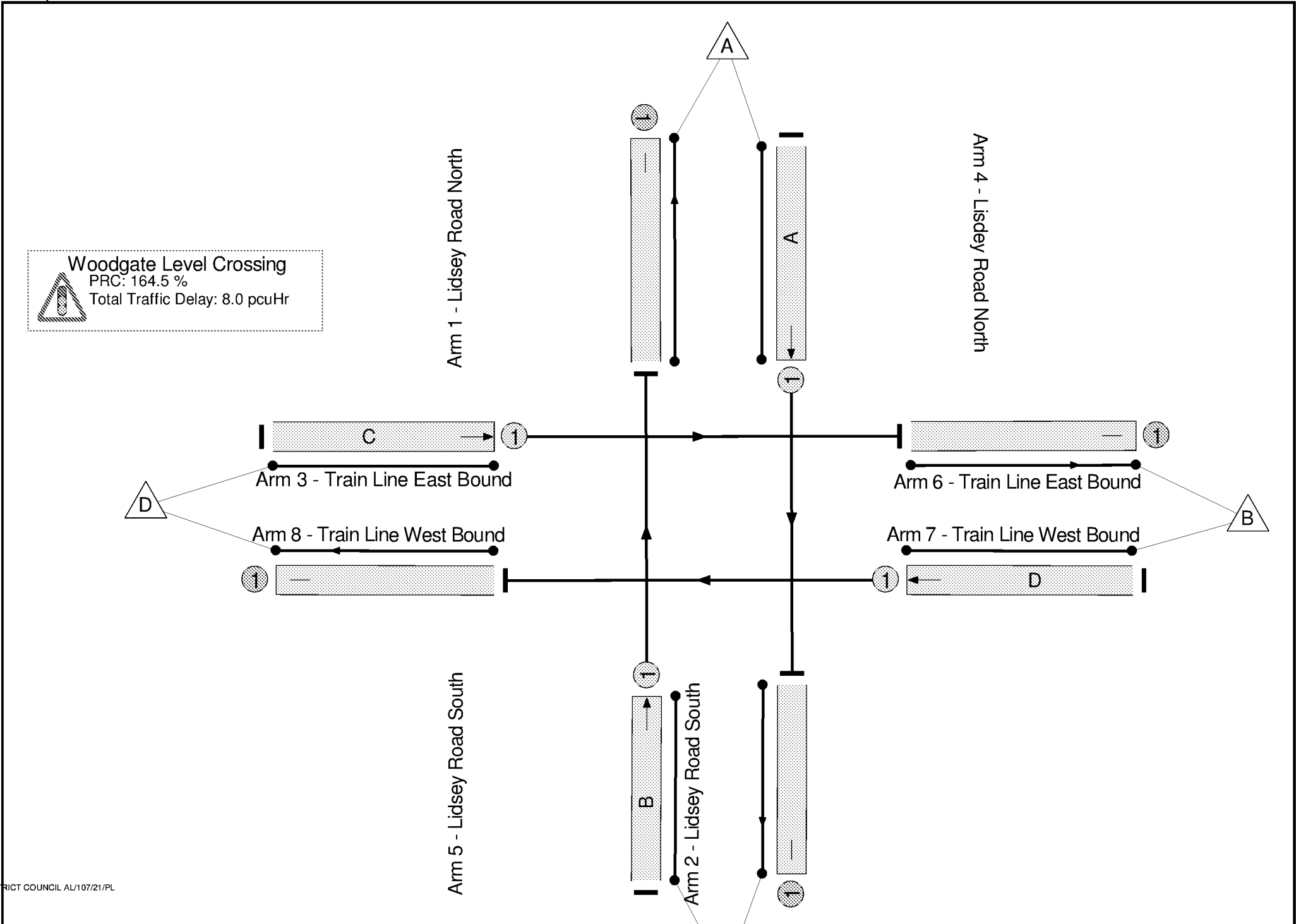
Stage	1	2
Duration	222	158
Change Point	0	232

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	34.0%
Woodgate Level Crossing	-	-	N/A	-	-		-	-	-	-	-	-	34.0%
1/1	Lidsey Road North Ahead	U	N/A	N/A	A		1	222	-	367	1935	1079	34.0%
2/1	Lidsey Road South Ahead	U	N/A	N/A	B		1	222	-	220	2115	1179	18.7%
3/1	Train Line East Bound Ahead	U	N/A	N/A	C		1	158	-	0	2020	803	0.0%
4/1	Lidsey Road North	U	N/A	N/A	-		-	-	-	220	Inf	Inf	0.0%
5/1	Lidsey Road South	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%
6/1	Train Line East Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
7/1	Train Line West Bound Ahead	U	N/A	N/A	D		1	158	-	0	2020	803	0.0%
8/1	Train Line West Bound	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Woodgate Level Crossing	-	-	0	0	0	7.6	0.4	0.0	8.0	-	-	-	-
Woodgate Level Crossing	-	-	0	0	0	7.6	0.4	0.0	8.0	-	-	-	-
1/1	367	367	-	-	-	4.9	0.3	-	5.2	50.9	22.2	0.3	22.5
2/1	220	220	-	-	-	2.7	0.1	-	2.8	45.6	12.0	0.1	12.2
3/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 164.5 PRC Over All Lanes (%): 164.5 Total Delay for Signalled Lanes (pcuHr): 7.97 Total Delay Over All Lanes(pcuHr): 7.97 Cycle Time (s): 400													

Prabin Limbu

Subject: FW: Woodgate Rd Model Output

From: Tim Townsend <[REDACTED]>
Sent: 06 May 2021 13:11
To: Ashley Maltman <[REDACTED]> Glenn Charles <[REDACTED]m>; Guy Parfect
<[REDACTED]>
Cc: Steven Shaw <[REDACTED]>; 'james.cross@arun.gov.uk' <james.cross@arun.gov.uk>;
Prabin Limbu <PL[REDACTED]>
<[REDACTED]>
Subject: RE: Woodgate Rd Model Output

Dear Ashley,

Thank you for your email found below.

As has been made clear previously, highways pre-application advice is not a service that is intended to pre-determine any planning application, rather it is advice that you and your client can choose to act upon when preparing an actual planning application submission.

As you know, we have provided replies to a number of Technical Notes produced by yourselves. Looking specifically at the last Note you sent us and based on the modelling undertaken to date within that, it is demonstrated that the vehicular access link from your client's site eastwards into BEW not being provided doesn't appear to give rise to a negative material impact traffic-wise elsewhere on the network. Therefore, as Highway Authority we have no fundamental objection to a planning application coming forward on that basis. However, this and all other matters relating to delivery of the proposal will be determined in detail at the planning application stage once a submission has been made.

I trust this now provides the clarity you seek.

Regards,

Tim

Tim Townsend, MCiHT

Principal Transport Planner, County Highways Team -- Highways, Transport and Planning
West Sussex County Council, Ground Floor Northleigh, County Hall, Chichester PO19 1RQ

