

Land North of Barkby Road, Syston

LPA Ref:P21//2639

Mitigation Schemes Summary Note



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1.0 INTRODUCTION AND CONTEXT

- 1.1 DTA has been commissioned by Taylor Wimpey to provide transportation advice in relation to the proposed residential development of up to 195 dwellings on land north of Barkby Road, Syston.
- 1.2 DTA prepared a Transport Assessment (DTA reference 20060-08b) in support of the planning application. As part of the planning application process, Leicestershire County Council ("LCC") as Local Highway Authority has reviewed the TA and previously made a number of comments / requested additional information. DTA has responded to comments received from the initial planning application submission in response notes 20060-09, 20060-10 and 20060-11.
- 1.3 All matters relating to the physical access arrangements to the site are agreed. Contributions have been requested by LCC in respect of improved public transport provision to the site. These are also agreed.
- 1.4 Discussions in respect of the traffic modelling and impact have reached an impasse. Following a meeting on the 16th March 2023 DTA produced a final report (20060-11- 17th March 2023) which included, without prejudice, a sensitivity test that includes the trips associated with the proposed development, draft allocation site HA2 (proposed residential development at Queniborough Road), and then added growth to the end of the Local Plan Period (2037), as agreed with LCC.
- 1.5 The results showed that three off-site junctions approaching capacity in the TA assessment are worsened by the cumulative impact of further growth. The three junctions are:
- Melton Road/ Barkby Road/ High Street;
 - Goodes Lane/ Melton Road; and
 - Fosse Way/ High Street;



- 1.6 It is clear that the requirement of the NPPF (and indeed the CIL regulations) is that any mitigation provided by a development is directly related to it and essential to make the development acceptable in planning terms. It is DTA's position that the scale of the impact from the proposed development is not sufficient to warrant mitigation and / or trigger any severe impact.
- 1.7 In line with the wider evidence base for the submission draft Charnwood Local Plan (2021 – 2037) any improvement scheme within Syston will need to balance mitigation of development impacts with the desire not to increase traffic flows through the town centre. The Draft Infrastructure Delivery Plan (IDP) includes a proposed strategy for securing wider transport improvements and this includes works within and around Syston. These are principally aimed at reducing demand through the town and encouraging traffic (and through traffic in particular) to use the more appropriate Strategic Road Network.
- 1.8 Notwithstanding this and again, on a without prejudice basis, potential mitigation schemes for the three junctions have been prepared. LCC have requested that any schemes be presented with modelling results and be subject to Road Safety Audit and this is provided below in turn.
- 1.9 If it is concluded that mitigation is required due to the cumulative impact, this should be on a proportionate basis and a proposed financial contribution mechanism is attached at **Appendix A**.



2.0 MITIGATION SCHEMES

2.1 Melton Road/ Barkby Road/ High Street

Improvement Scheme Summary

- 2.1.1 This junction is currently laid out as an off-set mini-roundabout with a mixture of pedestrian crossing facilities (some signal controlled, some zebra and some uncontrolled).
- 2.1.2 The junction layout is constrained by third party land ownership on all corners and the oblique angle of Barkby Road. Historically buses have used the junction to travel from Melton Road to Barkby Road to allow the area to the south of Melton Road (including the vicinity of the Site) to be served by buses. Since changes were made to the junction in circa 2015 this has not been possible.
- 2.1.3 Clearly an improvement scheme which significantly increases capacity at this location would run counter to the wider IDP objectives of managing growth in Syston. The potential mitigation scheme has therefore been designed to:
- a) Significantly improve the public realm for pedestrians,
 - b) Allow for the re-introduction of bus movements to Barkby Road.
- 2.1.4 The scheme therefore consists of the conversion of the existing mini roundabout junction to a traffic signal controlled junction with uncontrolled crossing facilities on all 4 approaches;
- 2.1.5 The layout shown on **Drawing 20060-03** was subject to the Road Safety Audit, and this has been updated to reflect comments arising from the Audit. **Drawing 20060-04c** shows the revised layout and the bus tracking to Barkby Road.

Junction Modelling

- 2.1.6 The existing junction modelling shows that for the 2037 test the junction will be operating at an RFC of 1.09 with queues of upto 39 vehicles. The proposed layout has



been tested in Linsig and this is attached at **Appendix C**. It shows a significant improvement on the operation of the junction whilst avoiding over-provision of traffic capacity in the town centre as discussed above.

Table 1: Melton Road/ Barkby Road/ High Street

Scenario	Results Summary	
	Existing Layout	Improvement Scheme
2027	Approaching capacity (highest RFC of 0.91 and Q of 8)	
2027 + Development	Approaching capacity (highest RFC of 0.95 and Q of 12)	
2037	Highest RFC of 1.04 Q of 27	Highest DOS 0.96 Q of 15
2037 + Development	Highest RFC of 1.09 Q of 39	Highest DOS 0.98 Q of 15

Stage 1 Road Safety Audit Summary

2.1.7 An independent Stage 1 Road Safety Audit was carried out on the scheme and the audit report is contained within **Appendix D**. It raises a total of nine issues. All of issues raised are detailed design points and need to be considered in the context of the already constrained urban environment.

Issue 1.1 relates to crossing widths and these can be refined and reviewed at the detailed design stage.

Issue 1.2 relates to spacing of stop lines to crossings which are not considered inappropriate given the urban environment and low speeds but these can be refined and reviewed at the detailed design stage.

Issue 1.3 relates to cycle provision. The existing layout is very poorly defined for cyclists and the change to signals will offer highway safety benefits over the roundabout. Given the urban environment there is limited space for full cycle segregation but the scheme offers an improvement over the existing. This can be reviewed and refined at the detailed design stage.



Issue 1.4 relates to the location of two private accesses within the junction. These are infrequently used and existing. They can safely operate within the signal scheme as is common in most urban areas.

Issue 2.1 requires tracking. This has been undertaken.

Issue 2.2 requires street furniture locations to be checked at detailed design and this is agreed.

Issue 2.3 relates to the location of service covers in the road which need to be considered at detailed design.

Issue 2.4 relates to the provision of improved road markings which is a detailed design matter.

Issue 2.5 requires the levels to be appropriately detailed which is a detailed design matter.

- 2.1.8 It can be concluded from the report that there are no fundamental safety concerns regarding the proposed layout that cannot be fully resolved at the detailed design stage.

2.2 Goodes Lane/ Melton Road

Improvement Scheme Summary

- 2.2.1 This junction is currently a priority T-junction. The modelling identifies that, as traffic flows increase in the future, vehicles turning right into Goodes Lane block through traffic travelling north along Melton Road.
- 2.2.2 To address this issue, it is proposed to provide a right turn lane at the junction and this is shown on drawing **20060-08**. This has been designed as a DRMB compliant right turn lane. The scheme will require some localised widening of the road and the removal of some on-street parking. Surveys of those parking areas have confirmed that they are very lightly used (**Appendix E**).



Junction Modelling

- 2.2.3 The arrangement has been tested in Junctions 10 and the outputs provided at **Appendix F**. This shows that with the right turn lane provided the junction operates in the 2037 future year with an RFC of 0.91. This again reflects an overall strategy not to over-provide for highway capacity with Syston.

Table 2: Goodes Lane/ Melton Road junction

Scenario	Results Summary	
	Existing Layout	Improvement Scheme
2027	Approaching capacity (highest RFC of 0.89 and Q of 11)	Within capacity (highest RFC of 0.72 and Q of 3)
2027 + Development	Nearing capacity (highest RFC of 0.97 and Q of 20) Development flows through junction: 40 AM, 39, PM	Within capacity (highest RFC of 0.78 and Q of 3) Development flows through junction: 40 AM, 39, PM
2037	Highest RFC of 1.03 Q of 34	Approaching capacity (highest RFC of 0.84 and Q of 5)
2037 + Development	Highest RFC of 1.09 Q of 53	Approaching capacity (highest RFC of 0.91 and Q of 7)

Stage 1 Road Safety Audit Summary

- 2.2.4 An independent Stage 1 Road Safety Audit was carried out on the scheme and the audit report is contained within **Appendix G**.
- 2.2.5 The Audit raises one issue with the scheme. Issue 1 (4.1) noted that the removal of the parking bays outside the Syston Day Nursery on Melton Road could result in displaced parking, with parents/ carers alternatively parking on Goodes Lane, with this likely to increase the number of pedestrians with small children needing to cross Melton Road.
- 2.2.6 The Audit has recommended that an appropriate pedestrian facility is provided. A measure may include but not be limited to incorporating a pedestrian refuge within the hatched area of the junction.
- 2.2.7 This recommendation is accepted and appropriate pedestrian provision can be made at this location. This is most appropriately confirmed at the detailed design stage.



2.3 Fosse Way/ High Street

Improvement Scheme Summary

- 2.3.1 This is an existing signal controlled junction which is operating over capacity in the 2037 scenario. A financial contribution towards signal timing improvements was previously requested from the Site.
- 2.3.2 Further improvements to capacity can be made to the capacity by:
- widening the northbound approach to provide carriageway space for an ahead vehicle to pass a vehicle waiting to turn right into the High Street;
 - relaxing the kerb radius between the Fosse Way southbound approach and the High Street to ease the left turn into the High Street;
 - the relocation of the stop lines on all three approaches; and
 - extending the footway on the northeast side into the High Street arm to allow the uncontrolled pedestrian crossing on the High Street to be relocated further east.
- 2.3.3 The proposals are shown on **DTA drawing 20060-08-2**.

Junction Modelling

- 2.3.4 The arrangement has been tested in LINSIG and the outputs provided at **Appendix H**. This shows that with the right turn lane provided the junction operates in the 2037 future year at capacity.



Table 3: Fosse Way/ High Street junction

Scenario	Results Summary	
	Existing Layout	Improvement Scheme
2027	Within capacity (highest DoS of 92.0% and Q of 24)	Within capacity (highest DoS of 88.0% and Q of 22)
2027 + Development	Approaching capacity (highest DoS of 94.5% and Q of 26)	Approaching capacity (highest DoS of 92.4% and Q of 25)
2037	Highest DoS of 103.3% Q of 42	Nearing capacity (highest DoS of 98.7% and Q of 33)
2037 + Development	Highest DoS of 105.7% Q of 49	Nearing capacity (highest DoS of 101.0% and Q of 37)

2.3.5 The results shows that the layout provides improvement to the operation of the junction. This again reflects an overall strategy not to over-provide for highway capacity with Syston.

Stage 1 Road Safety Audit Summary

2.3.6 A Stage 1 Road Safety Audit was carried out and the report is contained within **Appendix I**. The Audit identified two issues, both of which relate to visibility restriction. The recommendation for both issues are to cut back or remove vegetation which lies within the public highway. These are accepted and are matters which can and will be addressed at the detailed design stage.



3.0 CONTRIBUTION STRATEGY

- 3.1 The schemes set out above have been subject to cost analysis by Arcadis and their cost report is attached at **Appendix J**. The total sum of the costs of the works is £962,676.
- 3.2 If deemed necessary for a development to make a contribution towards the schemes, it would be appropriate that all three major allocations to make a proportional contribution as follows:

	Dwellings	Proportion
HA1	195 (application)	13.9%
HA2	251 (application)	17.8%
HA3	960 (allocation)	68.3%
Total	1,406	

- 3.3 On that basis the appropriate contribution for the Site would be £133,523.



4.0 PUBLIC TRANSPORT STRATEGY

- 4.1 In relation to Public Transport, it is agreed with LCC that it would be appropriate and reasonable to have a capped commitment to improving services to the eastern side of Syston.
- 4.2 In order to establish an appropriate level of contribution Centre Bus (who operate the service 100) have been approached for a cost to improve the frequency of the service to provide a 30 minute frequency between the hours of 0700-0900 and 1600-1900. They have confirmed a cost of £71,000 pa would provide this.
- 4.3 It is proposed that the contribution should commence from the occupation of the 50th dwelling and continue for 5 years post completion which gives a total of 6 years worth of contribution – a maximum of £450,000. As stated at paragraph 1.3 above, this has been agreed with LCC.
- 4.4 The adjacent housing development of allocation HA2 is likely to benefit from these bus service enhancements and so should also be liable for financial contribution towards it. The approach to the proposed Highway Obligations at Appendix A provides a mechanism to enable the contribution from the Site to be reduced to reflect any future contributions from allocation HA2.



Appendix A

Land North of Barkby Road, Syston (ref P/21/2639/2)

Draft Highways Obligations

Definitions (non-alphabetical order)

Notice of Intention to Commence	means a notice in writing advising the County Council of the date of the Owner's intention to Commence the Development
HA1 Allocation	means the land to the south east of Syston identified in the [emerging] Charnwood Local Plan as site HA1 shown indicatively on Plan []
HA1 Development	means the development of the HA1 Allocation
HA1 Development Notice of Intention to Commence	means a notice in writing served on the County Council by the Owners and/or developer of the HA1 Development providing the County Council with [3] months' notice of their intention to Implement the HA1 Development
HA2 Allocation	means the land to the west of Quenibrough Road, Syston identified in the [emerging] Charnwood Local Plan as site HA2 Shown indicatively on Plan []
HA2 Development	means the development of the HA2 Allocation pursuant to planning application ref P/22/0354/2 or any subsequent planning permission
HA2 Development Notice of Intention to Commence	means a notice in writing served on the County Council by the Owners and/or developer of the HA2 Development providing the County Council with [3] months' notice of their intention to Implement the HA2 Development
High Street / Melton Road Roundabout Improvements	means the improvements to the High Street / Melton Road junction shown indicatively on drawing no 20060-04
Joint Developments	means the Development, the HA1 Development and the HA2 Development together.
Joint Developments Notice	means a notice served on the Owners by the County Council confirming: i) That the County Council has received either the HA2 Development Notice of Intention to Commence OR the HA1 Development Notice of Intention to Commence; and ii) that the Joint Highway Works Contribution is required to be paid to the County Council.
Joint Highway Works	means the off-site highway improvements required to mitigate the cumulative impact of the Joint Developments comprising the Melton Road / Goodes Lane Junction Improvements, the High Street / Fosse Way Junction Improvements and the High Street / Melton Road Roundabout Improvements.
Melton Road / Goodes Lane Junction Improvements	means the improvements to the Melton Road / Goodes Lane junction shown indicatively on drawing no 20060-08 Rev B

High Street / Fosse Way Junction Improvements	means the improvements to the High Street / Fosse Way junction shown indicatively on drawing no 20060-08-2 Rev B
Joint Highway Works Contribution	means the sum of [£133,523] apportioned to the Joint Developments and which may be payable to the County Council towards the cost of the County Council delivering the Joint Highway Works or other improvements to the local highway network to mitigate the cumulative impact of the Joint Developments
Public Transport Contribution	means the sum of £450,000 payable to the County Council towards the Bus Service Enhancement
Joint Public Transport Notice	means a notice served on the Owners by the County Council confirming: <ul style="list-style-type: none"> i) That the County Council has received the HA2 Development Notice of Intention to Commence; and ii) the amount of the HA2 Public Transport Contribution.
HA2 Development Public Transport Contribution	means any sum payable by the HA2 Development towards the Bus Service Enhancement
Adjusted Public Transport Contribution	means the sum calculated in application of the below formula and payable to the County Council towards the Bus Service Enhancement $A = B - (C + D)$ <p>Where:</p> <p>A = Adjusted Public Transport Contribution</p> <p>B = Public Transport Contribution</p> <p>C = HA2 Development Public Transport Contribution</p> <p>D = the sum of any instalments of the Public Transport Contribution paid to the County Council before the Joint Development Notice has been served.</p>
Enhanced Bus Service	means the enhancement of the existing bus service 100 to 30 mins intervals between 0700-0900 and 1600-1900, or such other bus service(s) that may be provided in the future to serve the Joint Developments and the HA1 Allocation.
Barkby Road Access	means the site access junction shown indicatively on drawing no 20060-02 Rev F
Barkby Road Roundabout	means a roundabout that may be constructed to replace the Barkby Road Access as part of development of the HA1 Allocation
Barkby Road Roundabout Notice	means a notice served by the County Council on the Owners confirming that the Barkby Road Roundabout Deed of Dedication is required.
Barkby Road Roundabout Deed of Dedication	means a Deed that may be entered into between the Owners and the County Council in dedication of the land shown coloured [] on Plan [] (or such other area in the Control of the Owners as may be agreed between the Owners and the County Council) to the

	County Council as highway to enable the future construction of the Barkby Road Roundabout. (SAVE THAT any adoption of the dedicated land will occur following completion of the Barkby Road Access)
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Obligations

General

1. The Owners covenant to serve the Notice of Intention to Commence on the County Council no later than 3 calendar months prior to the date of Commencement of Development. *[DN – The Owners expect that the same provisions below will be secured in any HA2 Development consent]*

Joint Highway Works

2. Subject to the County Council serving the Joint Developments Notice, the Owners covenant with the County Council to pay the Joint Highway Works Contribution as follows:
 - 2.1 [50%] within [3] months of receipt of the Joint Developments Notice; and
 - 2.2 [50%] on the first anniversary of the payment made pursuant paragraph 2.1 above.

Public Transport

3. Subject to the County Council serving the Joint Public Transport Notice prior to Occupation of the 25th Dwelling, the Owners covenant with the County Council to:
 - 3.1 pay the Adjusted Public Transport Contribution in the following instalments;
 - 3.1.1 16.67% prior to Occupation of the 50th Dwelling;
 - 3.1.2 16.67% prior to the first anniversary of the payment made pursuant to paragraph 3.1.1 above;
 - 3.1.3 16.67% prior to the second anniversary of the payment made pursuant to paragraph 3.1.1 above;
 - 3.1.4 16.67% prior to the third anniversary of the payment made pursuant to paragraph 3.1.1 above; and
 - 3.1.5 16.67% prior to the fourth anniversary of the payment made pursuant to paragraph 3.1.1 above; and
 - 3.1.6 16.65% prior to the fifth anniversary of the payment made pursuant to paragraph 3.1.1 above.
4. In the event that the County Council serve a Joint Public Transport Notice after Occupation of the 25th Dwelling, the Owners covenant with the County Council to:
 - 4.1 pay the Adjusted Public Transport Contribution in the following instalments;
 - 4.1.1 £75,000 prior to Occupation of the 50th Dwelling;
 - 4.1.2 £75,000 prior to each anniversary (up to and including the fifth anniversary) of the payment made pursuant to paragraph 4.1.1 above until the Joint Developments Notice has been received.

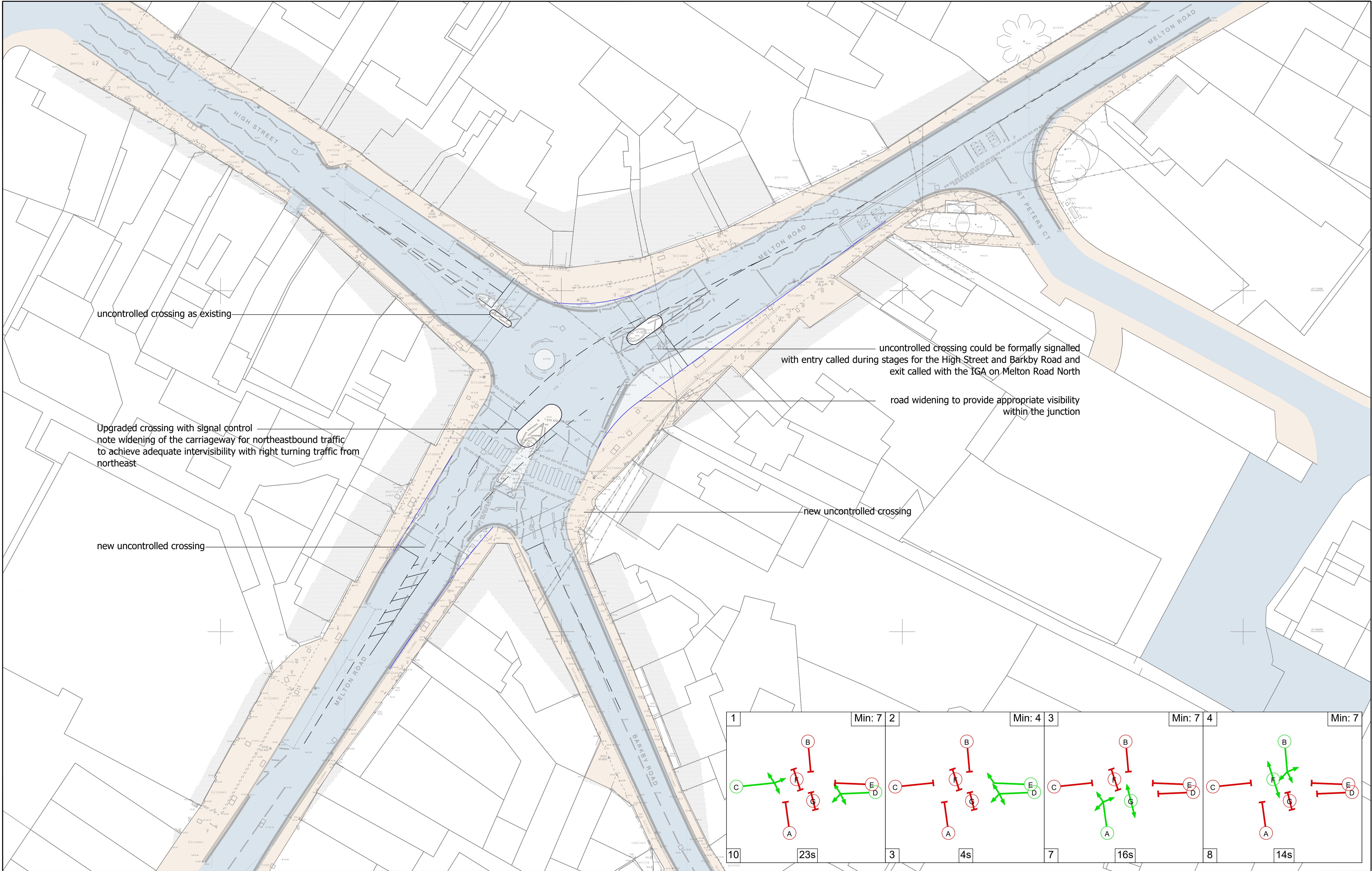
4.1.3 Pay the balance (if any) of the Adjusted Public Transport Contribution in equal instalments on the anniversaries up to and including the fifth anniversary of the payment made pursuant to paragraph 4.1.1 above.

Barkby Road Access

5. The County Council may serve the Barkby Road Roundabout Notice within [6] months of the date of the Notice of Intention to Commence
6. The Owners covenant with the County Council to use reasonable endeavours to enter into the Barkby Road Roundabout Deed of Dedication within [6] months of receipt of the Barkby Road Roundabout Notice.



Appendix B

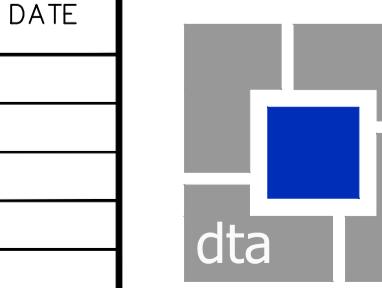


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REV	DESCRIPTION	DRAWN	INITIALS	DATE

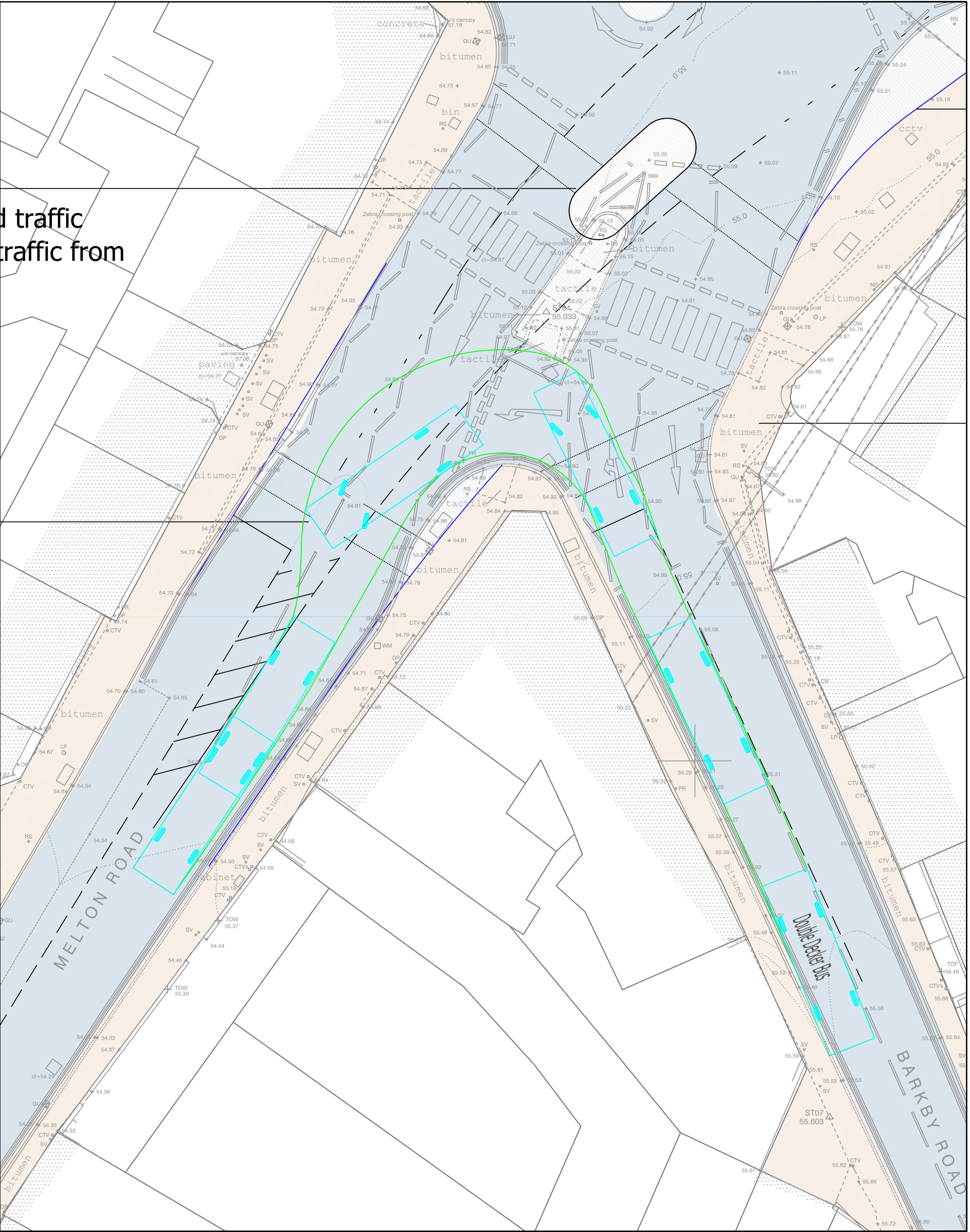
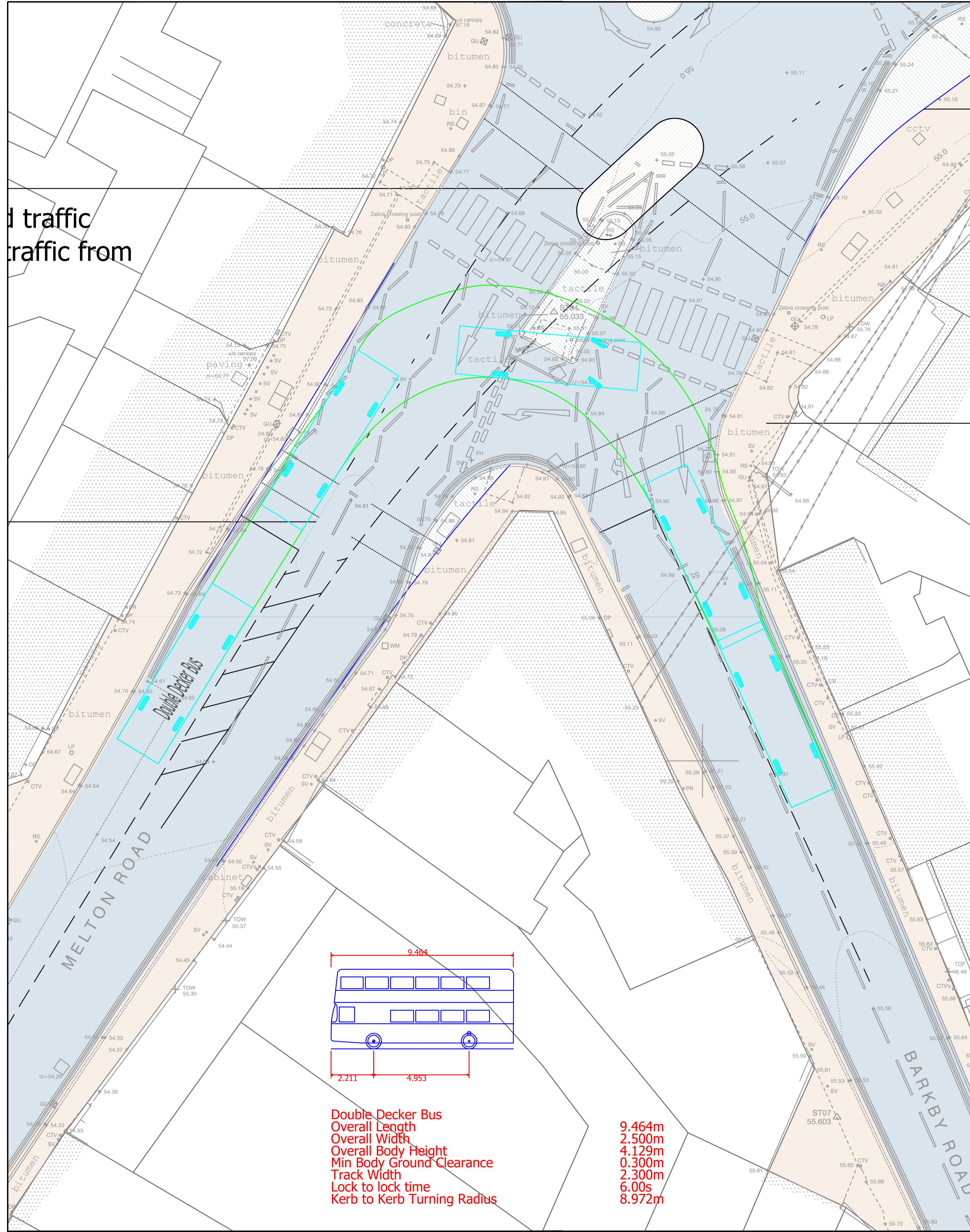
DRAWING STATUS	CHECKED BY	DATE



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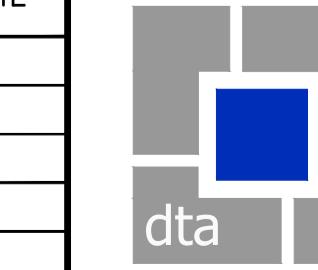
JOB TITLE		SYSTON		CLIENT	
DRAWING TITLE				TAYLOR WIMPEY	
Preliminary Melton Road Junction Signal Layout					
SCALE	1: 500@A1	DRAWN BY	RJM	DATE	28/06/23
DRAWING No	20060-04-GA	REVISION	C		



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REV	DESCRIPTION	DRAWN	INITIALS	DATE		
DRAWING STATUS					CHECKED BY	DATE

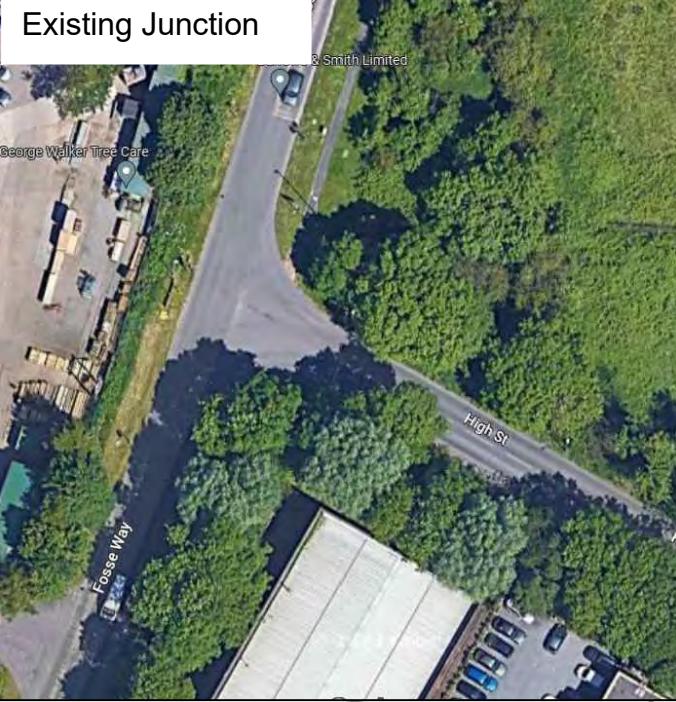


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JOB TITLE	SYSTON	CLIENT	TAYLOR WIMPEY						
DRAWING TITLE	Preliminary Melton Road Junction Signal Layout Vehicle Tracking								
SCALE	1:125@A1	DRAWN BY	RJM	DATE	28/06/23	DRAWING No	20060-04-TRK	REVISION	C

Existing Junction



Fosse Way ROMAN ROAD

Industrial Estate

Widened
carriageway to allow
for a right turn lane

Highway
boundary
extents

Stop line
moved forward

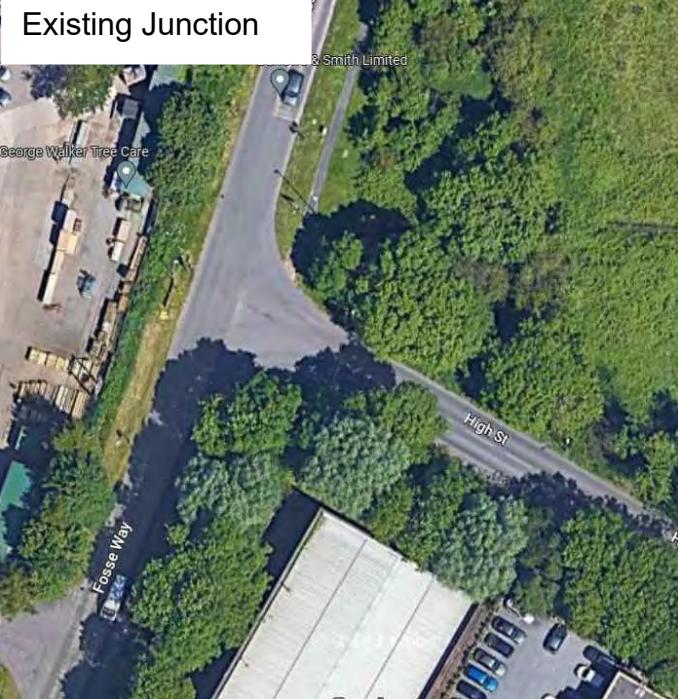
Widened radii

Stop line
moved forward

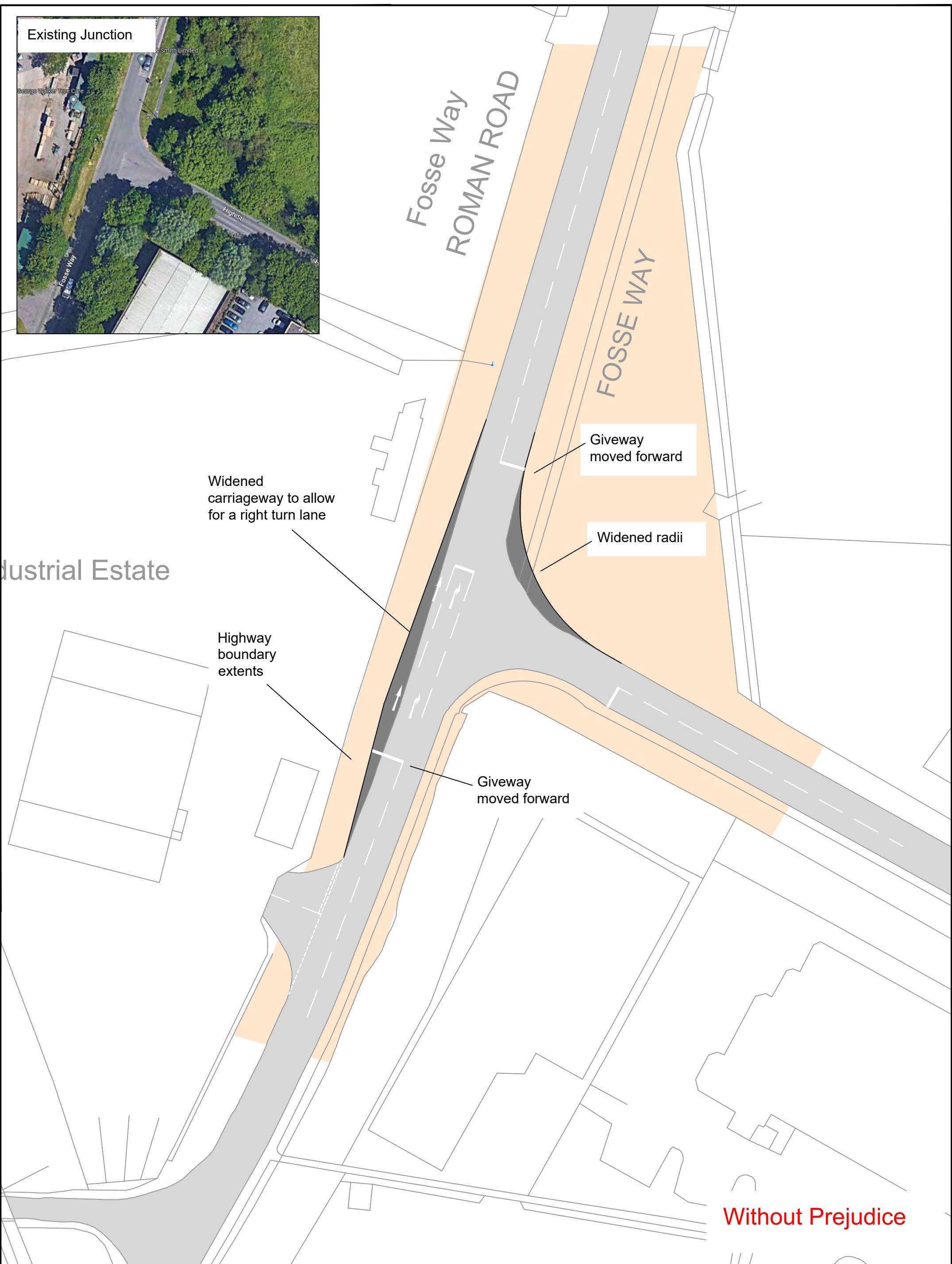
New footway &
Dropped kerb
crossing point

Without Prejudice

Existing Junction



Industrial Estate





Appendix C

Junctions 10	
ARCADY 10 - Roundabout Module	
Version: 10.0.4.1693	© Copyright TRL Software Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com	
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: J1 Melton- Hligh Street roundabout - REV C.j10

Path: P:\20000's\20060\Technical\Junction Modelling\2023 Assessments\Feb 2023

Report generation date: 27/06/2023 13:21:31

»2022 , AM
»2022 , PM
»2027 + Com, AM
»2027 + Com, PM
»2027 + Com + Dev, AM
»2027 + Com + Dev, PM
»2037 + Com, AM
»2037 + Com, PM
»2037 + Com + Dev , AM
»2037 + Com + Dev , PM

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
2022						
1 - Melton Road N	1.6	8.69	0.60	1.9	10.42	0.65
2 - Barkby Road	0.9	14.94	0.48	1.9	22.80	0.67
3 - Melton Road S	1.0	8.11	0.50	1.9	11.63	0.65
4 - High Street	1.2	9.94	0.53	4.9	30.32	0.84
2027 + Com						
1 - Melton Road N	1.8	9.50	0.63	2.2	11.93	0.69
2 - Barkby Road	1.2	17.40	0.54	2.5	27.85	0.72
3 - Melton Road S	1.2	8.77	0.53	2.2	13.13	0.69
4 - High Street	1.3	10.93	0.57	8.1	48.14	0.91
2027 + Com + Dev						
1 - Melton Road N	1.8	9.75	0.64	2.4	12.62	0.70
2 - Barkby Road	1.6	21.03	0.62	3.1	32.52	0.77
3 - Melton Road S	1.2	9.18	0.54	2.4	13.75	0.70
4 - High Street	1.5	11.49	0.59	11.9	66.49	0.95
2037 + Com						
1 - Melton Road N	2.4	11.91	0.71	3.3	16.06	0.77
2 - Barkby Road	1.6	22.00	0.62	4.3	44.33	0.83
3 - Melton Road S	1.5	10.39	0.59	3.4	18.48	0.77
4 - High Street	1.8	13.52	0.64	26.7	130.38	1.04
2037 + Com + Dev						
1 - Melton Road N	2.5	12.30	0.71	3.4	16.87	0.78
2 - Barkby Road	2.3	27.79	0.70	5.5	54.23	0.87
3 - Melton Road S	1.6	10.94	0.61	3.6	19.60	0.79
4 - High Street	2.0	14.38	0.66	38.9	176.13	1.09

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

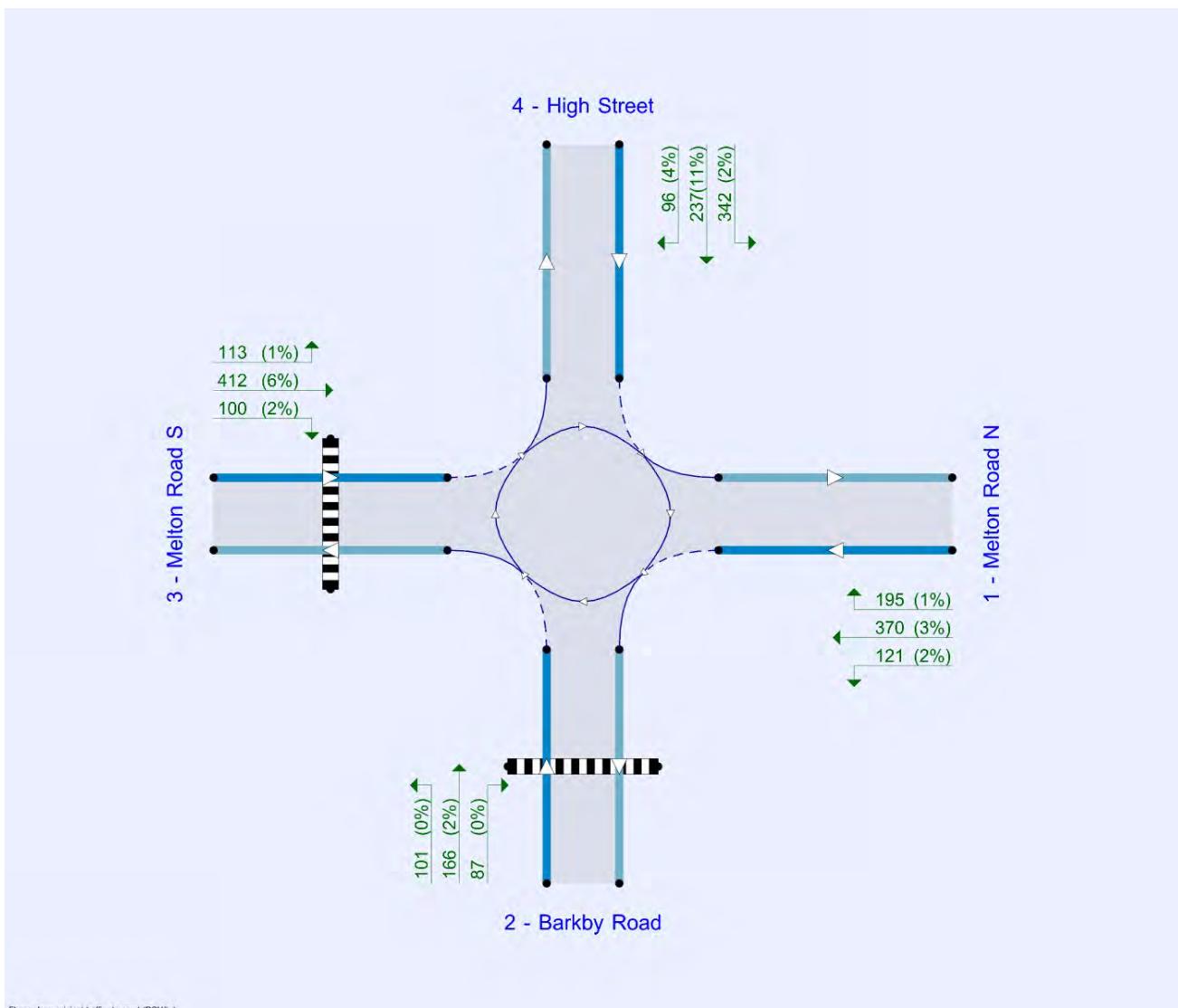
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	01/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D10	2022	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D11	2027 + Com	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D12	2027 + Com	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D13	2027 + Com + Dev	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D14	2027 + Com + Dev	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D15	2037 + Com	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D16	2037 + Com	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D17	2037 + Com + Dev	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D18	2037 + Com + Dev	PM	Covid Factor	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

2022 , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	9.62	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.62	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Melton Road N		
2	Barkby Road		
3	Melton Road S		
4	High Street		

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - Melton Road N	3.54	4.22	9.2	8.6	17.7	14.5		
2 - Barkby Road	3.76	4.33	2.0	3.0	17.7	80.0		
3 - Melton Road S	3.75	4.26	3.8	5.0	17.7	12.0		
4 - High Street	2.41	4.35	7.2	12.9	17.7	26.0		

Zebra Crossings

Arm	VGAP (PCU)	Vehs queueing on exit (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
2 - Barkby Road	1.00	3.00		Distance	8.00	5.71
3 - Melton Road S	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Melton Road N	0.564	1225
2 - Barkby Road	0.312	675
3 - Melton Road S	0.523	1139
4 - High Street	0.523	1032

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	591	100.000
2 - Barkby Road		ONE HOUR	✓	200	100.000
3 - Melton Road S		ONE HOUR	✓	424	100.000
4 - High Street		ONE HOUR	✓	385	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From	To				
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		1	83	360	147
2 - Barkby Road		65	0	0	135
3 - Melton Road S		305	38	2	79
4 - High Street		187	91	106	1

Vehicle Mix

HV %s

From	To				
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	3	4	1
2 - Barkby Road		1	0	1	1
3 - Melton Road S		6	5	0	8
4 - High Street		2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.60	8.69	1.6	A	542	813
2 - Barkby Road	0.48	14.94	0.9	B	184	275
3 - Melton Road S	0.50	8.11	1.0	A	389	584
4 - High Street	0.53	9.94	1.2	A	353	530

Main Results for each time segment
07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	445	111	178		1125	0.395	442	417	0.0	0.7	5.415	A
2 - Barkby Road	151	38	462	0.00	531	0.283	149	159	0.0	0.4	9.474	A
3 - Melton Road S	319	80	260	0.00	1003	0.318	317	350	0.0	0.5	5.564	A
4 - High Street	290	72	307		871	0.333	288	270	0.0	0.5	6.307	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	531	133	213		1105	0.481	530	501	0.7	0.9	6.445	A
2 - Barkby Road	180	45	553	0.00	503	0.358	179	190	0.4	0.6	11.218	B
3 - Melton Road S	381	95	313	0.00	975	0.391	380	420	0.5	0.7	6.420	A
4 - High Street	346	87	369		839	0.412	345	325	0.5	0.7	7.463	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	651	163	261		1078	0.604	648	612	0.9	1.5	8.585	A
2 - Barkby Road	220	55	677	0.00	464	0.474	219	233	0.6	0.9	14.741	B
3 - Melton Road S	467	117	382	0.00	939	0.497	465	513	0.7	1.0	8.049	A
4 - High Street	424	106	451		796	0.532	422	397	0.7	1.1	9.827	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	651	163	262		1078	0.604	651	614	1.5	1.6	8.687	A
2 - Barkby Road	220	55	679	0.00	463	0.475	220	233	0.9	0.9	14.939	B
3 - Melton Road S	467	117	384	0.00	938	0.498	467	515	1.0	1.0	8.113	A
4 - High Street	424	106	452		795	0.533	424	399	1.1	1.2	9.935	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	531	133	215		1104	0.481	534	504	1.6	1.0	6.530	A
2 - Barkby Road	180	45	557	0.00	501	0.359	181	191	0.9	0.6	11.396	B
3 - Melton Road S	381	95	316	0.00	974	0.391	383	423	1.0	0.7	6.482	A
4 - High Street	346	87	371		838	0.413	348	327	1.2	0.7	7.558	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	445	111	180		1124	0.396	446	421	1.0	0.7	5.485	A
2 - Barkby Road	151	38	466	0.00	530	0.284	151	160	0.6	0.4	9.618	A
3 - Melton Road S	319	80	264	0.00	1001	0.319	320	353	0.7	0.5	5.621	A
4 - High Street	290	72	310		870	0.333	291	273	0.7	0.5	6.385	A

2022 , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	18.09	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.09	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	599	100.000
2 - Barkby Road		ONE HOUR	✓	288	100.000
3 - Melton Road S		ONE HOUR	✓	547	100.000
4 - High Street		ONE HOUR	✓	554	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	0	105	323	171
	2 - Barkby Road	76	1	87	124
	3 - Melton Road S	360	85	3	99
	4 - High Street	299	171	84	0

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	2	3	1
	2 - Barkby Road	0	0	0	2
	3 - Melton Road S	6	2	0	1
	4 - High Street	2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.65	10.42	1.9	B	550	824
2 - Barkby Road	0.67	22.80	1.9	C	264	396
3 - Melton Road S	0.65	11.63	1.9	B	502	753
4 - High Street	0.84	30.32	4.9	D	508	763

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	451	113	257		1081	0.417	448	548	0.0	0.7	5.791	A
2 - Barkby Road	217	54	434	0.00	540	0.402	214	270	0.0	0.7	11.063	B
3 - Melton Road S	412	103	277	0.00	994	0.414	409	371	0.0	0.7	6.391	A
4 - High Street	417	104	392		827	0.504	413	294	0.0	1.0	9.039	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	538	135	308		1052	0.512	537	658	0.7	1.1	7.132	A
2 - Barkby Road	259	65	521	0.00	513	0.505	258	324	0.7	1.0	14.147	B
3 - Melton Road S	492	123	333	0.00	965	0.510	490	445	0.7	1.1	7.898	A
4 - High Street	498	125	471		786	0.634	495	353	1.0	1.8	12.872	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	660	165	373		1015	0.650	656	800	1.1	1.8	10.174	B
2 - Barkby Road	317	79	635	0.00	477	0.665	314	394	1.0	1.9	21.746	C
3 - Melton Road S	602	151	406	0.00	927	0.650	599	543	1.1	1.9	11.360	B
4 - High Street	610	152	574		731	0.834	599	431	1.8	4.5	26.556	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	660	165	378		1012	0.652	659	808	1.8	1.9	10.420	B
2 - Barkby Road	317	79	639	0.00	476	0.666	317	398	1.9	1.9	22.801	C
3 - Melton Road S	602	151	409	0.00	925	0.651	602	547	1.9	1.9	11.626	B
4 - High Street	610	152	578		730	0.836	608	434	4.5	4.9	30.319	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	538	135	315		1048	0.514	542	670	1.9	1.1	7.319	A
2 - Barkby Road	259	65	527	0.00	511	0.507	262	330	1.9	1.1	14.801	B
3 - Melton Road S	492	123	338	0.00	962	0.511	495	451	1.9	1.1	8.095	A
4 - High Street	498	125	476		783	0.636	510	357	4.9	1.9	14.367	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	451	113	261		1078	0.418	452	556	1.1	0.7	5.895	A
2 - Barkby Road	217	54	439	0.00	538	0.403	218	274	1.1	0.7	11.398	B
3 - Melton Road S	412	103	282	0.00	992	0.415	413	376	1.1	0.8	6.513	A
4 - High Street	417	104	397		824	0.506	420	298	1.9	1.1	9.422	A

2027 + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	10.70	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.70	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2027 + Com	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	616	100.000
2 - Barkby Road		ONE HOUR	✓	223	100.000
3 - Melton Road S		ONE HOUR	✓	441	100.000
4 - High Street		ONE HOUR	✓	407	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	1	86	376	153
	2 - Barkby Road	68	0	0	155
	3 - Melton Road S	318	39	2	82
	4 - High Street	195	100	111	1

Vehicle Mix

HV %s

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	3	4	1
2 - Barkby Road		1	0	1	1
3 - Melton Road S		6	5	0	8
4 - High Street		2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.63	9.50	1.8	A	565	848
2 - Barkby Road	0.54	17.40	1.2	C	205	307
3 - Melton Road S	0.53	8.77	1.2	A	405	607
4 - High Street	0.57	10.93	1.3	B	373	560

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	464	116	189		1119	0.415	461	435	0.0	0.7	5.617	A
2 - Barkby Road	168	42	482	0.00	525	0.320	166	168	0.0	0.5	10.077	B
3 - Melton Road S	332	83	282	0.00	992	0.335	330	366	0.0	0.5	5.762	A
4 - High Street	306	77	320		865	0.354	304	292	0.0	0.6	6.560	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	554	138	227		1097	0.505	553	522	0.7	1.0	6.796	A
2 - Barkby Road	200	50	578	0.00	495	0.405	200	202	0.5	0.7	12.270	B
3 - Melton Road S	396	99	339	0.00	962	0.412	396	439	0.5	0.7	6.744	A
4 - High Street	366	91	384		831	0.440	365	350	0.6	0.8	7.901	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	678	170	277		1069	0.634	675	638	1.0	1.7	9.360	A
2 - Barkby Road	246	61	706	0.00	455	0.540	244	247	0.7	1.1	17.049	C
3 - Melton Road S	486	121	414	0.00	923	0.526	484	536	0.7	1.2	8.681	A
4 - High Street	448	112	469		786	0.570	446	428	0.8	1.3	10.775	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	678	170	279		1068	0.635	678	641	1.7	1.8	9.503	A
2 - Barkby Road	246	61	709	0.00	454	0.541	245	248	1.1	1.2	17.400	C
3 - Melton Road S	486	121	416	0.00	921	0.527	485	538	1.2	1.2	8.770	A
4 - High Street	448	112	471		785	0.571	448	430	1.3	1.3	10.932	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	554	138	229		1096	0.505	557	526	1.8	1.1	6.908	A
2 - Barkby Road	200	50	582	0.00	494	0.406	202	203	1.2	0.7	12.552	B
3 - Melton Road S	396	99	342	0.00	960	0.413	398	442	1.2	0.8	6.826	A
4 - High Street	366	91	387		830	0.441	368	354	1.3	0.8	8.032	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	464	116	191		1118	0.415	465	440	1.1	0.7	5.700	A
2 - Barkby Road	168	42	486	0.00	524	0.321	169	170	0.7	0.5	10.272	B
3 - Melton Road S	332	83	286	0.00	990	0.336	333	369	0.8	0.5	5.831	A
4 - High Street	306	77	323		863	0.355	307	295	0.8	0.6	6.656	A

2027 + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	24.84	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	24.84	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2027 + Com	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	625	100.000
2 - Barkby Road		ONE HOUR	✓	308	100.000
3 - Melton Road S		ONE HOUR	✓	569	100.000
4 - High Street		ONE HOUR	✓	592	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	0	110	337	178
	2 - Barkby Road	79	1	91	137
	3 - Melton Road S	375	88	3	103
	4 - High Street	312	193	87	0

Vehicle Mix

HV %s

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	2	3	1
2 - Barkby Road		0	0	0	2
3 - Melton Road S		6	2	0	1
4 - High Street		2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.69	11.93	2.2	B	574	860
2 - Barkby Road	0.72	27.85	2.5	D	283	424
3 - Melton Road S	0.69	13.13	2.2	B	522	783
4 - High Street	0.91	48.14	8.1	E	543	815

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	471	118	277		1069	0.440	467	571	0.0	0.8	6.086	A
2 - Barkby Road	232	58	452	0.00	534	0.434	229	292	0.0	0.8	11.780	B
3 - Melton Road S	428	107	294	0.00	985	0.435	425	387	0.0	0.8	6.676	A
4 - High Street	446	111	408		819	0.544	441	312	0.0	1.2	9.887	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	562	140	332		1038	0.541	560	685	0.8	1.2	7.681	A
2 - Barkby Road	277	69	542	0.00	506	0.547	275	351	0.8	1.2	15.604	C
3 - Melton Road S	512	128	353	0.00	954	0.536	510	464	0.8	1.2	8.430	A
4 - High Street	532	133	489		776	0.686	528	374	1.2	2.2	15.034	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	688	172	400		1000	0.688	684	829	1.2	2.2	11.514	B
2 - Barkby Road	339	85	660	0.00	469	0.722	334	424	1.2	2.4	25.966	D
3 - Melton Road S	626	157	430	0.00	914	0.685	622	564	1.2	2.2	12.719	B
4 - High Street	652	163	597		720	0.905	633	456	2.2	7.0	37.198	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	688	172	407		996	0.691	688	841	2.2	2.2	11.932	B
2 - Barkby Road	339	85	665	0.00	468	0.725	339	430	2.4	2.5	27.850	D
3 - Melton Road S	626	157	434	0.00	912	0.687	626	569	2.2	2.2	13.134	B
4 - High Street	652	163	601		718	0.908	647	460	7.0	8.1	48.141	E

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	562	140	346		1030	0.545	566	704	2.2	1.2	7.989	A
2 - Barkby Road	277	69	550	0.00	504	0.550	282	361	2.5	1.3	16.722	C
3 - Melton Road S	512	128	360	0.00	951	0.538	516	473	2.2	1.2	8.708	A
4 - High Street	532	133	495		773	0.689	555	380	8.1	2.5	18.935	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	471	118	283		1066	0.441	472	581	1.2	0.8	6.218	A
2 - Barkby Road	232	58	458	0.00	533	0.435	234	297	1.3	0.8	12.236	B
3 - Melton Road S	428	107	299	0.00	983	0.436	430	392	1.2	0.8	6.825	A
4 - High Street	446	111	413		816	0.546	450	316	2.5	1.3	10.472	B

2027 + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.69	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.69	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 + Com + Dev	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	616	100.000
2 - Barkby Road		ONE HOUR	✓	256	100.000
3 - Melton Road S		ONE HOUR	✓	443	100.000
4 - High Street		ONE HOUR	✓	421	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	1	86	376	153
	2 - Barkby Road	68	0	3	185
	3 - Melton Road S	318	41	2	82
	4 - High Street	195	114	111	1

Vehicle Mix

HV %s

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	3	4	1
2 - Barkby Road		1	0	1	1
3 - Melton Road S		6	5	0	8
4 - High Street		2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.64	9.75	1.8	A	565	848
2 - Barkby Road	0.62	21.03	1.6	C	235	352
3 - Melton Road S	0.54	9.18	1.2	A	407	610
4 - High Street	0.59	11.49	1.5	B	386	579

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	464	116	201		1112	0.417	461	435	0.0	0.7	5.675	A
2 - Barkby Road	193	48	482	0.00	525	0.367	190	180	0.0	0.6	10.796	B
3 - Melton Road S	334	83	304	0.00	980	0.340	331	368	0.0	0.5	5.878	A
4 - High Street	317	79	321		864	0.367	315	314	0.0	0.6	6.692	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	554	138	241		1089	0.508	552	522	0.7	1.1	6.895	A
2 - Barkby Road	230	58	578	0.00	495	0.465	229	216	0.6	0.9	13.606	B
3 - Melton Road S	398	100	365	0.00	948	0.420	397	441	0.5	0.8	6.934	A
4 - High Street	378	95	386		830	0.456	377	377	0.6	0.8	8.132	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	678	170	295		1059	0.640	675	638	1.1	1.8	9.592	A
2 - Barkby Road	282	70	706	0.00	455	0.619	279	264	0.9	1.6	20.330	C
3 - Melton Road S	488	122	446	0.00	906	0.538	486	539	0.8	1.2	9.066	A
4 - High Street	464	116	471		785	0.590	461	460	0.8	1.4	11.298	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	678	170	296		1058	0.641	678	641	1.8	1.8	9.751	A
2 - Barkby Road	282	70	709	0.00	454	0.621	282	265	1.6	1.6	21.025	C
3 - Melton Road S	488	122	449	0.00	904	0.539	488	542	1.2	1.2	9.179	A
4 - High Street	464	116	473		784	0.591	463	463	1.4	1.5	11.492	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	554	138	243		1088	0.509	557	526	1.8	1.1	7.021	A
2 - Barkby Road	230	58	582	0.00	494	0.466	233	218	1.6	0.9	14.089	B
3 - Melton Road S	398	100	370	0.00	945	0.421	400	445	1.2	0.8	7.035	A
4 - High Street	378	95	389		829	0.457	381	382	1.5	0.9	8.284	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	464	116	203		1111	0.418	465	440	1.1	0.7	5.759	A
2 - Barkby Road	193	48	486	0.00	524	0.368	194	182	0.9	0.6	11.071	B
3 - Melton Road S	334	83	309	0.00	978	0.341	334	372	0.8	0.6	5.954	A
4 - High Street	317	79	325		862	0.368	318	318	0.9	0.6	6.800	A

2027 + Com + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	31.52	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	31.52	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 + Com + Dev	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	625	100.000
2 - Barkby Road		ONE HOUR	✓	326	100.000
3 - Melton Road S		ONE HOUR	✓	572	100.000
4 - High Street		ONE HOUR	✓	619	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	0	110	337	178
	2 - Barkby Road	79	1	92	154
	3 - Melton Road S	375	91	3	103
	4 - High Street	312	220	87	0

Vehicle Mix

HV %s

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	2	3	1
2 - Barkby Road		0	0	0	2
3 - Melton Road S		6	2	0	1
4 - High Street		2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.70	12.62	2.4	B	574	860
2 - Barkby Road	0.77	32.52	3.1	D	299	449
3 - Melton Road S	0.70	13.75	2.4	B	525	787
4 - High Street	0.95	66.49	11.9	F	568	852

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	471	118	299		1057	0.445	467	571	0.0	0.8	6.213	A
2 - Barkby Road	245	61	452	0.00	534	0.459	242	315	0.0	0.8	12.302	B
3 - Melton Road S	431	108	307	0.00	979	0.440	427	387	0.0	0.8	6.779	A
4 - High Street	466	117	410		818	0.570	461	324	0.0	1.4	10.471	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	562	140	359		1023	0.549	560	685	0.8	1.2	7.924	A
2 - Barkby Road	293	73	542	0.00	506	0.579	291	377	0.8	1.3	16.727	C
3 - Melton Road S	514	129	368	0.00	946	0.543	513	464	0.8	1.2	8.629	A
4 - High Street	556	139	492		775	0.718	552	389	1.4	2.5	16.657	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	688	172	428		984	0.699	684	825	1.2	2.3	12.097	B
2 - Barkby Road	359	90	659	0.00	470	0.764	353	453	1.3	2.9	29.552	D
3 - Melton Road S	630	157	448	0.00	905	0.696	626	564	1.2	2.3	13.253	B
4 - High Street	682	170	599		718	0.949	654	474	2.5	9.4	46.230	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	688	172	438		979	0.703	688	838	2.3	2.4	12.623	B
2 - Barkby Road	359	90	664	0.00	468	0.767	358	461	2.9	3.1	32.524	D
3 - Melton Road S	630	157	453	0.00	902	0.698	630	570	2.3	2.4	13.749	B
4 - High Street	682	170	604		716	0.952	672	478	9.4	11.9	66.490	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	562	140	380		1011	0.556	566	711	2.4	1.3	8.345	A
2 - Barkby Road	293	73	552	0.00	503	0.583	300	394	3.1	1.5	18.383	C
3 - Melton Road S	514	129	376	0.00	942	0.546	518	476	2.4	1.3	8.954	A
4 - High Street	556	139	499		771	0.722	592	396	11.9	2.9	24.710	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	471	118	306		1053	0.447	472	581	1.3	0.8	6.360	A
2 - Barkby Road	245	61	458	0.00	532	0.461	248	320	1.5	0.9	12.869	B
3 - Melton Road S	431	108	312	0.00	976	0.441	432	393	1.3	0.8	6.939	A
4 - High Street	466	117	415		815	0.572	472	329	2.9	1.4	11.248	B

2037 + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	13.23	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.23	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037 + Com	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	675	100.000
2 - Barkby Road		ONE HOUR	✓	244	100.000
3 - Melton Road S		ONE HOUR	✓	484	100.000
4 - High Street		ONE HOUR	✓	444	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	1	94	412	168
	2 - Barkby Road	75	0	0	169
	3 - Melton Road S	349	43	2	90
	4 - High Street	213	109	121	1

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	3	4	1
	2 - Barkby Road	1	0	1	1
	3 - Melton Road S	6	5	0	8
	4 - High Street	2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.71	11.91	2.4	B	619	929
2 - Barkby Road	0.62	22.00	1.6	C	224	336
3 - Melton Road S	0.59	10.39	1.5	B	444	666
4 - High Street	0.64	13.52	1.8	B	407	611

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	508	127	206		1109	0.458	505	477	0.0	0.9	6.107	A
2 - Barkby Road	184	46	527	0.00	511	0.360	181	184	0.0	0.6	10.967	B
3 - Melton Road S	364	91	309	0.00	978	0.373	362	400	0.0	0.6	6.187	A
4 - High Street	334	84	351		848	0.394	332	319	0.0	0.7	7.110	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	607	152	247		1086	0.559	605	572	0.9	1.3	7.691	A
2 - Barkby Road	219	55	632	0.00	478	0.459	218	221	0.6	0.8	13.929	B
3 - Melton Road S	435	109	371	0.00	945	0.460	434	480	0.6	0.9	7.468	A
4 - High Street	399	100	421		812	0.492	398	383	0.7	1.0	8.896	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	743	186	302		1055	0.704	739	698	1.3	2.4	11.577	B
2 - Barkby Road	269	67	772	0.00	435	0.618	266	269	0.8	1.5	21.188	C
3 - Melton Road S	533	133	452	0.00	903	0.590	531	586	0.9	1.5	10.208	B
4 - High Street	489	122	515		763	0.641	486	468	1.0	1.8	13.174	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	743	186	304		1054	0.705	743	702	2.4	2.4	11.908	B
2 - Barkby Road	269	67	776	0.00	433	0.620	268	271	1.5	1.6	21.999	C
3 - Melton Road S	533	133	456	0.00	901	0.592	533	589	1.5	1.5	10.385	B
4 - High Street	489	122	517		761	0.642	489	471	1.8	1.8	13.519	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	607	152	250		1084	0.560	611	578	2.4	1.3	7.910	A
2 - Barkby Road	219	55	638	0.00	476	0.461	222	223	1.6	0.9	14.471	B
3 - Melton Road S	435	109	376	0.00	942	0.462	437	484	1.5	0.9	7.613	A
4 - High Street	399	100	425		809	0.493	402	388	1.8	1.0	9.135	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	508	127	209		1108	0.459	510	482	1.3	0.9	6.226	A
2 - Barkby Road	184	46	533	0.00	509	0.361	185	186	0.9	0.6	11.257	B
3 - Melton Road S	364	91	313	0.00	975	0.374	366	404	0.9	0.6	6.287	A
4 - High Street	334	84	355		846	0.395	336	324	1.0	0.7	7.251	A

2037 + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	53.11	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	53.11	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037 + Com	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	686	100.000
2 - Barkby Road		ONE HOUR	✓	338	100.000
3 - Melton Road S		ONE HOUR	✓	626	100.000
4 - High Street		ONE HOUR	✓	648	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	0	121	370	195
	2 - Barkby Road	87	1	100	150
	3 - Melton Road S	412	97	4	113
	4 - High Street	342	210	96	0

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	2	3	1
	2 - Barkby Road	0	0	0	2
	3 - Melton Road S	6	2	0	1
	4 - High Street	2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.77	16.06	3.3	C	629	944
2 - Barkby Road	0.83	44.33	4.3	E	310	465
3 - Melton Road S	0.77	18.48	3.4	C	574	862
4 - High Street	1.04	130.38	26.7	F	595	892

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	516	129	304		1054	0.490	513	626	0.0	1.0	6.749	A
2 - Barkby Road	254	64	496	0.00	520	0.489	251	320	0.0	0.9	13.292	B
3 - Melton Road S	471	118	322	0.00	971	0.486	467	425	0.0	1.0	7.415	A
4 - High Street	488	122	448		797	0.612	481	341	0.0	1.6	11.746	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	617	154	363		1021	0.604	614	750	1.0	1.5	9.012	A
2 - Barkby Road	304	76	595	0.00	490	0.621	301	383	0.9	1.6	19.020	C
3 - Melton Road S	563	141	387	0.00	937	0.601	561	509	1.0	1.5	9.929	A
4 - High Street	583	146	538		751	0.776	576	410	1.6	3.3	20.826	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	755	189	422		987	0.765	749	890	1.5	3.1	15.043	C
2 - Barkby Road	372	93	719	0.00	451	0.825	363	452	1.6	3.9	37.771	E
3 - Melton Road S	689	172	468	0.00	894	0.771	682	613	1.5	3.3	17.206	C
4 - High Street	713	178	654		690	1.034	659	497	3.3	17.0	72.239	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	755	189	431		983	0.769	755	905	3.1	3.3	16.057	C
2 - Barkby Road	372	93	726	0.00	449	0.829	370	460	3.9	4.3	44.331	E
3 - Melton Road S	689	172	475	0.00	890	0.774	689	621	3.3	3.4	18.476	C
4 - High Street	713	178	661		686	1.040	675	503	17.0	26.7	130.382	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	617	154	410		994	0.620	623	810	3.3	1.7	10.069	B
2 - Barkby Road	304	76	616	0.00	483	0.629	314	417	4.3	1.8	22.550	C
3 - Melton Road S	563	141	398	0.00	931	0.605	570	532	3.4	1.6	10.603	B
4 - High Street	583	146	549		745	0.782	672	419	26.7	4.5	69.191	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	516	129	313		1049	0.492	519	641	1.7	1.0	6.984	A
2 - Barkby Road	254	64	505	0.00	518	0.491	258	327	1.8	1.0	14.127	B
3 - Melton Road S	471	118	329	0.00	967	0.487	474	433	1.6	1.0	7.658	A
4 - High Street	488	122	455		794	0.615	499	347	4.5	1.7	13.273	B

2037 + Com + Dev , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	14.71	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.71	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2037 + Com + Dev	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	675	100.000
2 - Barkby Road		ONE HOUR	✓	276	100.000
3 - Melton Road S		ONE HOUR	✓	486	100.000
4 - High Street		ONE HOUR	✓	458	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	1	94	412	168
	2 - Barkby Road	75	0	3	198
	3 - Melton Road S	349	45	2	90
	4 - High Street	213	123	121	1

Vehicle Mix

HV %s

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	3	4	1
2 - Barkby Road		1	0	1	1
3 - Melton Road S		6	5	0	8
4 - High Street		2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.71	12.30	2.5	B	619	929
2 - Barkby Road	0.70	27.79	2.3	D	253	380
3 - Melton Road S	0.61	10.94	1.6	B	446	669
4 - High Street	0.66	14.38	2.0	B	420	630

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	508	127	218		1102	0.461	505	476	0.0	0.9	6.174	A
2 - Barkby Road	208	52	527	0.00	511	0.407	205	196	0.0	0.7	11.789	B
3 - Melton Road S	366	91	330	0.00	966	0.379	363	402	0.0	0.6	6.315	A
4 - High Street	345	86	353		848	0.407	342	341	0.0	0.7	7.263	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	607	152	262		1078	0.563	605	572	0.9	1.3	7.822	A
2 - Barkby Road	248	62	632	0.00	478	0.519	247	235	0.7	1.1	15.598	C
3 - Melton Road S	437	109	396	0.00	932	0.469	436	482	0.6	0.9	7.693	A
4 - High Street	412	103	423		811	0.508	410	409	0.7	1.0	9.187	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	743	186	319		1045	0.711	739	698	1.3	2.4	11.927	B
2 - Barkby Road	304	76	771	0.00	435	0.699	299	287	1.1	2.1	26.078	D
3 - Melton Road S	535	134	482	0.00	887	0.603	533	589	0.9	1.6	10.716	B
4 - High Street	504	126	516		762	0.662	501	498	1.0	1.9	13.944	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	743	186	321		1044	0.712	743	702	2.4	2.5	12.295	B
2 - Barkby Road	304	76	776	0.00	433	0.701	303	288	2.1	2.3	27.792	D
3 - Melton Road S	535	134	487	0.00	884	0.605	535	592	1.6	1.6	10.941	B
4 - High Street	504	126	519		760	0.663	504	503	1.9	2.0	14.379	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	607	152	265		1076	0.564	611	578	2.5	1.4	8.060	A
2 - Barkby Road	248	62	639	0.00	476	0.521	253	237	2.3	1.1	16.578	C
3 - Melton Road S	437	109	404	0.00	928	0.471	439	487	1.6	1.0	7.873	A
4 - High Street	412	103	428		808	0.509	415	416	2.0	1.1	9.475	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	508	127	221		1101	0.462	510	482	1.4	0.9	6.302	A
2 - Barkby Road	208	52	533	0.00	509	0.408	209	198	1.1	0.7	12.204	B
3 - Melton Road S	366	91	336	0.00	963	0.380	367	407	1.0	0.7	6.425	A
4 - High Street	345	86	357		845	0.408	346	346	1.1	0.7	7.417	A

2037 + Com + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	2 - Barkby Road - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Melton Road S - Ped crossing	Ped crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	69.10	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	69.10	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2037 + Com + Dev	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	686	100.000
2 - Barkby Road		ONE HOUR	✓	355	100.000
3 - Melton Road S		ONE HOUR	✓	629	100.000
4 - High Street		ONE HOUR	✓	675	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	0.00
3 - Melton Road S	[ONEHOUR]	0.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
	1 - Melton Road N	0	121	370	195
	2 - Barkby Road	87	1	101	166
	3 - Melton Road S	412	100	4	113
	4 - High Street	342	237	96	0

Vehicle Mix

HV %s

From		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
1 - Melton Road N		0	2	3	1
2 - Barkby Road		0	0	0	2
3 - Melton Road S		6	2	0	1
4 - High Street		2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.78	16.87	3.4	C	629	944
2 - Barkby Road	0.87	54.23	5.5	F	326	489
3 - Melton Road S	0.79	19.60	3.6	C	577	866
4 - High Street	1.09	176.13	38.9	F	619	929

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	516	129	326		1042	0.496	512	626	0.0	1.0	6.904	A
2 - Barkby Road	267	67	496	0.00	520	0.514	263	342	0.0	1.0	13.910	B
3 - Melton Road S	474	118	334	0.00	964	0.491	470	426	0.0	1.0	7.535	A
4 - High Street	508	127	450		796	0.638	501	353	0.0	1.8	12.555	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	617	154	389		1006	0.613	614	749	1.0	1.6	9.339	A
2 - Barkby Road	319	80	595	0.00	490	0.652	316	409	1.0	1.8	20.564	C
3 - Melton Road S	565	141	401	0.00	929	0.608	563	510	1.0	1.6	10.191	B
4 - High Street	607	152	540		749	0.810	598	424	1.8	4.0	23.783	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	755	189	444		975	0.774	749	880	1.6	3.3	15.774	C
2 - Barkby Road	391	98	716	0.00	452	0.865	379	476	1.8	4.8	43.854	E
3 - Melton Road S	693	173	484	0.00	886	0.782	685	611	1.6	3.4	18.060	C
4 - High Street	743	186	656		689	1.079	668	513	4.0	22.9	89.441	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	755	189	451		971	0.778	755	892	3.3	3.4	16.870	C
2 - Barkby Road	391	98	723	0.00	450	0.869	388	483	4.8	5.5	54.234	F
3 - Melton Road S	693	173	492	0.00	882	0.785	692	618	3.4	3.6	19.600	C
4 - High Street	743	186	664		685	1.085	679	520	22.9	38.9	176.135	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	617	154	453		970	0.636	623	823	3.4	1.8	10.786	B
2 - Barkby Road	319	80	620	0.00	482	0.662	333	456	5.5	2.1	26.141	D
3 - Melton Road S	565	141	415	0.00	922	0.613	573	537	3.6	1.7	10.998	B
4 - High Street	607	152	553		743	0.817	723	436	38.9	9.7	128.641	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalled level of service
1 - Melton Road N	516	129	346		1031	0.501	520	652	1.8	1.0	7.250	A
2 - Barkby Road	267	67	508	0.00	517	0.517	271	357	2.1	1.1	15.020	C
3 - Melton Road S	474	118	342	0.00	960	0.493	476	437	1.7	1.0	7.806	A
4 - High Street	508	127	458		792	0.641	539	360	9.7	2.0	16.677	C

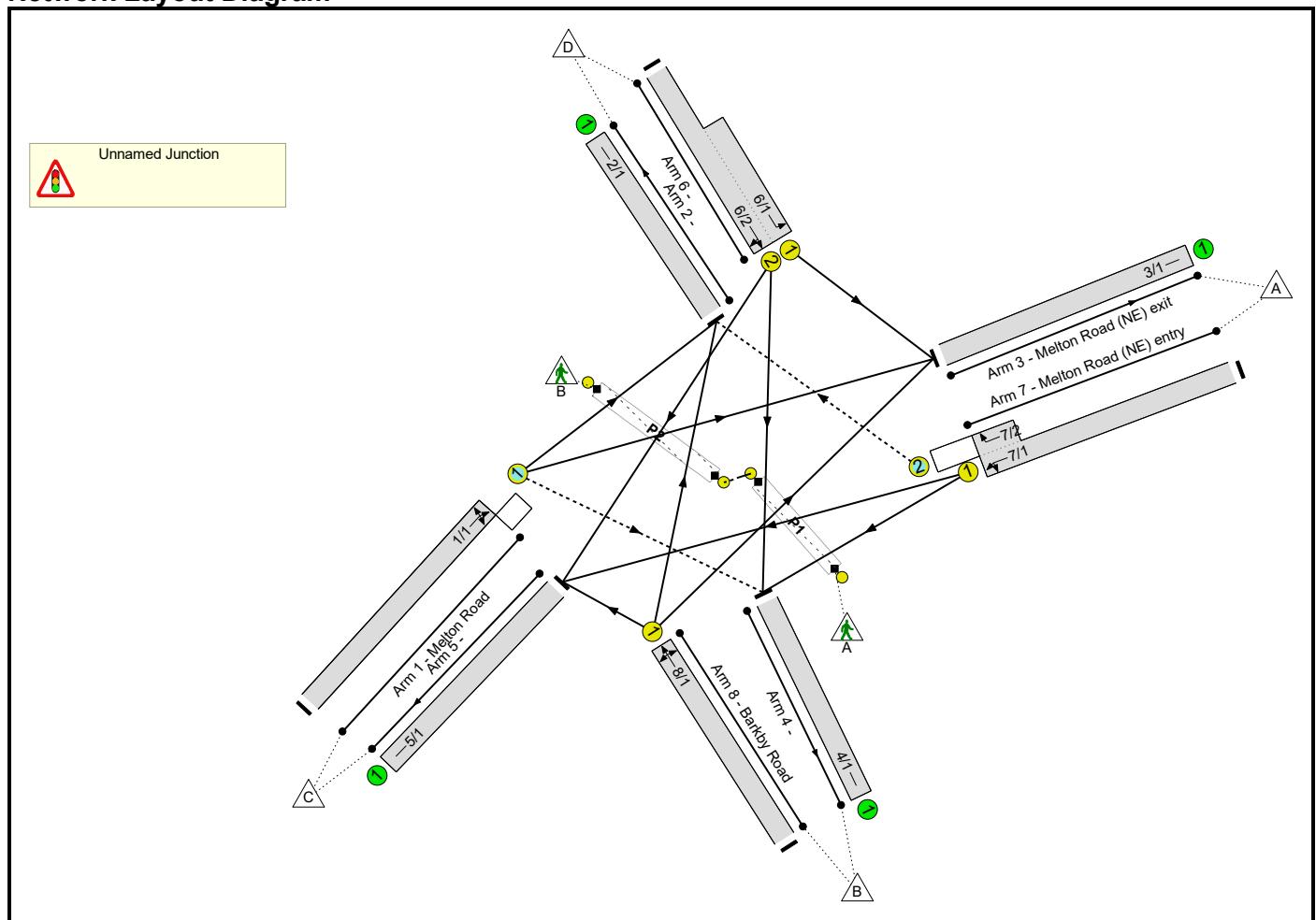
Full Input Data And Results

Full Input Data And Results

User and Project Details

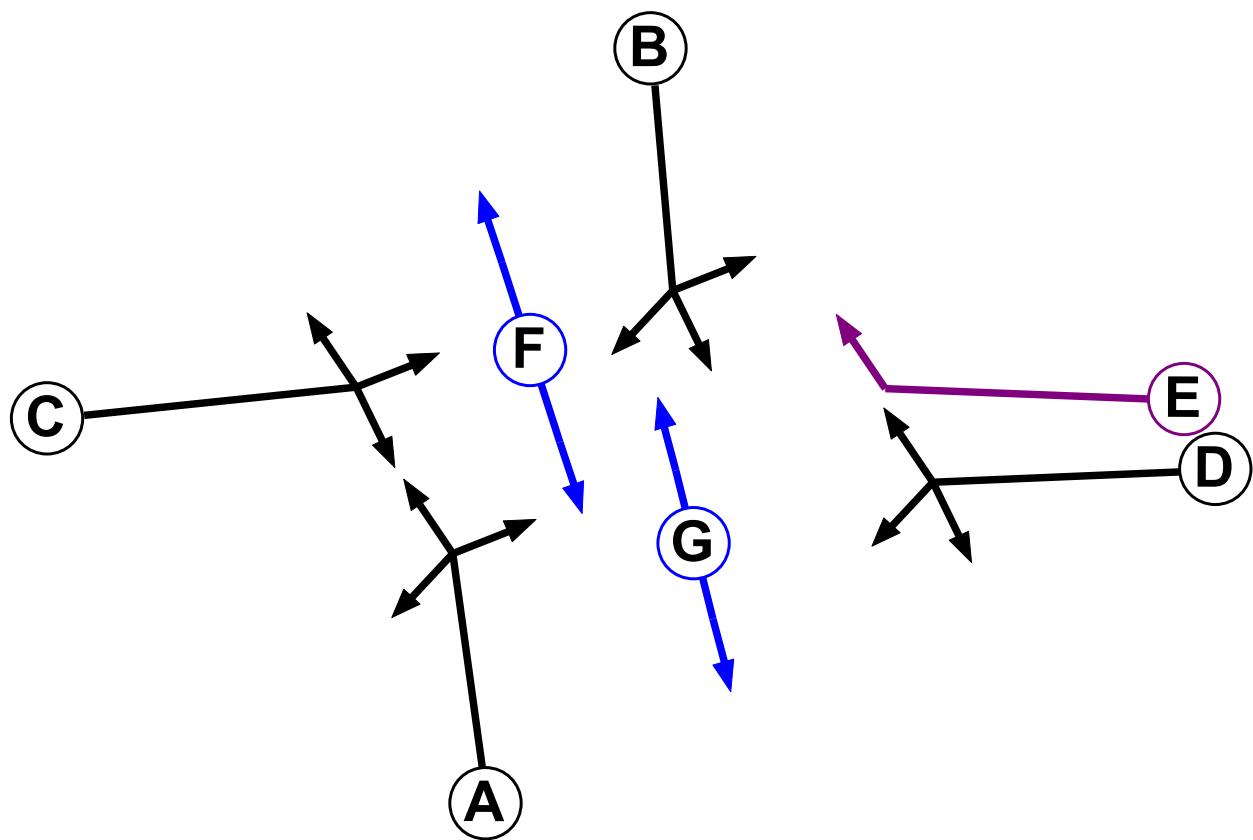
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Title:	
Location:	
Additional detail:	
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Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Ind. Arrow	D	4	4
F	Pedestrian		5	5
G	Pedestrian		5	5

Full Input Data And Results

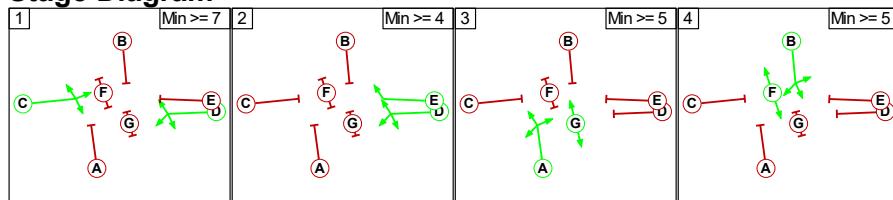
Phase Intergreens Matrix

		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A	8	5	5	5	6	-	
	B	8	5	5	6	-	6	
	C	5	7	-		3	5	8
	D	7	5	-		-	8	5
	E	6	5	5	-		-	5
	F	10	-	10	10	10	-	
	G	-	8	8	8	8	-	

Phases in Stage

Stage No.	Phases in Stage
1	C D
2	D E
3	A G
4	B F

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	C	Losing	2	2
4	1	B	Losing	5	5

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		3	10	8
	2	5		7	8
	3	8	8		8
	4	10	10	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction												
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)	
1/1 (Melton Road)	4/1 (Right)	1439	0	7/1	1.09	All	2.00	2.00	0.50	2	2.00	
7/2 (Melton Road (NE) entry)	2/1 (Right)	1439	0	1/1	1.09	To 2/1 (Left) To 3/1 (Ahead)	3.00	-	0.50	3	3.00	

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction													
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)	
1/1 (Melton Road)	O	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 2 Left	Inf	
											Arm 3 Ahead	Inf	
											Arm 4 Right	12.50	
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-	
3/1 (Melton Road (NE) exit)	U		2	3	60.0	Inf	-	-	-	-	-	-	
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-	
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-	
6/1	U	B	2	3	9.0	Geom	-	3.25	0.00	Y	Arm 3 Left	10.00	
6/2	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	15.00	
											Arm 5 Right	15.00	
7/1 (Melton Road (NE) entry)	U	D	2	3	60.0	User	1800	-	-	-	-	-	
7/2 (Melton Road (NE) entry)	O	D E	2	3	3.0	Geom	-	3.25	0.00	Y	Arm 2 Right	Inf	
											Arm 2 Ahead	Inf	
8/1 (Barkby Road)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 3 Right	15.00	
											Arm 5 Left	6.00	

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 AM'	08:00	09:00	01:00	
2: '2022 PM '	17:00	18:00	01:00	
3: '2027 AM'	08:00	09:00	01:00	
4: '2027 PM'	17:00	18:00	01:00	
5: '2027 with Dev'	08:00	09:00	01:00	
6: '2027 with Dev'	17:00	18:00	01:00	
7: '2037 AM'	08:00	09:00	01:00	
8: '2037 PM'	17:00	18:00	01:00	
9: '2037+ Dev AM'	08:00	09:00	01:00	
10: '2037+ Dev PM'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2022 Base AM' (FG1: '2022 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	83	360	147	590
	B	65	0	0	135	200
	C	305	38	0	79	422
	D	187	91	106	0	384
	Tot.	557	212	466	361	1596

Traffic Lane Flows

Lane	Scenario 1: 2022 Base AM
Junction: Unnamed Junction	
1/1	422
2/1	361
3/1	557
4/1	212
5/1	466
6/1 (short)	187
6/2 (with short)	384(In) 197(Out)
7/1 (with short)	590(In) 443(Out)
7/2 (short)	147
8/1	200

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.7 %	1959	1959		
				Arm 3 Ahead	Inf	72.3 %				
				Arm 4 Right	12.50	9.0 %				
2/1	Infinite Saturation Flow						Inf	Inf		
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf		
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687		
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	46.2 %	1764	1764		
				Arm 5 Right	15.00	53.8 %				
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800		
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940		
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	67.5 %	1855	1855		
				Arm 3 Right	15.00	32.5 %				
				Arm 5 Left	6.00	0.0 %				

Scenario 2: '2022 Base PM' (FG2: '2022 PM ', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
A	0	105	323	171	599	
B	76	0	87	124	287	
C	360	85	0	99	544	
D	299	171	84	0	554	
Tot.	735	361	494	394	1984	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Base PM
Junction: Unnamed Junction	
1/1	544
2/1	394
3/1	735
4/1	361
5/1	494
6/1 (short)	299
6/2 (with short)	554(In) 255(Out)
7/1 (with short)	599(In) 428(Out)
7/2 (short)	171
8/1	287

Lane Saturation Flows

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.2 %	1944	1944			
				Arm 3 Ahead	Inf	66.2 %					
				Arm 4 Right	12.50	15.6 %					
2/1	Infinite Saturation Flow						Inf	Inf			
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
4/1	Infinite Saturation Flow						Inf	Inf			
5/1	Infinite Saturation Flow						Inf	Inf			
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687			
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	67.1 %	1764	1764			
				Arm 5 Right	15.00	32.9 %					
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800			
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940			
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	43.2 %	1737	1737			
				Arm 3 Right	15.00	26.5 %					
				Arm 5 Left	6.00	30.3 %					

Full Input Data And Results

Scenario 3: '2027 AM' (FG3: '2027 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	86	376	153	615
	B	68	0	0	155	223
	C	318	39	0	82	439
	D	195	100	111	0	406
Tot.		581	225	487	390	1683

Traffic Lane Flows

Lane	Scenario 3: 2027 AM
Junction: Unnamed Junction	
1/1	439
2/1	390
3/1	581
4/1	225
5/1	487
6/1 (short)	195
6/2 (with short)	406(In) 211(Out)
7/1 (with short)	615(In) 462(Out)
7/2 (short)	153
8/1	223

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.7 %	1959	1959		
				Arm 3 Ahead	Inf	72.4 %				
				Arm 4 Right	12.50	8.9 %				
2/1	Infinite Saturation Flow						Inf	Inf		
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf		
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687		
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	47.4 %	1764	1764		
				Arm 5 Right	15.00	52.6 %				
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800		
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940		
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	69.5 %	1858	1858		
				Arm 3 Right	15.00	30.5 %				
				Arm 5 Left	6.00	0.0 %				

Scenario 4: '2027 PM' (FG4: '2027 PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
A	A	0	110	337	178	625
	B	79	0	91	137	307
	C	375	88	0	103	566
	D	312	193	87	0	592
Tot.		766	391	515	418	2090

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2027 PM
Junction: Unnamed Junction	
1/1	566
2/1	418
3/1	766
4/1	391
5/1	515
6/1 (short)	312
6/2 (with short)	592(In) 280(Out)
7/1 (with short)	625(In) 447(Out)
7/2 (short)	178
8/1	307

Lane Saturation Flows

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.2 %	1944	1944			
				Arm 3 Ahead	Inf	66.3 %					
				Arm 4 Right	12.50	15.5 %					
2/1	Infinite Saturation Flow						Inf	Inf			
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
4/1	Infinite Saturation Flow						Inf	Inf			
5/1	Infinite Saturation Flow						Inf	Inf			
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687			
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	68.9 %	1764	1764			
				Arm 5 Right	15.00	31.1 %					
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800			
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940			
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	44.6 %	1741	1741			
				Arm 3 Right	15.00	25.7 %					
				Arm 5 Left	6.00	29.6 %					

Full Input Data And Results

Scenario 5: '2027 + Dev AM' (FG5: '2027 with Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	86	376	153	615
	B	68	0	3	185	256
	C	318	41	0	82	441
	D	195	114	111	0	420
	Tot.	581	241	490	420	1732

Traffic Lane Flows

Lane	Scenario 5: 2027 + Dev AM
Junction: Unnamed Junction	
1/1	441
2/1	420
3/1	581
4/1	241
5/1	490
6/1 (short)	195
6/2 (with short)	420(In) 225(Out)
7/1 (with short)	615(In) 462(Out)
7/2 (short)	153
8/1	256

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.6 %	1958	1958		
				Arm 3 Ahead	Inf	72.1 %				
				Arm 4 Right	12.50	9.3 %				
2/1	Infinite Saturation Flow						Inf	Inf		
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf		
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687		
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	50.7 %	1764	1764		
				Arm 5 Right	15.00	49.3 %				
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800		
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940		
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	72.3 %	1860	1860		
				Arm 3 Right	15.00	26.6 %				
				Arm 5 Left	6.00	1.2 %				

Scenario 6: '2027 + Dev PM' (FG6: '2027 with Dev', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
A	0	110	337	178	625	
B	79	0	92	154	325	
C	375	91	0	103	569	
D	312	220	87	0	619	
Tot.	766	421	516	435	2138	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2027 + Dev PM
Junction: Unnamed Junction	
1/1	569
2/1	435
3/1	766
4/1	421
5/1	516
6/1 (short)	312
6/2 (with short)	619(In) 307(Out)
7/1 (with short)	625(In) 447(Out)
7/2 (short)	178
8/1	325

Lane Saturation Flows

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.1 %	1943	1943			
				Arm 3 Ahead	Inf	65.9 %					
				Arm 4 Right	12.50	16.0 %					
2/1	Infinite Saturation Flow						Inf	Inf			
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
4/1	Infinite Saturation Flow						Inf	Inf			
5/1	Infinite Saturation Flow						Inf	Inf			
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687			
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	71.7 %	1764	1764			
				Arm 5 Right	15.00	28.3 %					
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800			
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940			
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	47.4 %	1749	1749			
				Arm 3 Right	15.00	24.3 %					
				Arm 5 Left	6.00	28.3 %					

Full Input Data And Results

Scenario 7: '2037 AM' (FG7: '2037 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	94	412	168	674
	B	75	0	0	169	244
	C	349	43	0	90	482
	D	213	109	121	0	443
Tot.		637	246	533	427	1843

Traffic Lane Flows

Lane	Scenario 7: 2037 AM
Junction: Unnamed Junction	
1/1	482
2/1	427
3/1	637
4/1	246
5/1	533
6/1 (short)	213
6/2 (with short)	443(In) 230(Out)
7/1 (with short)	674(In) 506(Out)
7/2 (short)	168
8/1	244

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.7 %	1959	1959		
				Arm 3 Ahead	Inf	72.4 %				
				Arm 4 Right	12.50	8.9 %				
2/1	Infinite Saturation Flow						Inf	Inf		
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf		
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687		
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	47.4 %	1764	1764		
				Arm 5 Right	15.00	52.6 %				
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800		
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940		
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	69.3 %	1858	1858		
				Arm 3 Right	15.00	30.7 %				
				Arm 5 Left	6.00	0.0 %				

Scenario 8: '2037 PM' (FG8: '2037 PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
A	0	121	370	195	686	
B	87	0	100	150	337	
C	412	97	0	113	622	
D	342	210	96	0	648	
Tot.	841	428	566	458	2293	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2037 PM
Junction: Unnamed Junction	
1/1	622
2/1	458
3/1	841
4/1	428
5/1	566
6/1 (short)	342
6/2 (with short)	648(In) 306(Out)
7/1 (with short)	686(In) 491(Out)
7/2 (short)	195
8/1	337

Lane Saturation Flows

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.2 %	1944	1944			
				Arm 3 Ahead	Inf	66.2 %					
				Arm 4 Right	12.50	15.6 %					
2/1	Infinite Saturation Flow						Inf	Inf			
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
4/1	Infinite Saturation Flow						Inf	Inf			
5/1	Infinite Saturation Flow						Inf	Inf			
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687			
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	68.6 %	1764	1764			
				Arm 5 Right	15.00	31.4 %					
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800			
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940			
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	44.5 %	1741	1741			
				Arm 3 Right	15.00	25.8 %					
				Arm 5 Left	6.00	29.7 %					

Full Input Data And Results

Scenario 9: '2037 + Dev AM' (FG9: '2037+ Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	94	412	168	674
	B	75	0	3	198	276
	C	349	45	0	90	484
	D	213	123	121	0	457
	Tot.	637	262	536	456	1891

Traffic Lane Flows

Lane	Scenario 9: 2037 + Dev AM
Junction: Unnamed Junction	
1/1	484
2/1	456
3/1	637
4/1	262
5/1	536
6/1 (short)	213
6/2 (with short)	457(In) 244(Out)
7/1 (with short)	674(In) 506(Out)
7/2 (short)	168
8/1	276

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.6 %	1958	1958		
				Arm 3 Ahead	Inf	72.1 %				
				Arm 4 Right	12.50	9.3 %				
2/1	Infinite Saturation Flow						Inf	Inf		
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf		
4/1	Infinite Saturation Flow						Inf	Inf		
5/1	Infinite Saturation Flow						Inf	Inf		
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687		
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	50.4 %	1764	1764		
				Arm 5 Right	15.00	49.6 %				
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800		
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940		
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	71.7 %	1859	1859		
				Arm 3 Right	15.00	27.2 %				
				Arm 5 Left	6.00	1.1 %				

Scenario 10: '2037 + Dev PM' (FG10: '2037+ Dev PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
A	0	121	370	195	686	
B	87	0	101	166	354	
C	412	100	0	113	625	
D	342	237	96	0	675	
Tot.	841	458	567	474	2340	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2037 + Dev PM
Junction: Unnamed Junction	
1/1	625
2/1	474
3/1	841
4/1	458
5/1	567
6/1 (short)	342
6/2 (with short)	675(In) 333(Out)
7/1 (with short)	686(In) 491(Out)
7/2 (short)	195
8/1	354

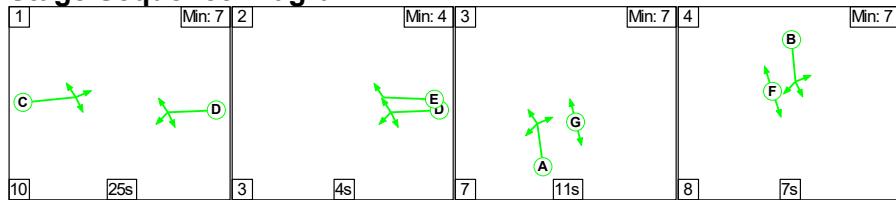
Lane Saturation Flows

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Melton Road)	3.65	0.00	Y	Arm 2 Left	Inf	18.1 %	1943	1943			
				Arm 3 Ahead	Inf	65.9 %					
				Arm 4 Right	12.50	16.0 %					
2/1	Infinite Saturation Flow						Inf	Inf			
3/1 (Melton Road (NE) exit Lane 1)	Infinite Saturation Flow						Inf	Inf			
4/1	Infinite Saturation Flow						Inf	Inf			
5/1	Infinite Saturation Flow						Inf	Inf			
6/1	3.25	0.00	Y	Arm 3 Left	10.00	100.0 %	1687	1687			
6/2	3.25	0.00	Y	Arm 4 Ahead	15.00	71.2 %	1764	1764			
				Arm 5 Right	15.00	28.8 %					
7/1 (Melton Road (NE) entry Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800			
7/2 (Melton Road (NE) entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940			
8/1 (Barkby Road)	3.00	0.00	Y	Arm 2 Ahead	Inf	46.9 %	1747	1747			
				Arm 3 Right	15.00	24.6 %					
				Arm 5 Left	6.00	28.5 %					

Full Input Data And Results

Scenario 1: '2022 Base AM' (FG1: '2022 AM', Plan 1: 'Network Control Plan 1')

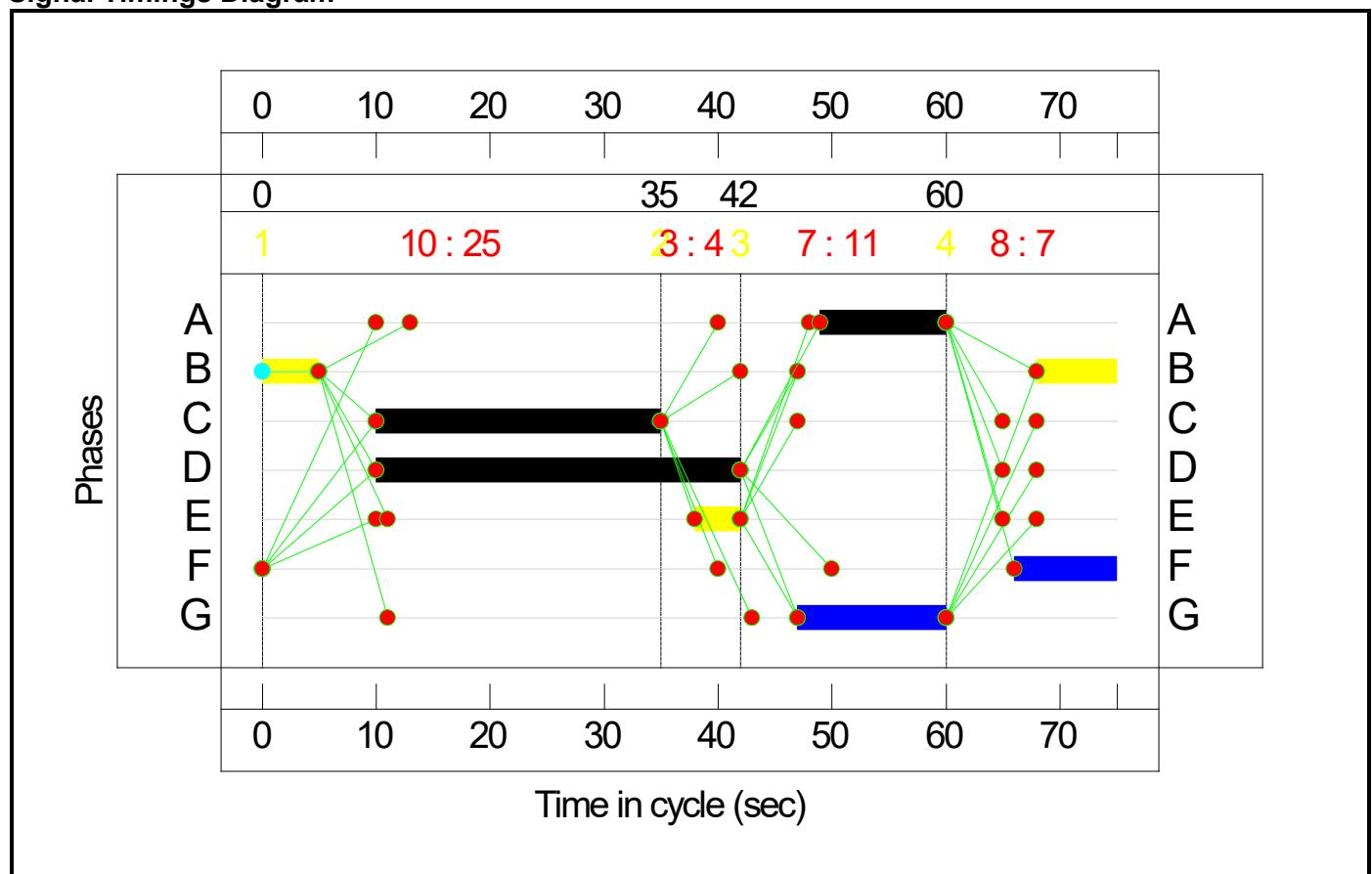
Stage Sequence Diagram



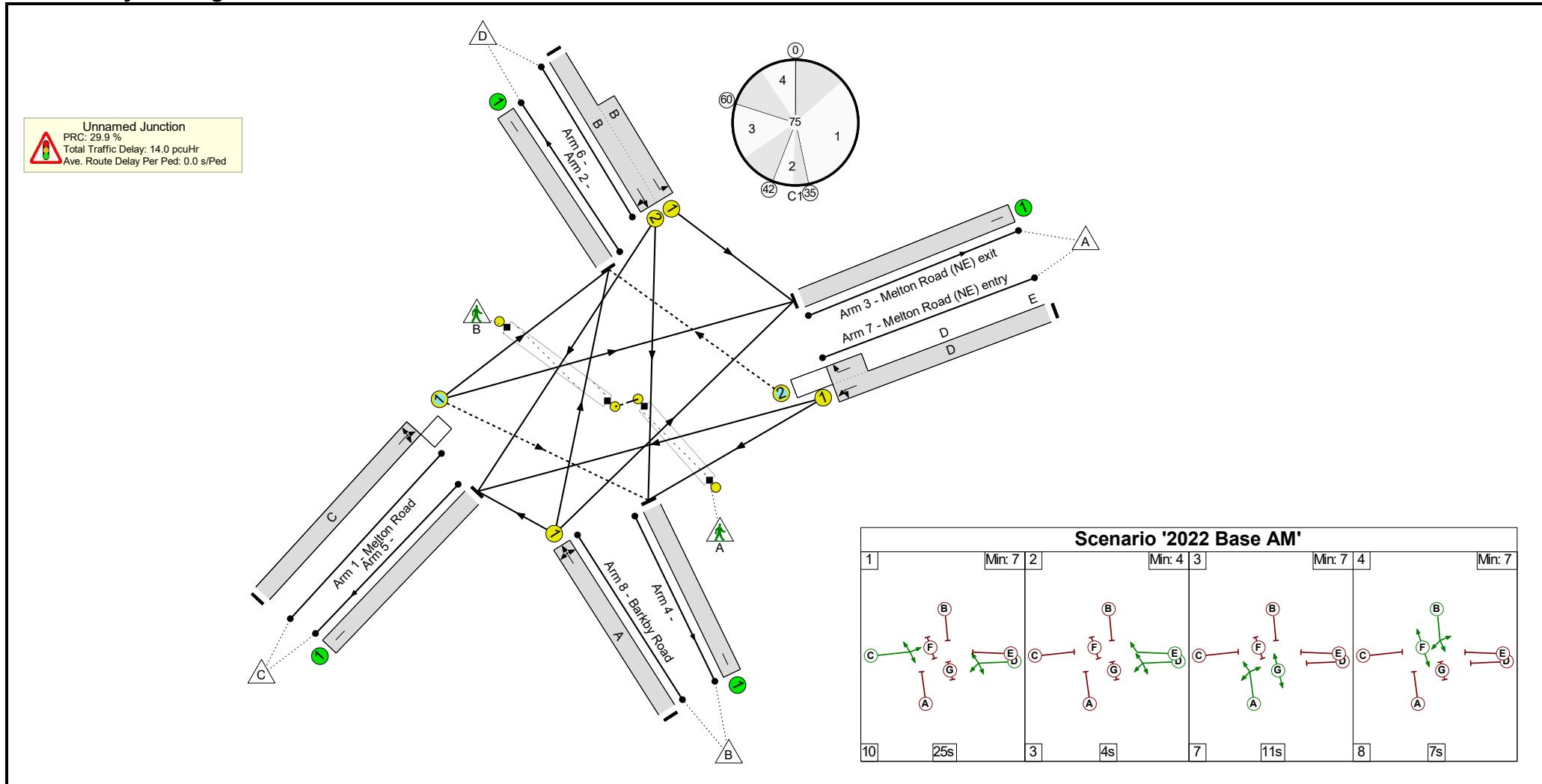
Stage Timings

Stage	1	2	3	4
Duration	25	4	11	7
Change Point	0	35	42	60

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	-	-	N/A	-	-		-	-	-	-	-	-	69.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	69.3%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	25	-	422	1959	679	62.1%
2/1		U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	12	-	384	1764:1687	306+292	64.4 : 64.0%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	32	4	590	1800:1940	639+212	69.3 : 69.3%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	11	-	200	1855	297	67.4%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	13	-	0	-	12480	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	9	-	0	-	8640	0.0%

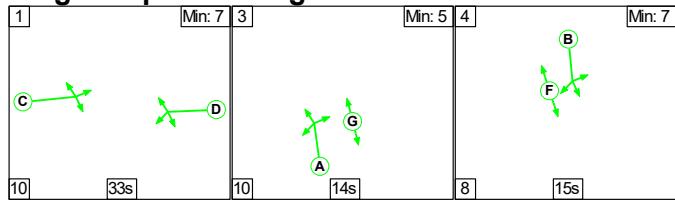
Full Input Data And Results

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	-	-	169	10	6	9.7	3.8	0.4	14.0	-	-	-	-
Unnamed Junction	-	-	169	10	6	9.7	3.8	0.4	14.0	-	-	-	-
1/1	422	422	38	0	0	2.4	0.8	0.1	3.3	28.3	7.3	0.8	8.1
2/1	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	384	384	-	-	-	3.1	0.9	-	4.0	37.2	3.8	0.9	4.7
7/1+7/2	590	590	131	10	6	2.6	1.1	0.3	4.1	24.7	8.7	1.1	9.8
8/1	200	200	-	-	-	1.6	1.0	-	2.7	47.9	3.9	1.0	4.9
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): 29.9		Total Delay for Signalled Lanes (pcuHr): 14.00		Cycle Time (s): 75						
			PRC Over All Lanes (%): 29.9		Total Delay Over All Lanes(pcuHr): 14.00								

Full Input Data And Results

Scenario 2: '2022 Base PM' (FG2: '2022 PM', Plan 2: 'Network Control Plan 2')

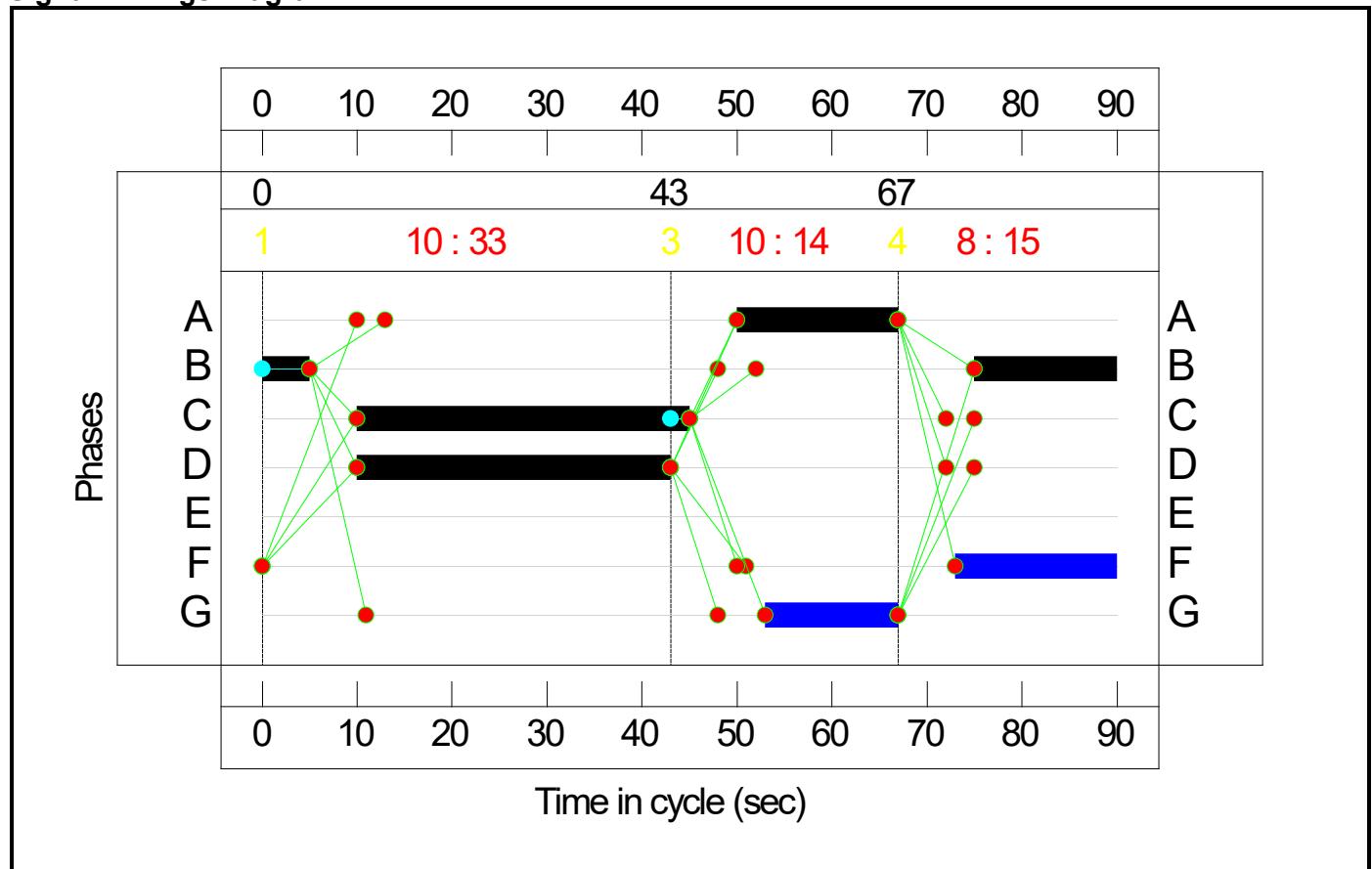
Stage Sequence Diagram



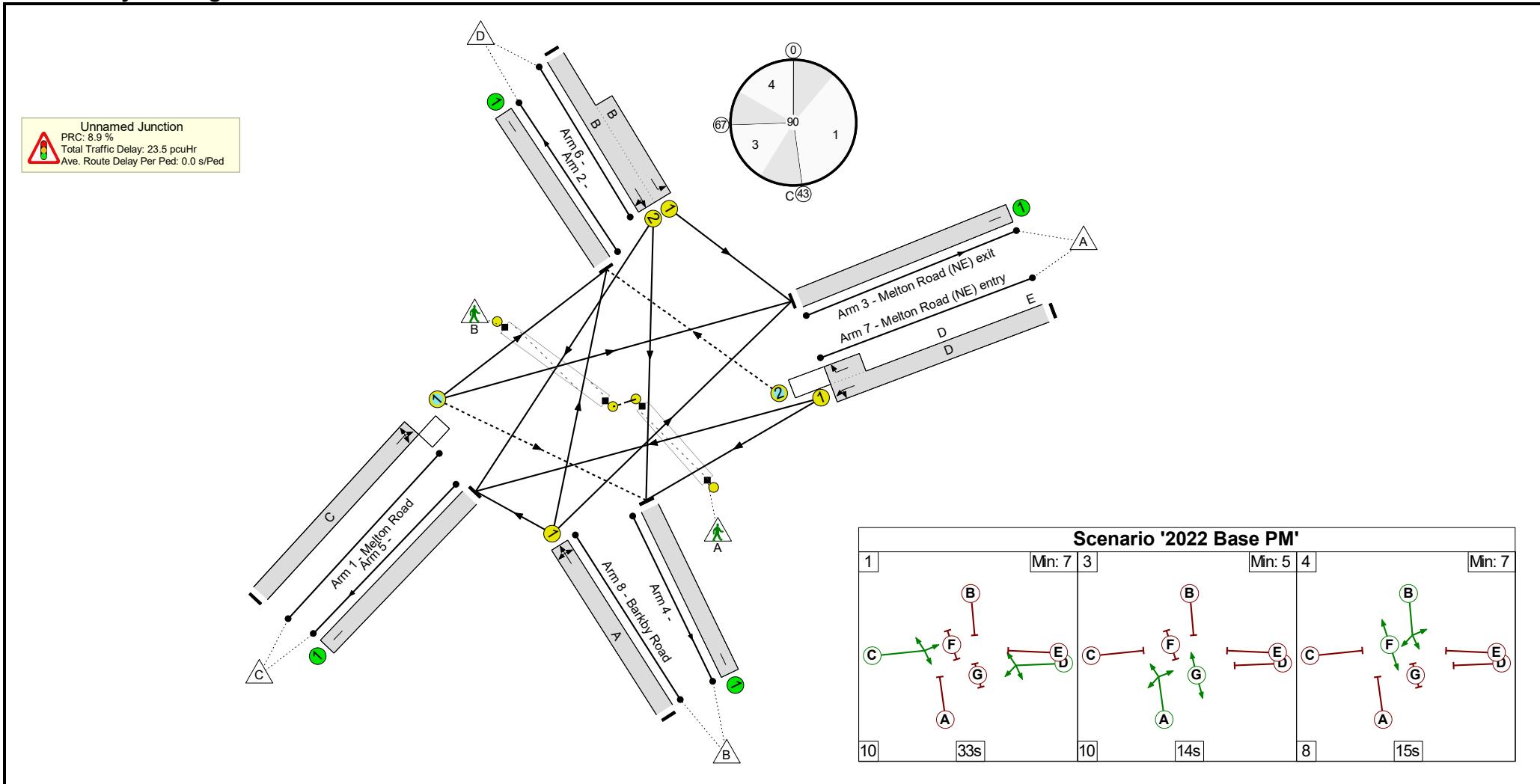
Stage Timings

Stage	1	3	4
Duration	33	14	15
Change Point	0	43	67

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	-	-	N/A	-	-		-	-	-	-	-	-	82.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	82.6%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	35	-	544	1944	739	73.7%
2/1		U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	494	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	20	-	554	1764:1687	325+381	78.6 : 78.6%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	33	0	599	1800:1940	529+211	81.0 : 81.0%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	17	-	287	1737	347	82.6%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	14	-	0	-	11200	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	17	-	0	-	13600	0.0%

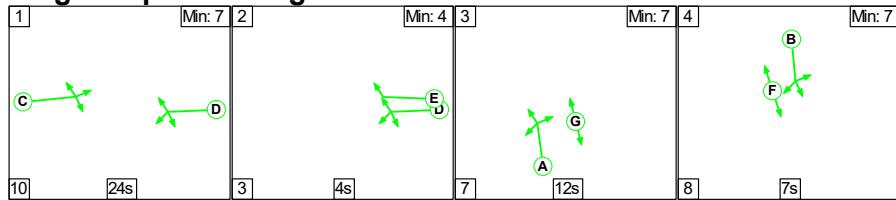
Full Input Data And Results

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	-	-	237	0	19	15.1	7.4	1.0	23.5	-	-	-	-
Unnamed Junction	-	-	237	0	19	15.1	7.4	1.0	23.5	-	-	-	-
1/1	544	544	83	0	2	3.4	1.4	0.3	5.1	33.8	11.3	1.4	12.7
2/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	494	494	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	554	554	-	-	-	4.9	1.8	-	6.6	43.2	6.9	1.8	8.7
7/1+7/2	599	599	154	0	17	4.0	2.1	0.7	6.8	40.9	11.9	2.1	14.0
8/1	287	287	-	-	-	2.8	2.2	-	5.0	62.3	6.9	2.2	9.1
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		8.9 8.9	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		23.53 23.53	Cycle Time (s): 90				

Full Input Data And Results

Scenario 3: '2027 AM' (FG3: '2027 AM', Plan 1: 'Network Control Plan 1')

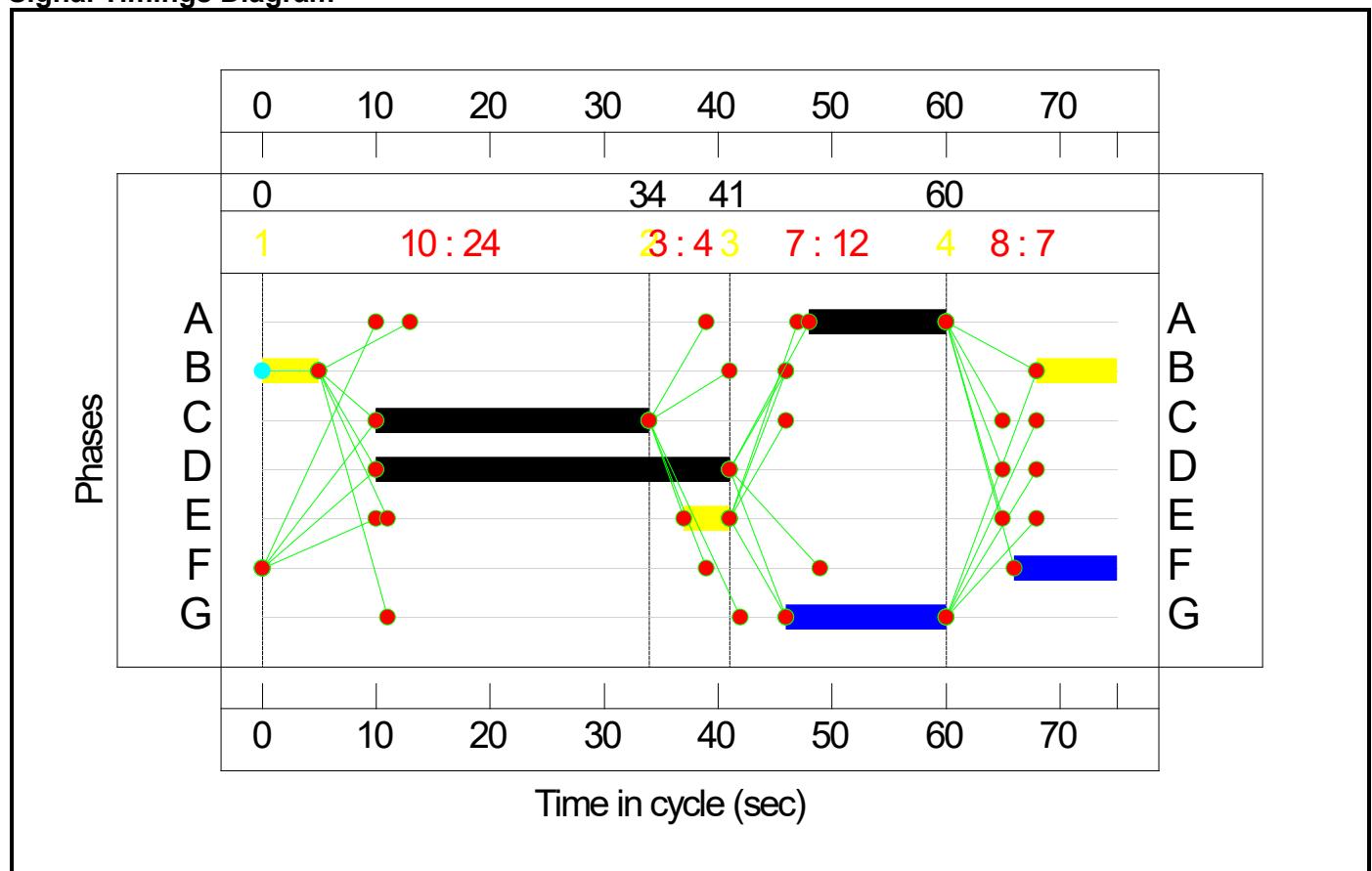
Stage Sequence Diagram



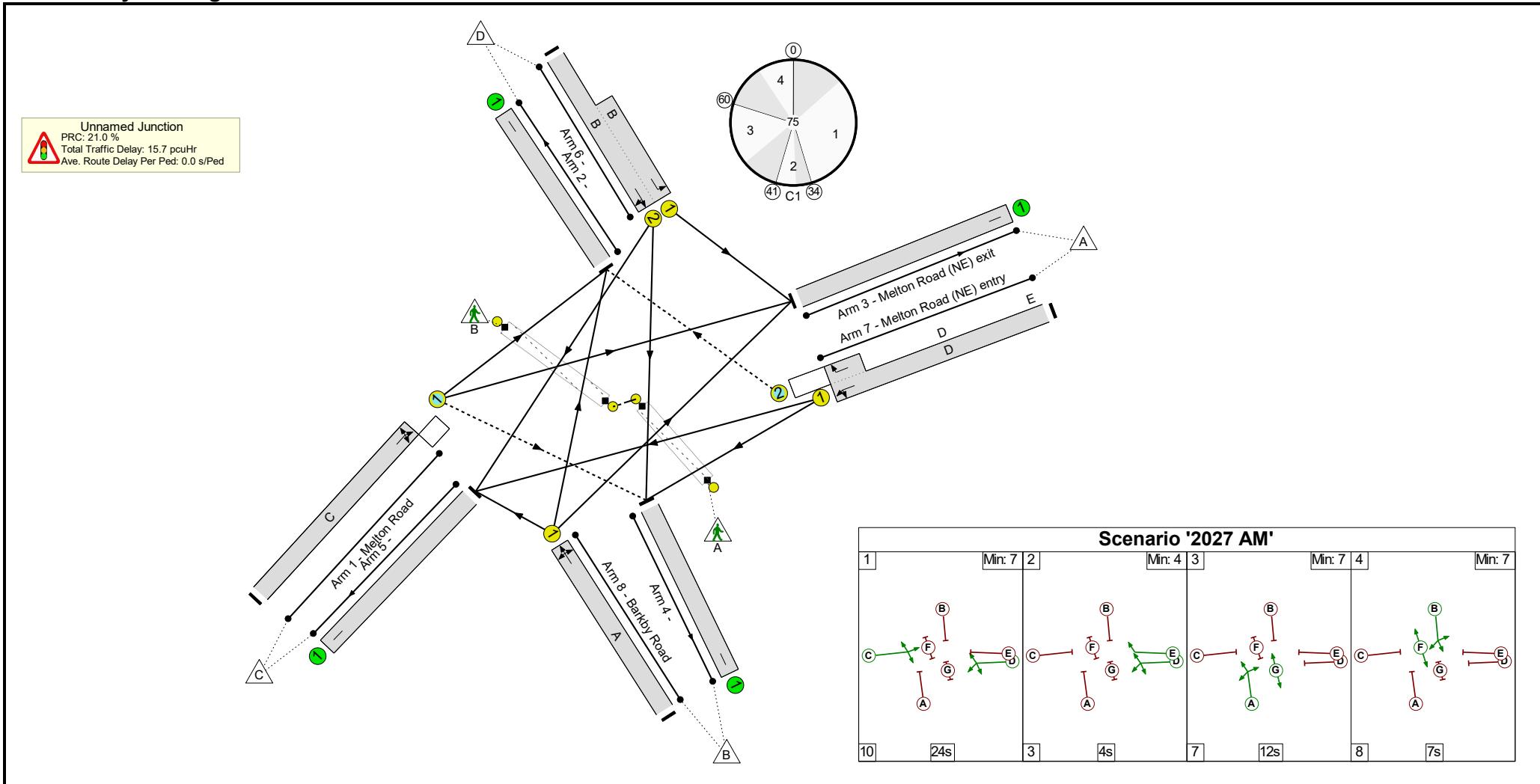
Stage Timings

Stage	1	2	3	4
Duration	24	4	12	7
Change Point	0	34	41	60

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	-	-	N/A	-	-		-	-	-	-	-	-	74.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	74.4%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	24	-	439	1959	653	67.2%
2/1		U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	12	-	406	1764:1687	306+292	69.0 : 66.7%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	31	4	615	1800:1940	621+206	74.4 : 74.4%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	12	-	223	1858	322	69.2%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	14	-	0	-	13440	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	9	-	0	-	8640	0.0%

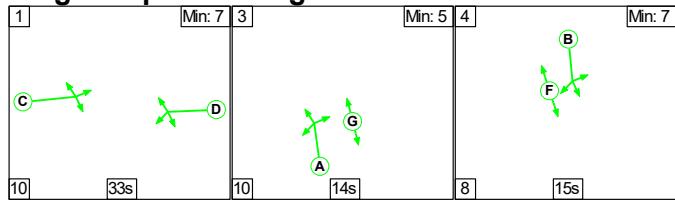
Full Input Data And Results

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	-	-	176	10	6	10.6	4.6	0.5	15.7	-	-	-	-
Unnamed Junction	-	-	176	10	6	10.6	4.6	0.5	15.7	-	-	-	-
1/1	439	439	39	0	0	2.6	1.0	0.1	3.8	30.9	7.8	1.0	8.8
2/1	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	406	406	-	-	-	3.3	1.0	-	4.3	38.3	4.1	1.0	5.1
7/1+7/2	615	615	137	10	6	2.9	1.4	0.4	4.7	27.6	9.4	1.4	10.9
8/1	223	223	-	-	-	1.8	1.1	-	2.9	46.9	4.3	1.1	5.4
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		21.0 21.0	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		15.71 15.71	Cycle Time (s): 75				

Full Input Data And Results

Scenario 4: '2027 PM' (FG4: '2027 PM', Plan 2: 'Network Control Plan 2')

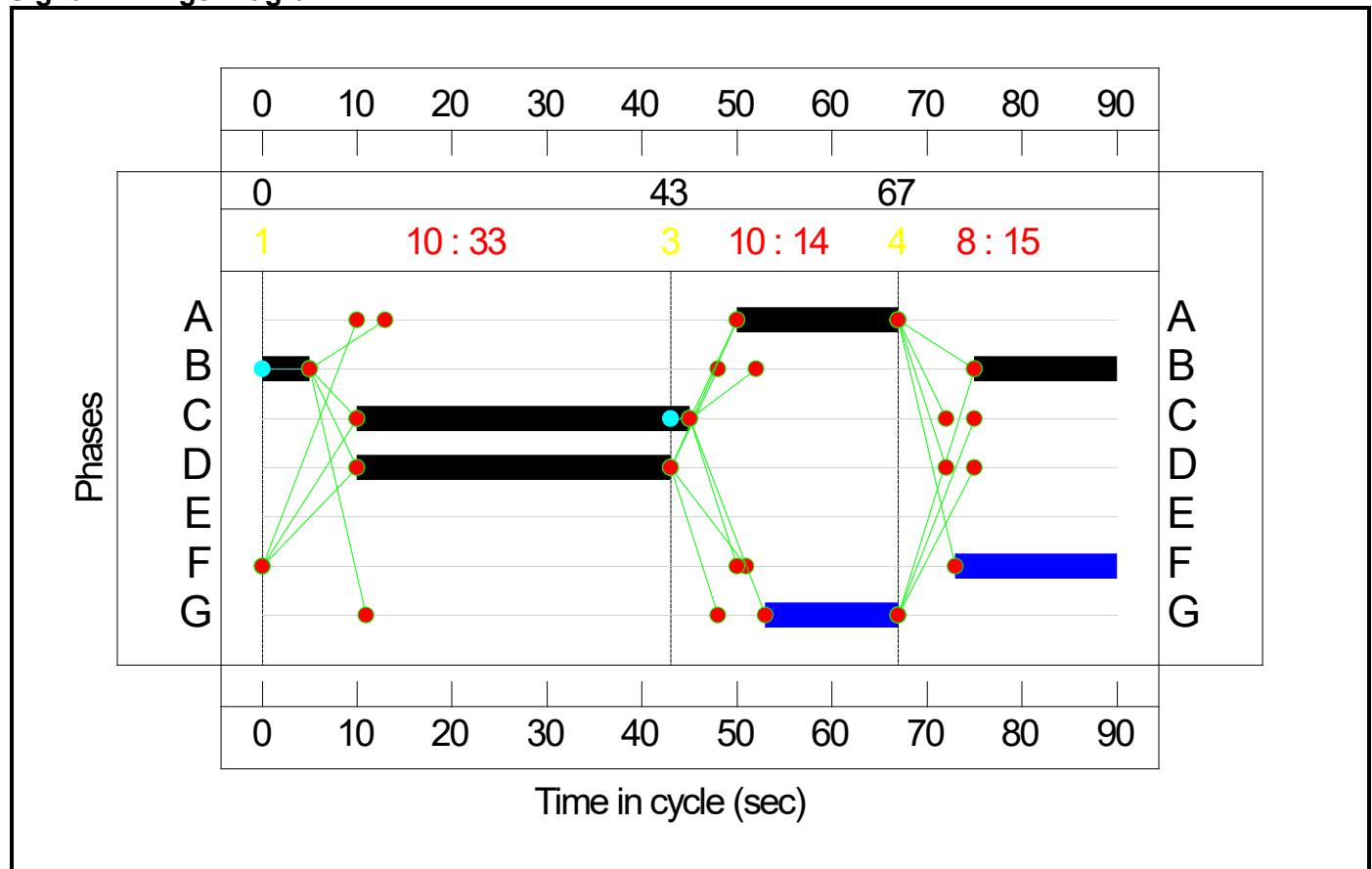
Stage Sequence Diagram



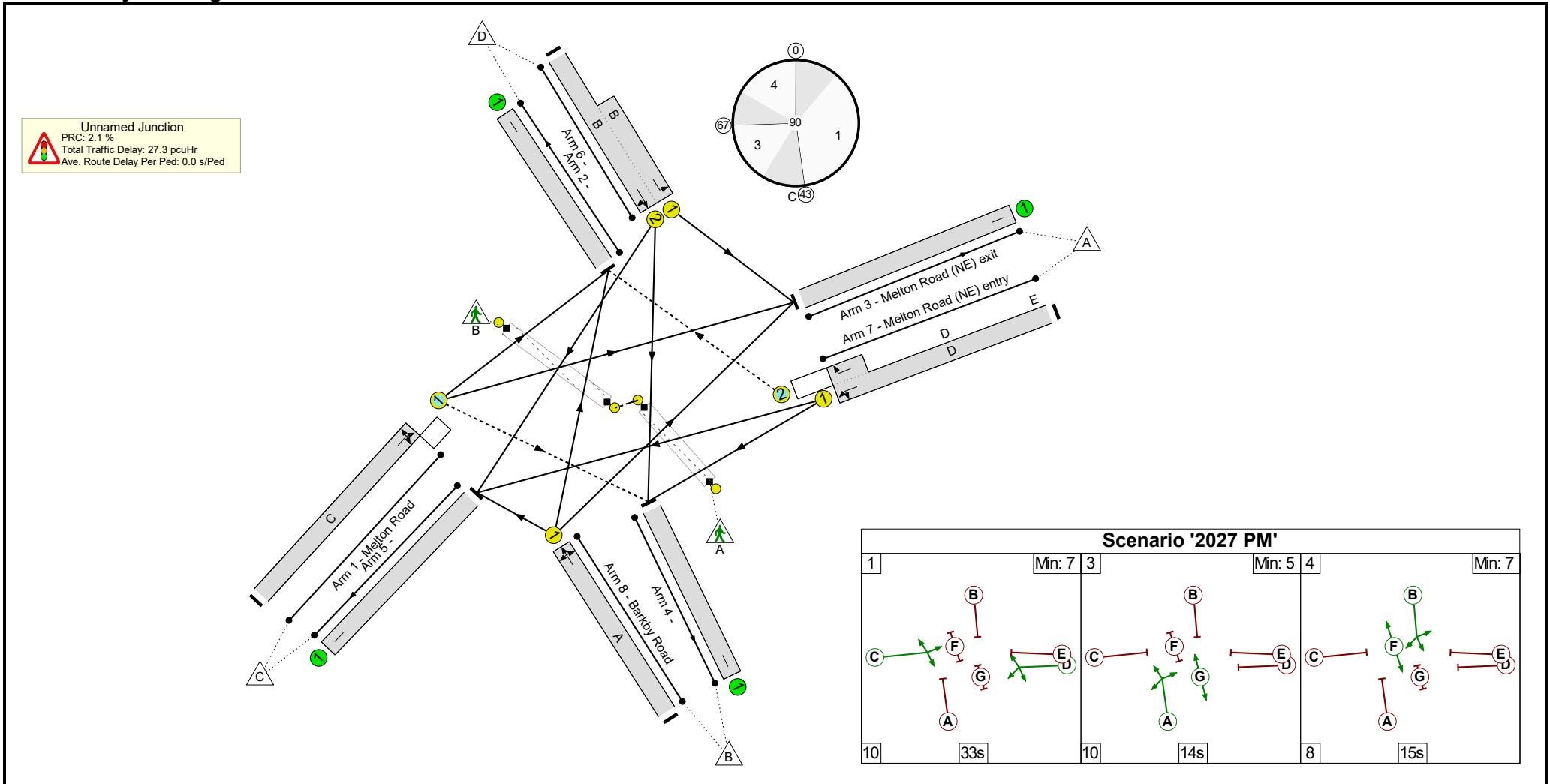
Stage Timings

Stage	1	3	4
Duration	33	14	15
Change Point	0	43	67

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	-	-	N/A	-	-		-	-	-	-	-	-	88.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	88.2%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	35	-	566	1944	708	79.9%
2/1		U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	391	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	20	-	592	1764:1687	341+380	82.1 : 82.1%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	33	0	625	1800:1940	529+211	84.5 : 84.5%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	17	-	307	1741	348	88.2%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	14	-	0	-	11200	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	17	-	0	-	13600	0.0%

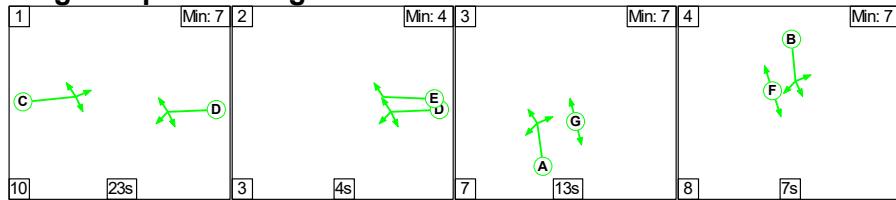
Full Input Data And Results

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	-	-	221	0	45	16.2	10.0	1.2	27.3	-	-	-	-
Unnamed Junction	-	-	221	0	45	16.2	10.0	1.2	27.3	-	-	-	-
1/1	566	566	86	0	2	3.6	1.9	0.4	5.9	37.6	11.9	1.9	13.9
2/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	592	592	-	-	-	5.3	2.2	-	7.5	45.4	7.3	2.2	9.5
7/1+7/2	625	625	135	0	43	4.3	2.6	0.8	7.7	44.4	12.9	2.6	15.5
8/1	307	307	-	-	-	3.0	3.2	-	6.2	72.8	7.4	3.2	10.6
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		2.1 2.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		27.30 27.30	Cycle Time (s): 90				

Full Input Data And Results

Scenario 5: '2027 + Dev AM' (FG5: '2027 with Dev', Plan 1: 'Network Control Plan 1')

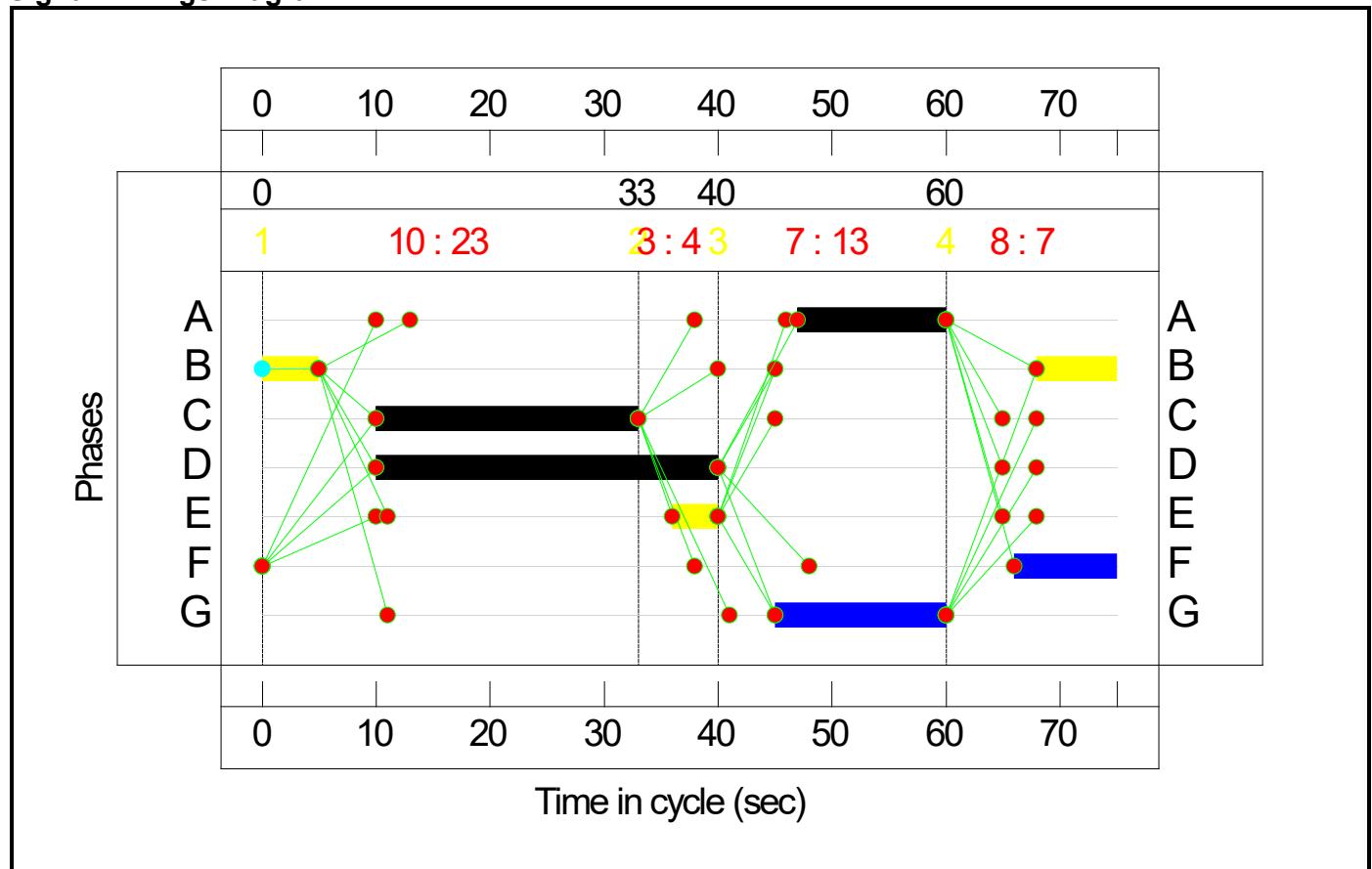
Stage Sequence Diagram



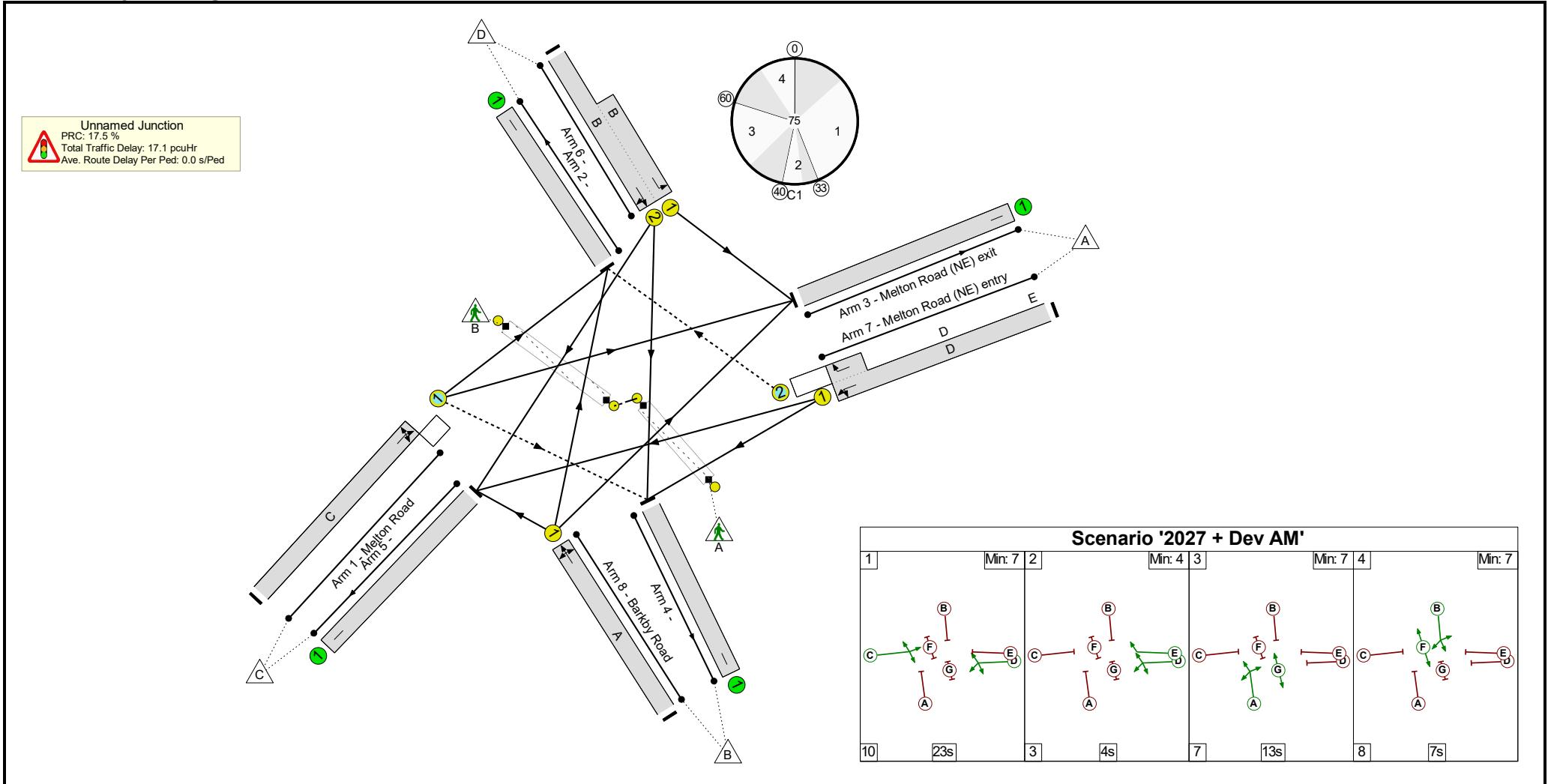
Stage Timings

Stage	1	2	3	4
Duration	23	4	13	7
Change Point	0	33	40	60

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	-	-	N/A	-	-		-	-	-	-	-	-	76.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	76.6%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	23	-	441	1958	627	70.4%
2/1		U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	12	-	420	1764:1687	306+292	73.6 : 66.7%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	30	4	615	1800:1940	603+200	76.6 : 76.6%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	13	-	256	1860	347	73.7%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	15	-	0	-	14400	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	9	-	0	-	8640	0.0%

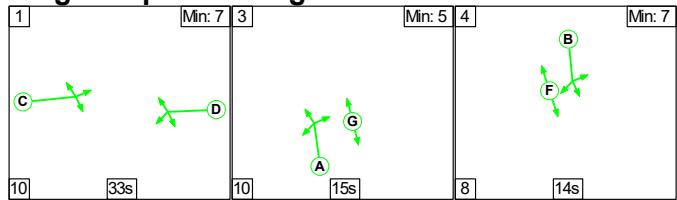
Full Input Data And Results

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	-	-	161	27	6	11.3	5.3	0.5	17.1	-	-	-	-
Unnamed Junction	-	-	161	27	6	11.3	5.3	0.5	17.1	-	-	-	-
1/1	441	441	41	0	0	2.7	1.2	0.1	4.1	33.1	8.0	1.2	9.1
2/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	420	420	-	-	-	3.4	1.2	-	4.6	39.2	4.4	1.2	5.6
7/1+7/2	615	615	120	27	6	3.1	1.6	0.4	5.1	29.6	9.8	1.6	11.4
8/1	256	256	-	-	-	2.0	1.4	-	3.4	47.9	5.0	1.4	6.3
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		17.5 17.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		17.09 17.09	Cycle Time (s): 75				

Full Input Data And Results

Scenario 6: '2027 + Dev PM' (FG6: '2027 with Dev', Plan 2: 'Network Control Plan 2')

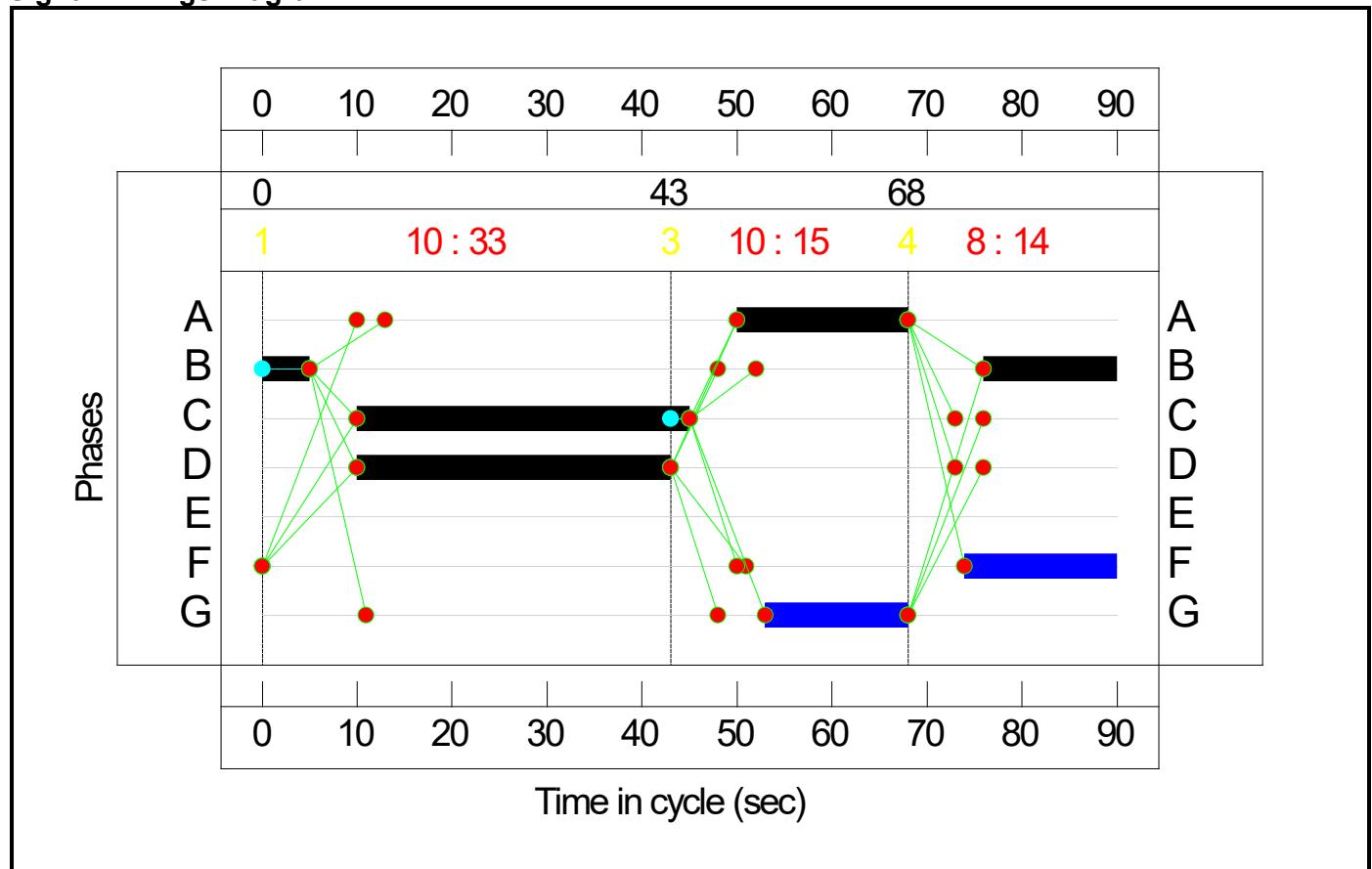
Stage Sequence Diagram



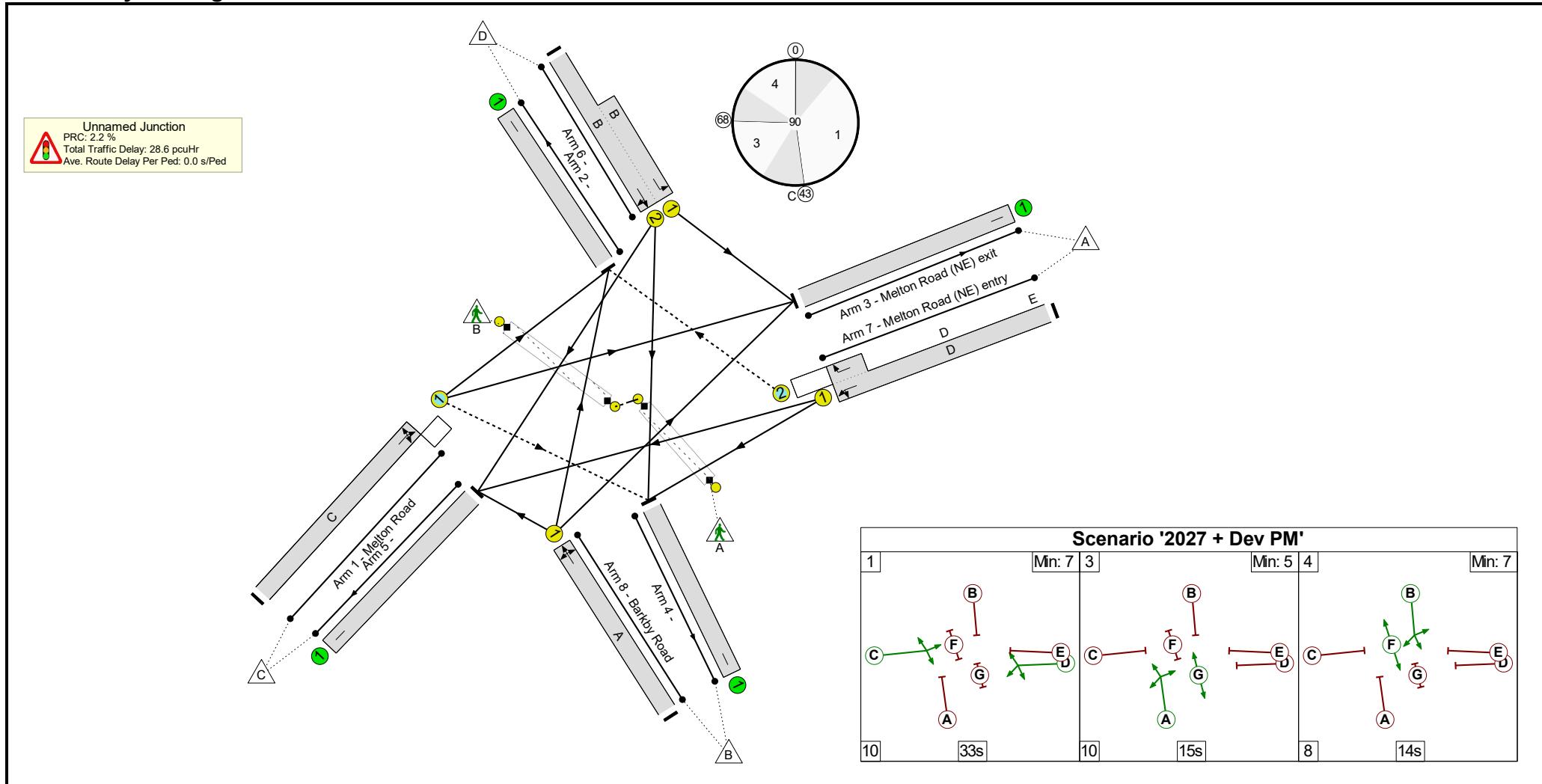
Stage Timings

Stage	1	3	4
Duration	33	15	14
Change Point	0	43	68

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	-	-	N/A	-	-		-	-	-	-	-	-	88.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	88.0%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	35	-	569	1943	694	82.0%
2/1		U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	516	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	19	-	619	1764:1687	364+370	84.4 : 84.4%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	33	0	625	1800:1940	529+209	84.5 : 85.0%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	18	-	325	1749	369	88.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	15	-	0	-	12000	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	16	-	0	-	12800	0.0%

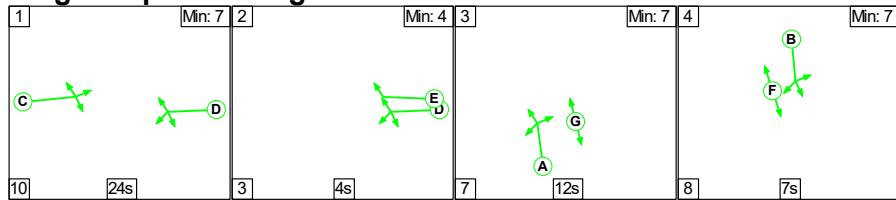
Full Input Data And Results

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	-	-	219	0	50	16.8	10.6	1.2	28.6	-	-	-	-
Unnamed Junction	-	-	219	0	50	16.8	10.6	1.2	28.6	-	-	-	-
1/1	569	569	89	0	2	3.6	2.2	0.4	6.2	39.4	12.2	2.2	14.4
2/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	516	516	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	619	619	-	-	-	5.7	2.6	-	8.3	48.2	7.4	2.6	10.0
7/1+7/2	625	625	130	0	48	4.3	2.6	0.8	7.8	44.6	12.9	2.6	15.5
8/1	325	325	-	-	-	3.1	3.2	-	6.3	69.9	7.9	3.2	11.1
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		2.2 2.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		28.58 28.58	Cycle Time (s): 90				

Full Input Data And Results

Scenario 7: '2037 AM' (FG7: '2037 AM', Plan 1: 'Network Control Plan 1')

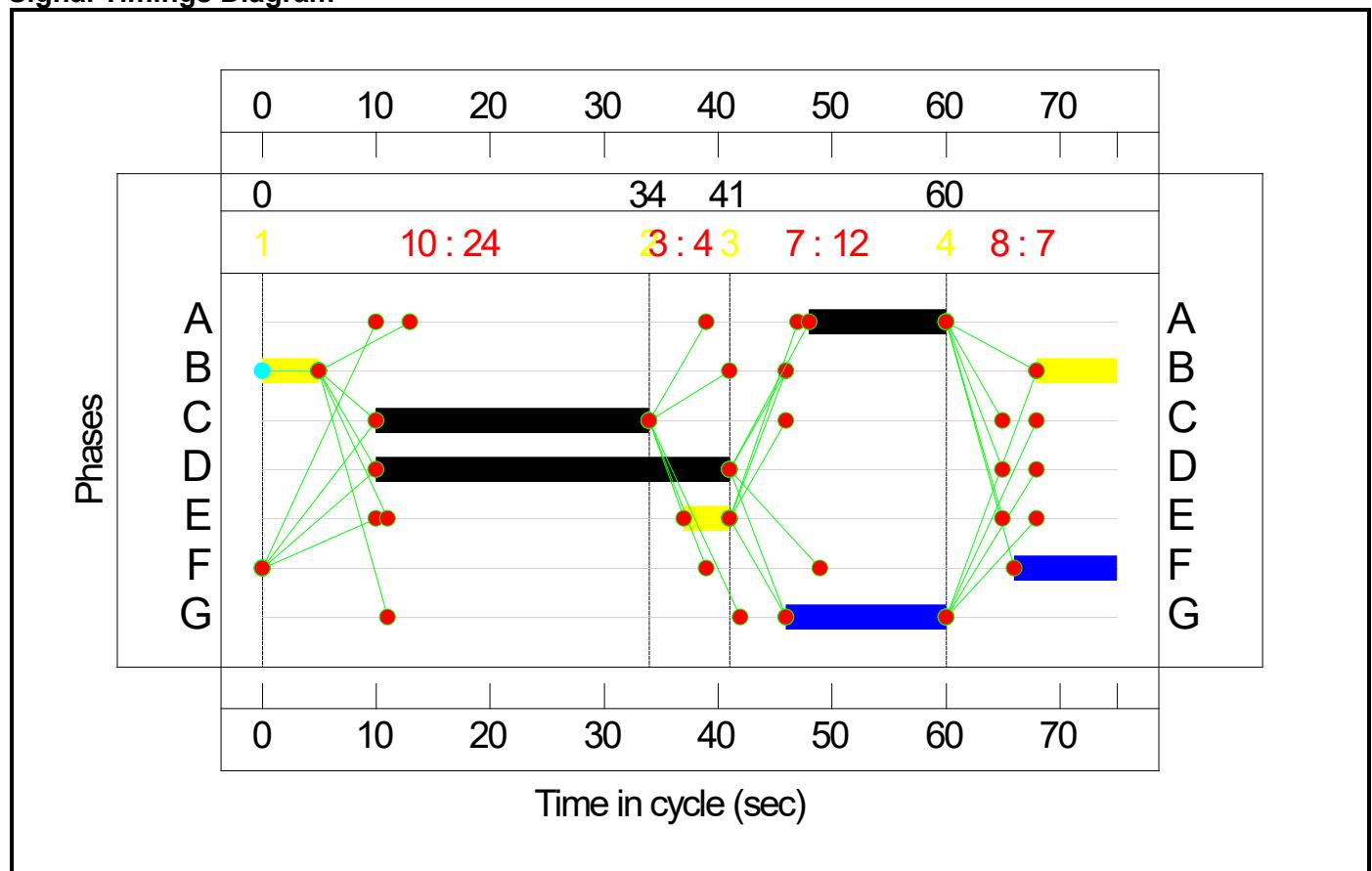
Stage Sequence Diagram



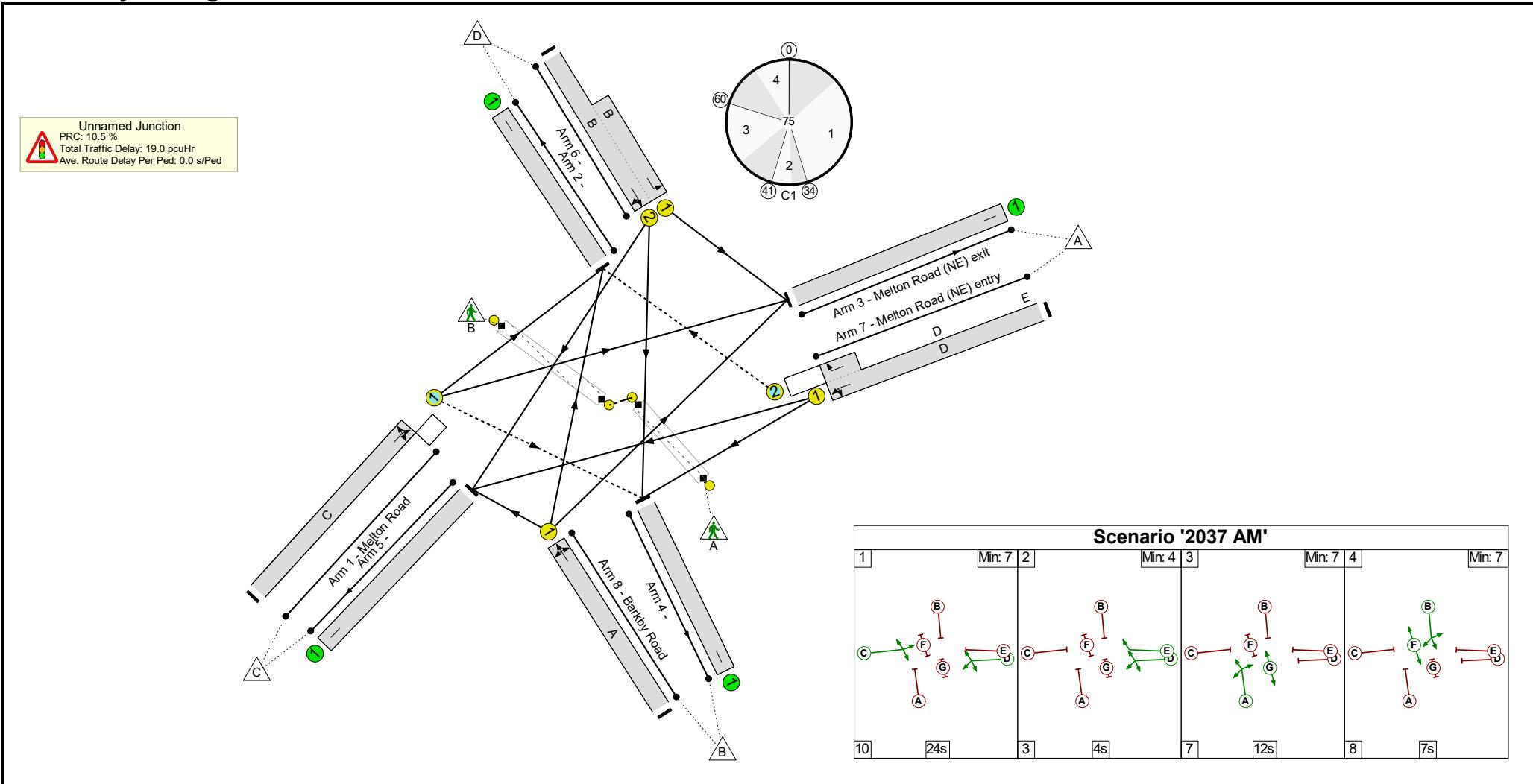
Stage Timings

Stage	1	2	3	4
Duration	24	4	12	7
Change Point	0	34	41	60

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	-	-	N/A	-	-		-	-	-	-	-	-	81.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.5%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	24	-	482	1959	653	73.8%
2/1		U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	12	-	443	1764:1687	306+292	75.2 : 72.8%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	31	4	674	1800:1940	621+206	81.5 : 81.5%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	12	-	244	1858	322	75.8%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	14	-	0	-	13440	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	9	-	0	-	8640	0.0%

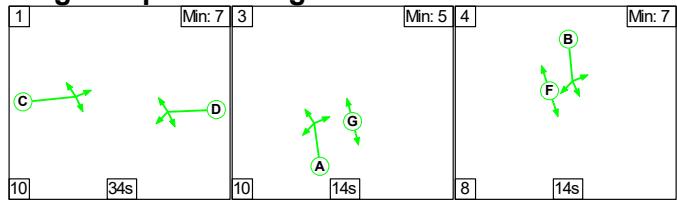
Full Input Data And Results

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	-	-	152	52	7	11.9	6.4	0.6	19.0	-	-	-	-
Unnamed Junction	-	-	152	52	7	11.9	6.4	0.6	19.0	-	-	-	-
1/1	482	482	43	0	0	3.0	1.4	0.2	4.5	33.7	8.8	1.4	10.2
2/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	533	533	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	443	443	-	-	-	3.6	1.4	-	5.0	40.8	4.5	1.4	5.9
7/1+7/2	674	674	109	52	7	3.4	2.1	0.5	6.0	31.9	11.2	2.1	13.3
8/1	244	244	-	-	-	2.0	1.5	-	3.5	51.7	4.8	1.5	6.3
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		10.5 10.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		19.01 19.01	Cycle Time (s): 75				

Full Input Data And Results

Scenario 8: '2037 PM' (FG8: '2037 PM', Plan 2: 'Network Control Plan 2')

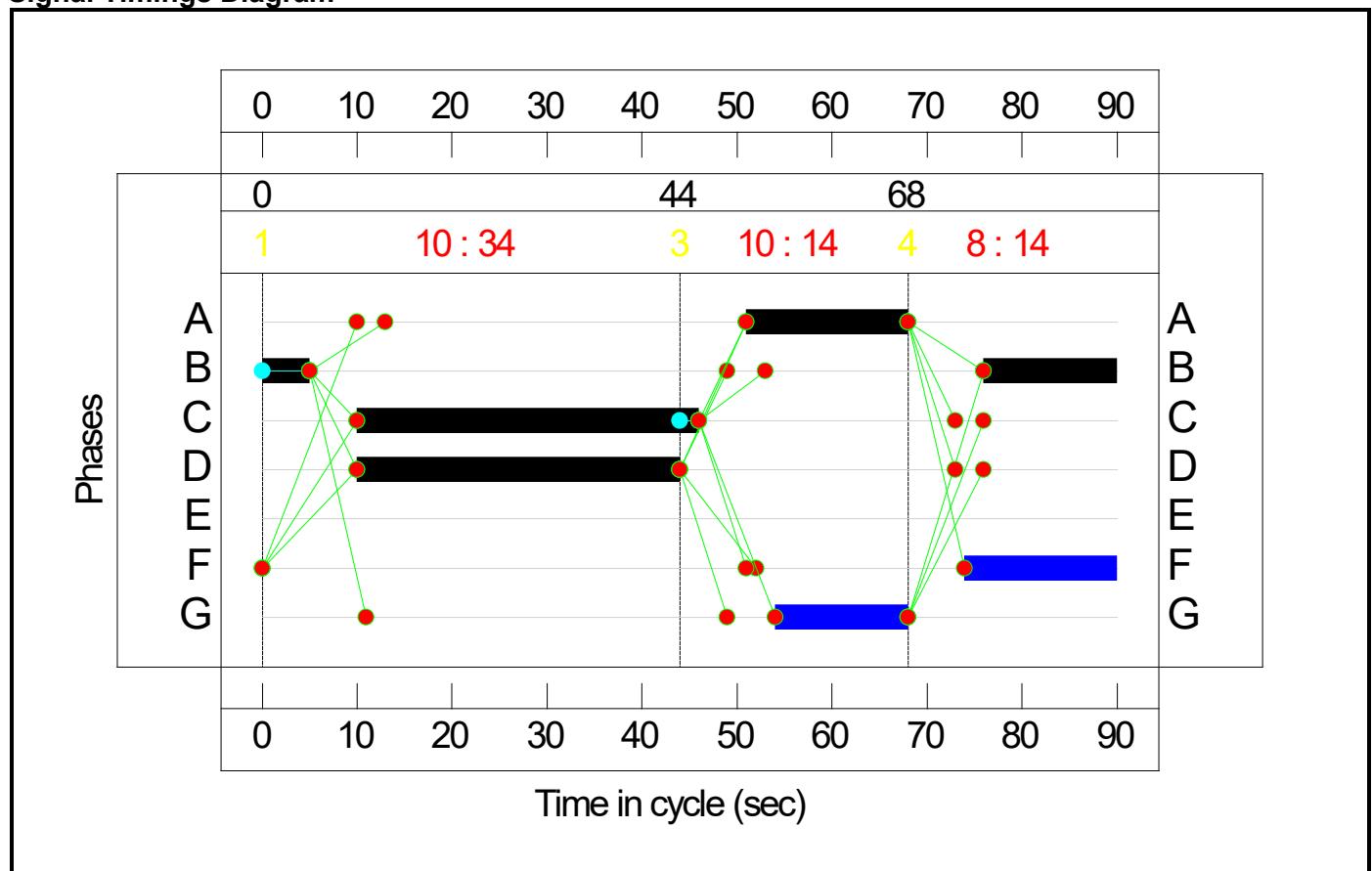
Stage Sequence Diagram



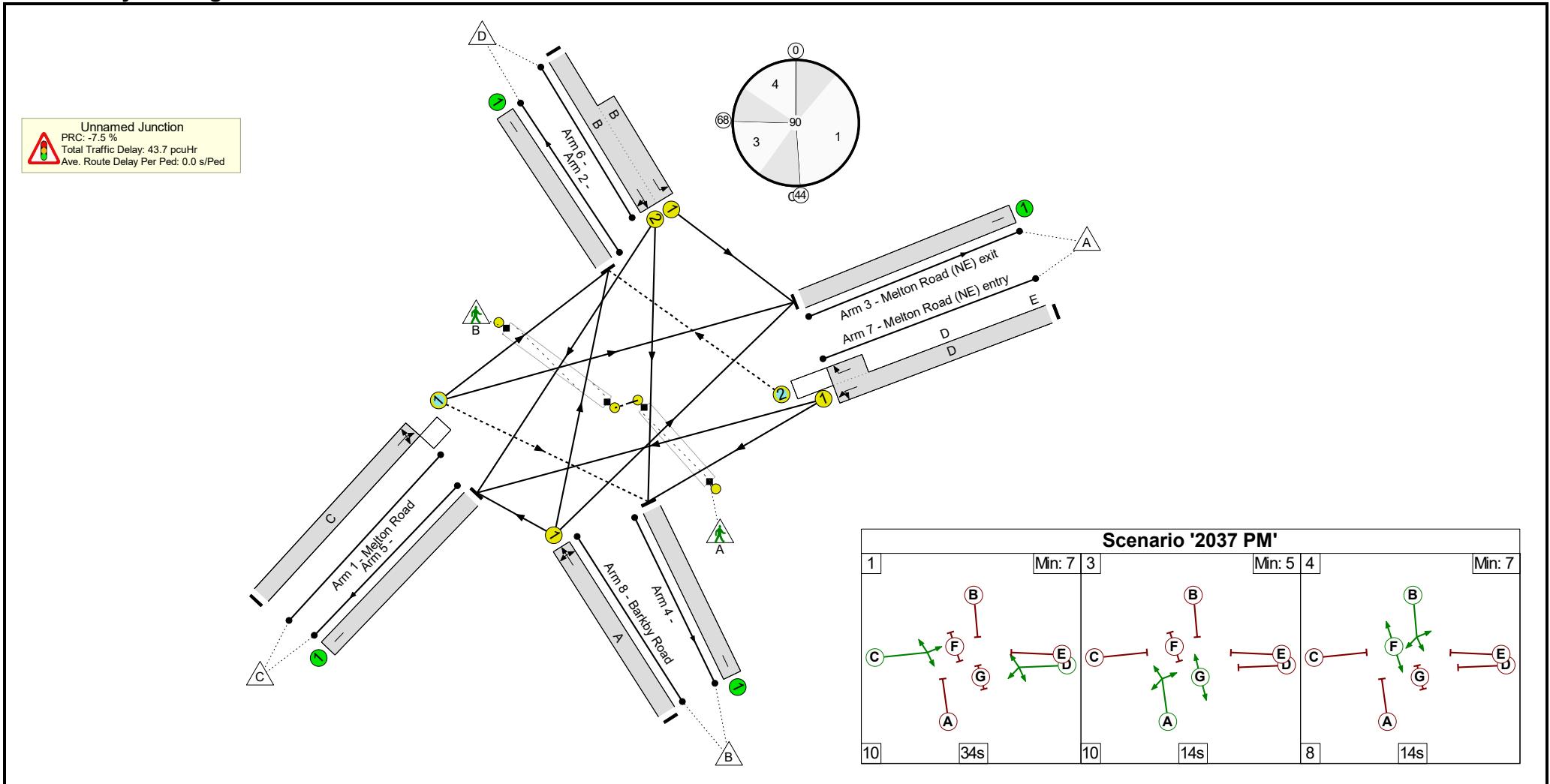
Stage Timings

Stage	1	3	4
Duration	34	14	14
Change Point	0	44	68

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	-	-	N/A	-	-		-	-	-	-	-	-	96.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	96.8%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	36	-	622	1944	645	96.4%
2/1		U	N/A	N/A	-		-	-	-	458	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	841	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	566	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	19	-	648	1764:1687	331+370	92.4 : 92.4%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	34	0	686	1800:1940	544+216	90.3 : 90.3%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	17	-	337	1741	348	96.8%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	14	-	0	-	11200	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	16	-	0	-	12800	0.0%

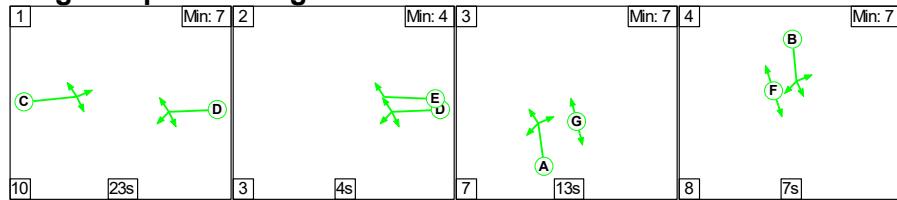
Full Input Data And Results

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	-	-	169	0	123	18.3	24.1	1.4	43.7	-	-	-	-
Unnamed Junction	-	-	169	0	123	18.3	24.1	1.4	43.7	-	-	-	-
1/1	622	622	59	0	38	4.1	8.0	0.5	12.5	72.6	15.2	8.0	23.2
2/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	648	648	-	-	-	6.0	5.1	-	11.1	61.9	8.3	5.1	13.4
7/1+7/2	686	686	110	0	85	4.8	4.2	0.9	9.9	51.8	14.8	4.2	19.0
8/1	337	337	-	-	-	3.3	6.8	-	10.1	108.3	8.3	6.8	15.1
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		-7.5 -7.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		43.70 43.70	Cycle Time (s): 90				

Full Input Data And Results

Scenario 9: '2037 + Dev AM' (FG9: '2037+ Dev AM', Plan 1: 'Network Control Plan 1')

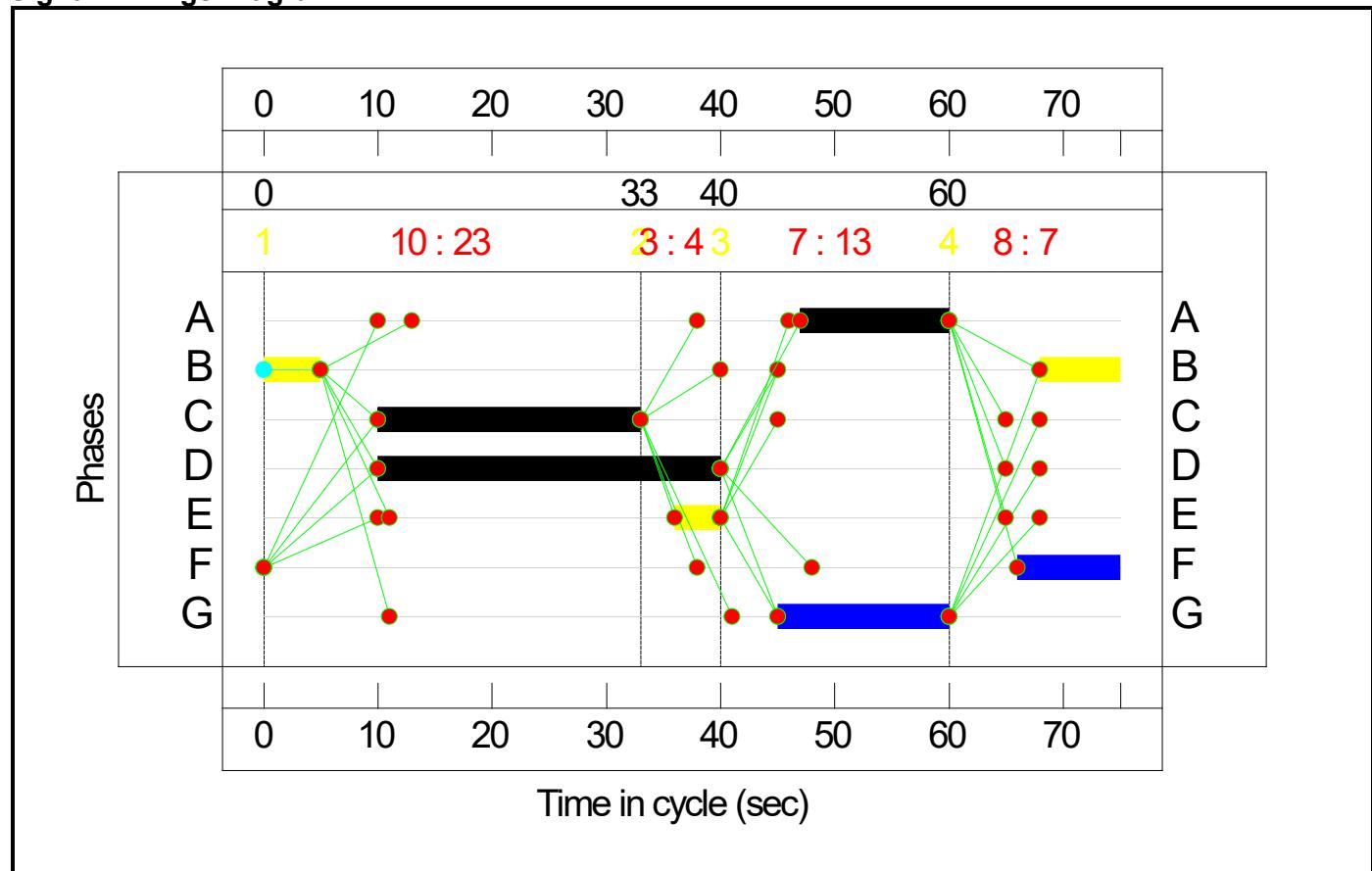
Stage Sequence Diagram



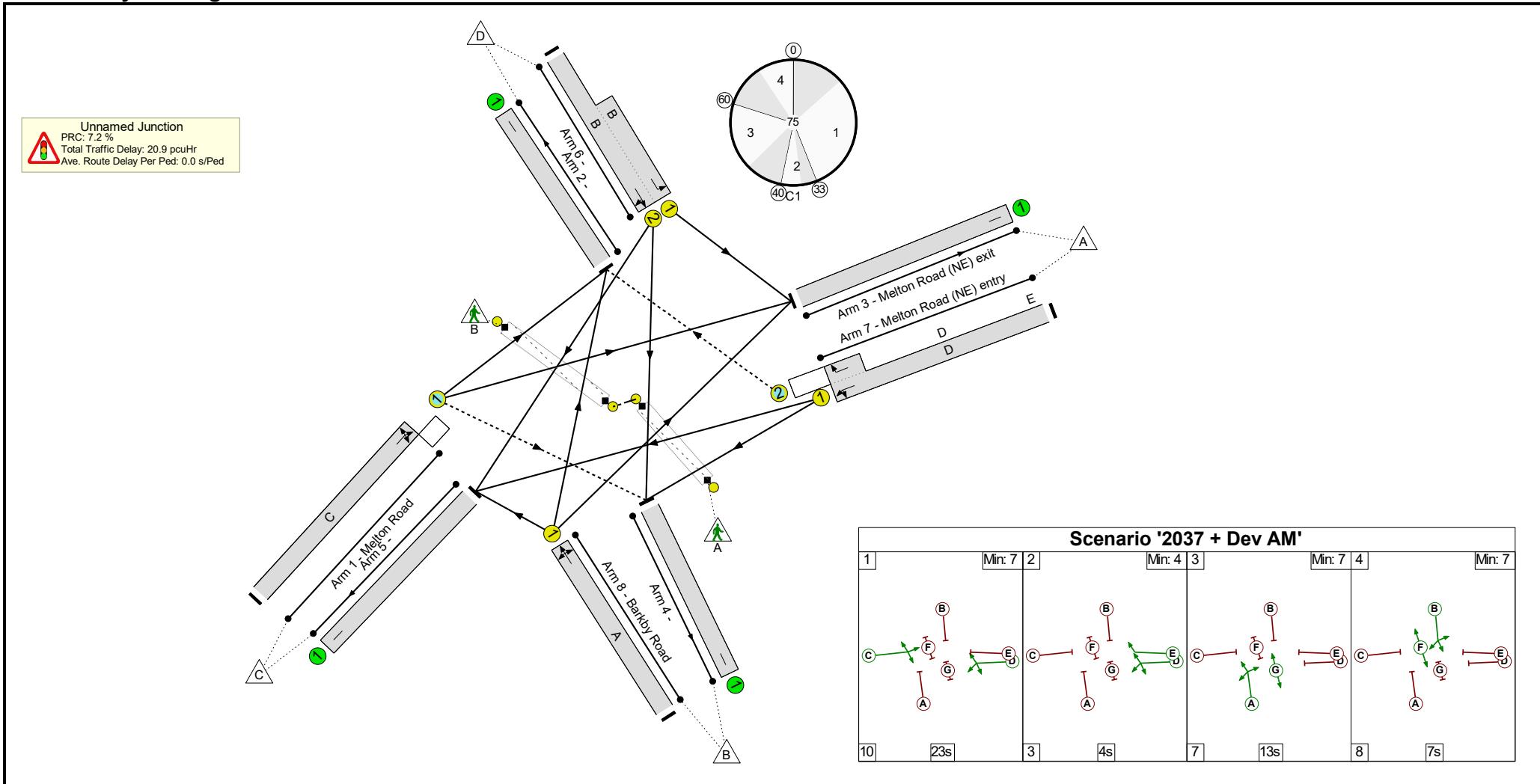
Stage Timings

Stage	1	2	3	4
Duration	23	4	13	7
Change Point	0	33	40	60

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	-	-	N/A	-	-		-	-	-	-	-	-	84.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.0%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	23	-	484	1958	627	77.2%
2/1		U	N/A	N/A	-		-	-	-	456	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	262	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	536	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	12	-	457	1764:1687	306+292	79.8 : 72.8%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	30	4	674	1800:1940	603+200	84.0 : 84.0%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	13	-	276	1859	347	79.5%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	15	-	0	-	14400	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	9	-	0	-	8640	0.0%

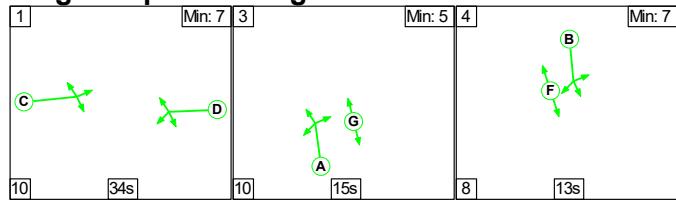
Full Input Data And Results

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	-	-	135	72	7	12.6	7.6	0.7	20.9	-	-	-	-
Unnamed Junction	-	-	135	72	7	12.6	7.6	0.7	20.9	-	-	-	-
1/1	484	484	45	0	0	3.1	1.7	0.2	4.9	36.8	9.0	1.7	10.7
2/1	456	456	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	536	536	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	457	457	-	-	-	3.8	1.6	-	5.3	42.0	4.8	1.6	6.4
7/1+7/2	674	674	90	72	7	3.5	2.5	0.5	6.5	34.8	11.4	2.5	13.9
8/1	276	276	-	-	-	2.2	1.8	-	4.1	53.2	5.4	1.8	7.3
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): PRC Over All Lanes (%):		7.2 7.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		20.88 20.88	Cycle Time (s): 75				

Full Input Data And Results

Scenario 10: '2037 + Dev PM' (FG10: '2037+ Dev PM', Plan 2: 'Network Control Plan 2')

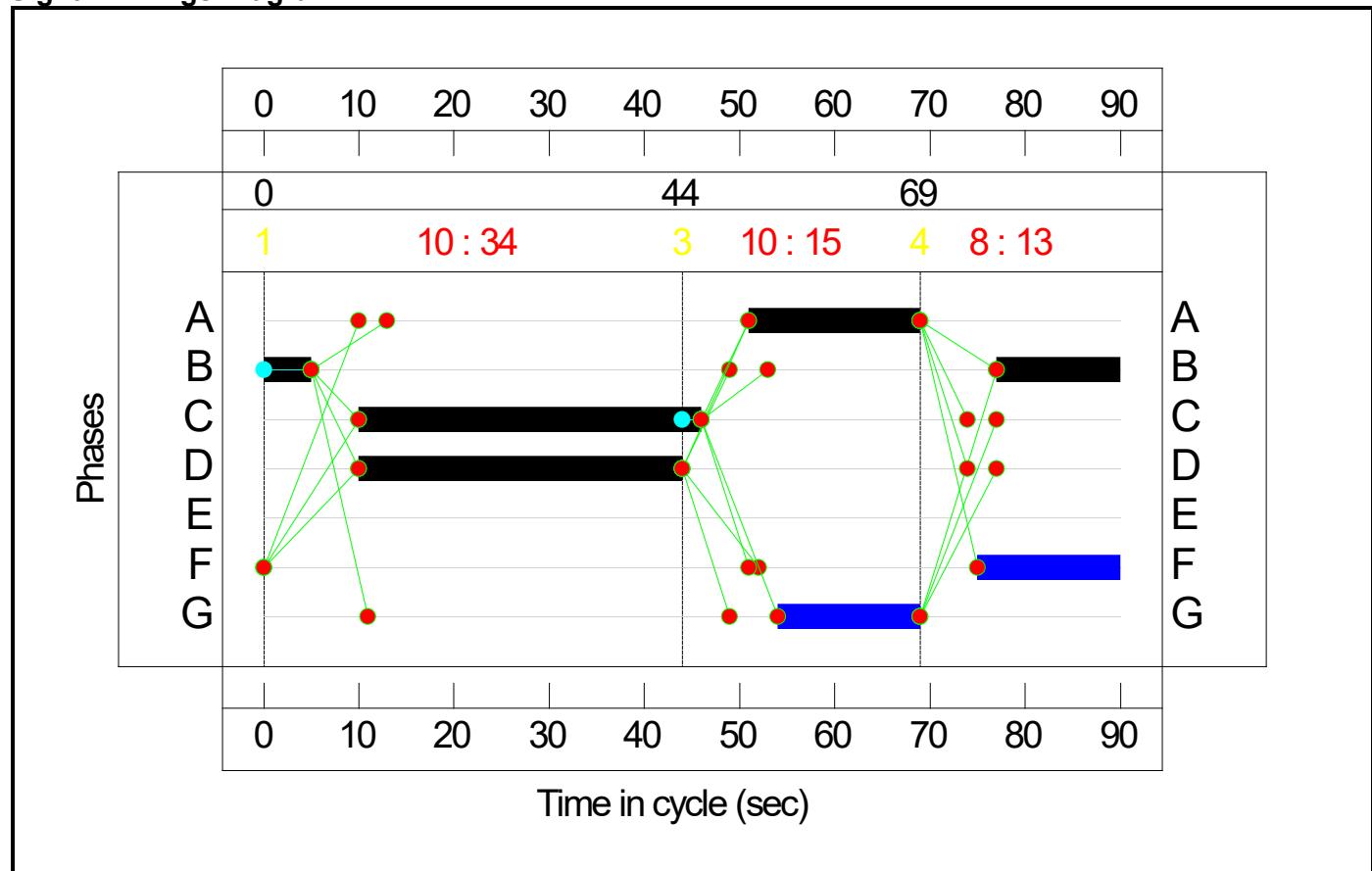
Stage Sequence Diagram



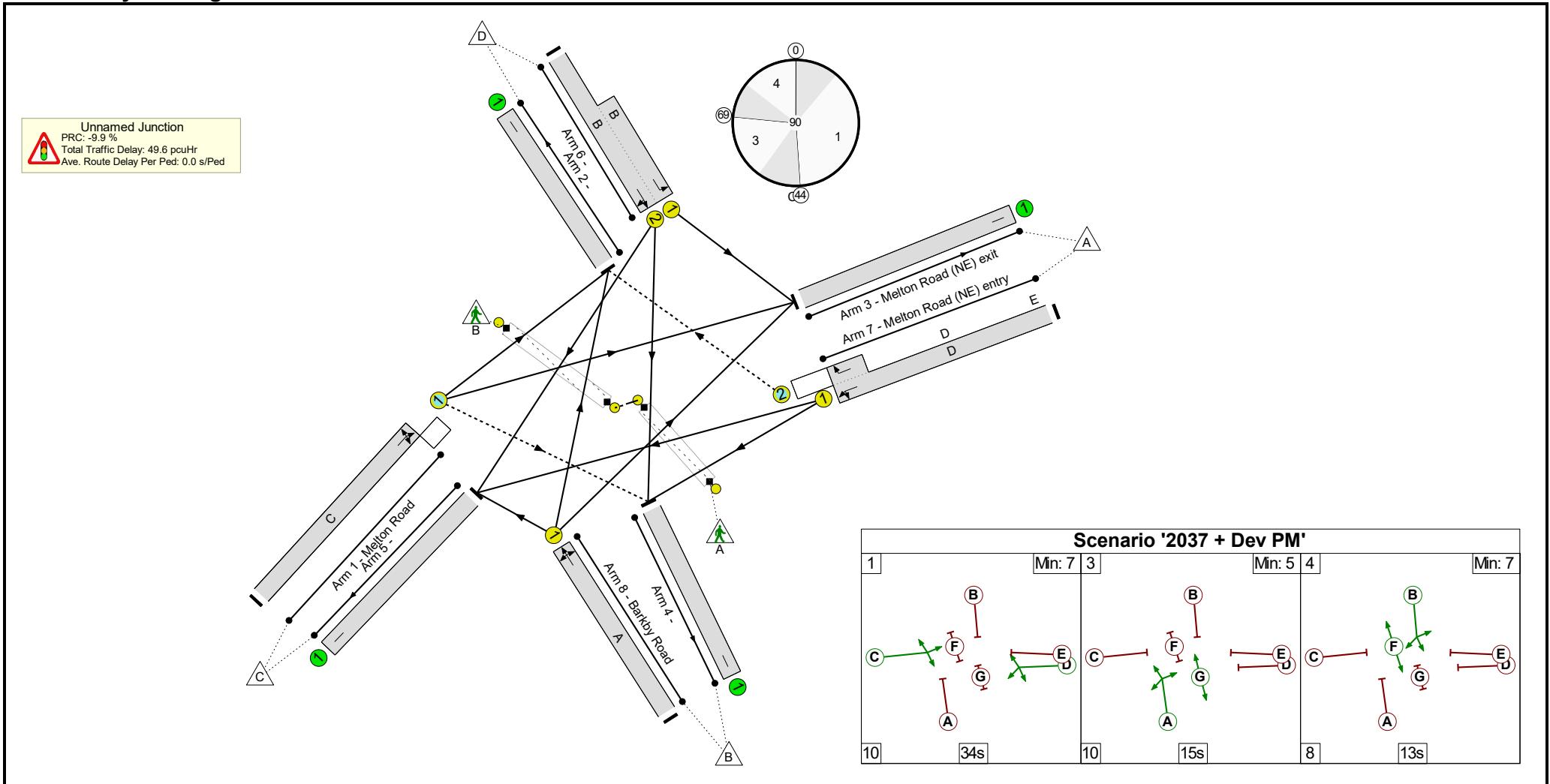
Stage Timings

Stage	1	3	4
Duration	34	15	13
Change Point	0	44	69

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	-	-	N/A	-	-		-	-	-	-	-	-	98.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	98.9%
1/1	Melton Road Left Ahead Right	O	N/A	N/A	C		1	36	-	625	1943	632	98.9%
2/1		U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
3/1	Melton Road (NE) exit	U	N/A	N/A	-		-	-	-	841	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	458	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	567	Inf	Inf	0.0%
6/2+6/1	Left Ahead Right	U	N/A	N/A	B		1	18	-	675	1764:1687	347+356	96.0 : 96.0%
7/1+7/2	Melton Road (NE) entry Right Left Ahead	U+O	N/A	N/A	D	E	1	34	0	686	1800:1940	544+216	90.3 : 90.3%
8/1	Barkby Road Ahead Right Left	U	N/A	N/A	A		1	18	-	354	1747	369	96.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		1	15	-	0	-	12000	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	15	-	0	-	12000	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	-	-	168	0	127	19.0	29.3	1.3	49.6	-	-	-	-
Unnamed Junction	-	-	168	0	127	19.0	29.3	1.3	49.6	-	-	-	-
1/1	625	625	59	0	41	4.2	10.9	0.5	15.6	89.9	15.5	10.9	26.4
2/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	567	567	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2+6/1	675	675	-	-	-	6.5	7.8	-	14.3	76.3	8.5	7.8	16.2
7/1+7/2	686	686	109	0	86	4.8	4.2	0.8	9.8	51.6	14.8	4.2	19.0
8/1	354	354	-	-	-	3.5	6.4	-	9.9	100.3	8.8	6.4	15.2
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1			PRC for Signalled Lanes (%): -9.9 PRC Over All Lanes (%): -9.9		Total Delay for Signalled Lanes (pcuHr): 49.60 Total Delay Over All Lanes(pcuHr): 49.60		Cycle Time (s): 90						



Appendix D



Stage 1 Road Safety Audit

Melton Road-High Street Junction, Syston

Proposed Traffic Signals

Date: 30/05/2023

Report produced for: Taylor Wimpey

Report requested by: DTA Transport Planning Consultants

On behalf of: Leicestershire County Council

Report prepared by: Elaine Bingham, Road Safety Consulting Ltd

Reference: RSC/EB/DL/22143

Document Control Sheet

Project Title Melton Road-High Street Junction, Syston
 Proposed Traffic Signals

Report Title Stage 1 Road Safety Audit
 Reference: RSC/EB/DL/22143

Revision -

Status Final

Control Date 30/05/2023

Record of Issue

Issue	Author	Date	Check	Date	Authorised	Date
Final	EB	26/05/23	DL	26/05/23	EB	30/05/23

Distribution

Organisation	Contact	Copies
DTA Transport Planning Consultants	Simon Tucker	Ecopy

1. Introduction

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the proposed improvements to the Melton Road-High Street junction in association with a residential development on land north of Barkby Road in Syston. The Audit was carried out during May 2023.
- 1.2. This Road Safety Audit was produced for (client organisation): Taylor Wimpey, requested by (design organisation): DTA Transport Planning Consultants, on behalf of (overseeing organisation): Leicestershire County Council.
- 1.3. The Audit Team membership was as follows:

Audit Team Leader
Elaine Bingham
B Eng (Hons), MCIHT, MSoRSA
Certificate of Competence (Road Safety Audit)

Audit Team Member
Duncan Lord,
IEng, FIHE, Certificate of Competence (Road Safety Audit)
- 1.4. The audit took place at the offices of Road Safety Consulting Ltd between 23rd and 30th May 2023. The audit was undertaken in accordance with the email instruction from Simon Tucker at DTA Transport Planning Consultants. The report has been prepared with reference to DMRB – GG 119 – Road Safety Audit, with exceptions set out in paragraph 2.4
- 1.5. The Audit Team visited the site together on the 23rd May 2023 at 2.00pm. Weather at the time of the audit was sunny and dry. The road surface was dry. Traffic flows were moderate. Pedestrian activity in the area was moderate including pedestrians and a few cyclists were observed.
- 1.6. The audit comprised an examination of the information provided by the Design Organisation and listed in Appendix 1.
- 1.7. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.8. All comments and recommendations are referenced to the design drawing and the locations have been indicated on plans in Appendix 2.

2. Items Considered

2.1. Scheme Proposals

- 2.1.1. The proposed residential development consists of up to 196 dwellings on land on the northern side of Barkby Lane to the east of Empingham Drive.
- 2.1.2. The proposed improvements to the Melton Road-High Street junction consists of:
 - Converting the existing mini roundabout junction to a traffic signal controlled junction with uncontrolled crossing facilities on all 4 approaches;
 - Removing the zebra crossing on Melton Road and providing a controlled crossing within the traffic signal arrangement; and
 - Removing the Pelican crossing on Melton Road
- 2.1.3. The proposals are shown on DTA drawing 20060-03

2.2. Information Provided to the Audit Team

- 2.2.1. Information that has been provided to the Audit Team, for the purpose of this audit, is as outlined within Appendix 1 of this report.

2.3. Departures from Standards (Design)

- 2.3.1. The Audit Team has not been advised of any Departures from Standard

2.4. Departures from Standards (Road Safety Audit)

- 2.4.1. This Road Safety Audit has been produced, with reference to DMRB – GG 119 – Road Safety Audit with the following exception.
 - A formally approved Road Safety Audit brief has not been provided by Leicestershire County Council to the Audit Team, however the Audit Team received a supporting email with relevant background data and information, and therefore did not consider that the lack of a formal brief would compromise the production of a Road Safety Audit for these proposals.

3. Items Raised at Previous Road Safety Audits

- 3.1. The Audit Team is not aware of any previous Road Safety Audits being carried on these proposals.

4. Items Raised by this Stage 1 Road Safety Audit

4.1. Walking, Cycling & Horse Riding

4.1.1. Problem

Location: General

Summary: Risk of vulnerable pedestrian collisions with vehicles

The junction falls within the shopping area in Syston, where pedestrian movements and the need to cross at the junction is likely to be high.

The proposal removes the existing staggered zebra crossing and Pelican crossing on Melton Road and replaces them with uncontrolled pedestrian facilities on all arms of the junction and a staggered controlled crossing within the centre of the junction across Melton Road.

A lack of formal facilities requires pedestrians to judge for themselves when to cross while vehicles are stopped at the stop lines, which pedestrians particularly visually impaired, young pedestrians, elderly pedestrians or those with mentally impairments may find it difficult to judge and this may lead to them stepping out into the path of a turning vehicle and being hit and injured.

The staging arrangement of the traffic signals provides little opportunity for pedestrians to cross Barkby Road arm of junction and the size of pedestrian refuge island on the High Street is too narrow to allow pedestrians particularly those with pushchairs, wheelchairs or mobility scooters to shelter whilst they wait to cross.

Recommendation:

It is recommended that appropriate pedestrian facilities should be provided on all arms of the junction, measures may include but not limited to providing a full pedestrian stage, or suitable size pedestrian refuge islands (preferably 2m or 3m wide) to allow walk with traffic.

4.1.2. Problem

Location: High Street and Melton Road(E)
approaches

Summary: Risk of overshooting vehicles
colliding with pedestrians
leading to pedestrian injuries

The short distance between the stop line and pedestrian crossing points on the High Street and Melton Road(E) approaches may increase the risk of vehicles colliding with pedestrians if the overshoot the stop line. In addition drivers of large vehicles can have difficulty in seeing pedestrians and pedestrians can feel intimidated by the proximity of vehicles.

Recommendation:

It is recommended that the distance between stop line and crossing points is increased. TSM Chapter 6 recommends a minimum distance of 3m.

4.1.3. Problem

Location: General

Summary: Risk of collisions involving cyclists leading to rider injury.

No provision for cyclists has been incorporated in the layout of the traffic signal junction. Cyclists are particularly vulnerable when making right turns at the junction.

Cyclists may also be vulnerable if the nearside lane is allocated as a left turn lane on the High Street approach. This is because if they are travelling ahead or turning right, they will have to cycle between lanes with traffic overtaking on both sides.

The lack of cycle facilities at the junction may increase the risk of collisions between cyclists and vehicles leading to rider injury.

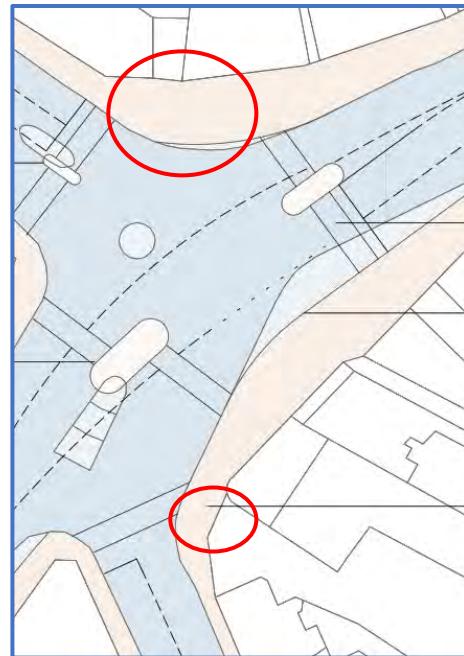
Recommendation:

It is recommended that suitable provision for cyclists should be provided at the traffic signal junction.

4.1.4. Problem

Location: Public House car park and residential access

Summary: Risk of collisions between vehicles exiting the car park and vehicles and pedestrians



The Public House car park access on the north corner of the junction and the residential access on the southeast corner of the junction falls within the junction mouth, and drivers exiting the access may find it difficult to identify a gap in traffic when to exit the car park. This may lead to vehicle to vehicle collisions.

There is also a potential risk of them hitting pedestrians, if they see vehicles stopped at the stop lines and they pull out when the controlled crossing within the centre of junction is green for pedestrians.

Recommendation:

It is recommended that measures are included to allow drivers to safely exit their accesses.

4.2. Alignment

4.2.1. Problem

Location: General

Summary: Insufficient carriageway space for large vehicles to negotiate may lead to vehicle to vehicle collisions or vehicle to pedestrian collisions

No swept path information has been provided to the Audit Team for assessment. Large vehicles may have trouble negotiating the junction. Large vehicles may over-run footways or refuge islands with consequent risk of vehicle to pedestrian collisions, colliding and damage traffic signal equipment or hit other vehicles.

Recommendation:

It is recommended that swept path analysis is checked to ensure that anticipated vehicles can safely negotiate the junction.

4.2.2. Problem

Location: Melton Road - southwest bound approach

Summary: Risk of vehicles hitting CCTV column



The CCTV equipment in the footway may be affected by the revised junction layout. The widening of the carriageway may bring the kerb line closer to the CCTV column. If there is insufficient edge clearance to the column, it may lead to vehicles striking the column and losing control.

Recommendation:

It is recommended that at the detail design stage the edge clearance is checked to ensure that sufficient distance is provided between the kerb edge and the column.

4.2.3. Problem

- Location: Melton Road – southern side
- Summary: Service covers in carriageway could be a hazard to road users and maintenance personnel



Example location

There are large service covers and a gully located in the existing footway on the southern side of Melton Road, which may be affected by the proposals and be in the new carriageway. This is not ideal as ironwork in the carriageway can be a slip hazard for motorcyclists and cyclists.

Recommendation:

It is recommended that all service covers that will be affected by the highway works should be identified at an early stage, with a view to relocating services into the footway. Where this is not feasible, the need to provide additional strengthening and heavy duty covers with high grip coatings, should be taken into account.

4.2.4. Problem

- Location: High Street approach
- Summary: Risk of side swipe type collisions



The High Street consists of a two lane approach and it is unclear if drivers travelling straight ahead should use lane 1 or lane 2. If drivers are in the wrong lane when travelling straight ahead into Barkby Road, this could result in side-swipe type collisions.

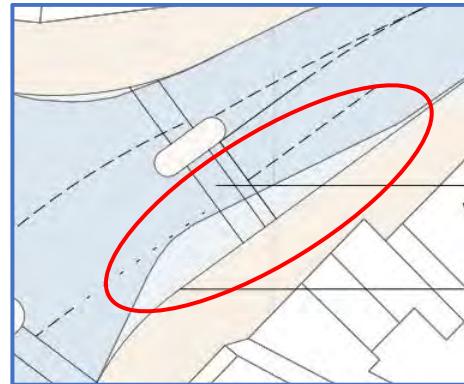
Recommendation:

It is recommended that lane direction arrows are provided on the High Street approach

4.2.5. Problem

Location: Melton Road westbound approach

Summary: Steep crossfall potential hazard for motorcyclists and cyclists leading to fall type injuries



The is a level difference between the carriageway and footway on the south side of Melton Road on the eastern approach. This may result in a steep crossfall in the nearside lane. Steep crossfall may destabilise a motorcyclists or pedal cyclists if they lose their footing when stopping at the stop line, leading to fall type injuries.

Recommendation:

It is recommended that appropriate cross falls are provided.

End of Safety Comments

5. Audit Team Statement

We certify that this Stage 1 Road Safety Audit has been carried with reference to GG 119.

Audit Team Leader

Elaine Bingham,
B Eng (Hons), MCIHT, MSoRSA
NH Certificate of Competence (Road Safety Audit)

Signed: *E. Bingham* Dated 26th May 2023

Director of Road Safety Consulting Ltd

Audit Team Member

Duncan Lord,
IEng, FIHE
NH Certificate of Competence (Road Safety Audit)

Signed: *D. Lord* Dated 26th May 2023

Consultant working on behalf of Road Safety Consulting Ltd

Road Safety Consulting Ltd
4 Paramore Close
Whetstone
Leicestershire
LE8 6EY

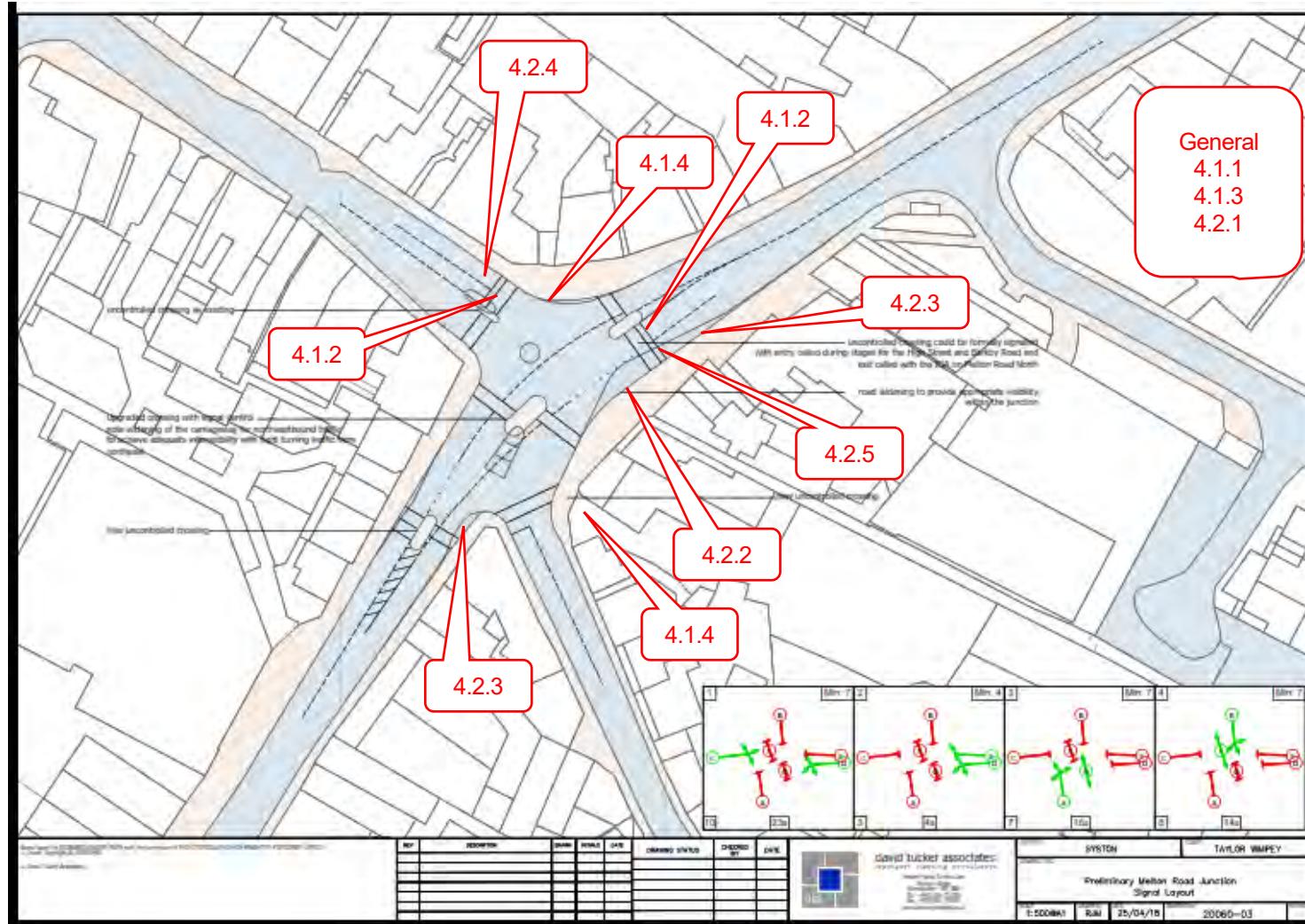
APPENDIX 1: Information Provided

List of Information Provided

Drawing Reference Number	Revision	Title
20060-03	-	Preliminary Melton Road Junction Signal Layout

APPENDIX 2: Drawing Showing Problem Locations

Problem numbers shown on the attached drawing refer to Problem numbers within the report.





Appendix E

SITE:

1

LOCATION:

MELTON ROAD

DATE:

17TH & 18 MAY 2023

DAY:

WEDNESDAY & THURSDAY



JOB TITLE:

SYSTON

JOB NUMBER:

123321

SITE:

2

LOCATION:

MELTON ROAD

DATE:

17TH & 18 MAY 2023

DAY:

WEDNESDAY & THURSDAY

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JOB TITLE:

SYSTON

JOB NUMBER:

123322

ACTIVITY SURVEY

JOB REF: 12332



JOB NAME: SYSTON

SITE: 1 DATE: 17/05/2023

LOCATION: MELTON ROAD DAY: WEDNESDAY

ZONE	ARRIVAL TIME (HH:MM:SS)	DEPARTURE TIME (HH:MM:SS)	DWELL TIME	VEHICLE TYPE
1	06:55:14	06:55:32	00:00:18	CAR
1	07:20:18	07:25:56	00:05:38	CAR
1	09:32:49	09:34:41	00:01:52	CAR
1	09:42:17	09:49:42	00:07:25	CAR
1	09:47:23	10:22:43	00:35:20	CAR
1	09:59:08	10:05:13	00:06:05	OG1
1	10:10:11	10:13:01	00:02:50	CAR
1	10:37:20	10:41:25	00:04:05	CAR
1	12:30:02	16:08:12	03:38:10	CAR
1	13:04:28	14:26:00	01:21:32	CAR
1	14:22:10	14:23:25	00:01:15	CAR
1	15:23:13	15:23:34	00:00:21	CAR
1	15:39:18	15:55:12	00:15:54	CAR
1	15:40:25	16:50:00	01:09:35	CAR
1	16:23:08	16:33:38	00:10:30	CAR
1	16:25:37	16:26:12	00:00:35	CAR
1	16:43:50	17:07:34	00:23:44	CAR
1	16:55:57	17:01:48	00:05:51	CAR
1	18:53:15	AT END	N/A	CAR

ACTIVITY SURVEY

JOB REF: 12332



JOB NAME: SYSTON

SITE: 1 DATE: 18/05/2023

LOCATION: MELTON ROAD DAY: THURSDAY

ZONE	ARRIVAL TIME (HH:MM:SS)	DEPARTURE TIME (HH:MM:SS)	DWELL TIME	VEHICLE TYPE
1	07:06:51	07:07:22	00:00:31	CAR
1	07:36:29	07:36:41	00:00:12	CAR
1	09:20:25	10:03:43	00:43:18	CAR
1	10:02:45	10:06:21	00:03:36	CAR
1	10:10:56	10:16:54	00:05:58	CAR
1	10:19:29	10:43:37	00:24:08	CAR
1	10:38:40	10:45:16	00:06:36	CAR
1	10:50:06	10:57:21	00:07:15	CAR
1	10:54:11	10:56:36	00:02:25	CAR
1	12:00:29	13:20:30	01:20:01	CAR
1	12:23:52	12:57:18	00:33:26	CAR
1	13:21:41	13:22:25	00:00:44	LGV
1	13:30:33	13:31:09	00:00:36	CAR
1	16:02:59	16:19:28	00:16:29	CAR
1	16:03:00	16:06:22	00:03:22	CAR
1	16:31:50	16:32:51	00:01:01	CAR
1	17:51:15	18:17:04	00:25:49	CAR

ACTIVITY SURVEY

JOB REF: 12332



JOB NAME: SYSTON

SITE: 2 DATE: 17/05/2023

LOCATION: MELTON ROAD DAY: WEDNESDAY

ZONE	ARRIVAL TIME (HH:MM:SS)	DEPARTURE TIME (HH:MM:SS)	DWELL TIME	VEHICLE TYPE
2	07:02:43	07:03:09	00:00:26	CAR
2	08:40:21	08:45:05	00:04:44	CAR
2	09:33:39	09:43:30	00:09:51	CAR
2	09:37:16	09:52:27	00:15:11	CAR
2	10:05:46	10:09:45	00:03:59	LGV
2	11:18:49	11:22:42	00:03:53	LGV
2	11:35:32	11:51:11	00:15:39	CAR
2	11:45:22	11:49:59	00:04:37	CAR
2	11:54:06	12:09:15	00:15:09	CAR
2	11:56:08	12:14:58	00:18:50	CAR
2	13:19:09	13:30:55	00:11:46	CAR
2	13:43:36	13:47:58	00:04:22	CAR
2	13:51:32	13:54:46	00:03:14	CAR
2	15:46:15	15:53:00	00:06:45	CAR
2	16:16:27	16:16:39	00:00:12	CAR
2	16:20:40	17:34:32	01:13:52	CAR
2	16:25:45	16:45:30	00:19:45	CAR
2	16:48:59	16:54:30	00:05:31	CAR
2	16:52:44	17:42:32	00:49:48	CAR
2	17:52:18	17:56:43	00:04:25	CAR
2	17:53:14	17:57:23	00:04:09	CAR
2	18:02:57	18:38:15	00:35:18	CAR
2	18:19:27	18:36:53	00:17:26	CAR
2	18:37:04	18:38:34	00:01:30	CAR

ACTIVITY SURVEY

JOB REF: 12332



JOB NAME: SYSTON

SITE: 2

DATE: 18/05/2023

LOCATION: MELTON ROAD

DAY: THURSDAY

ZONE	ARRIVAL TIME (HH:MM:SS)	DEPARTURE TIME (HH:MM:SS)	DWELL TIME	VEHICLE TYPE
2	08:37:13	09:01:40	00:24:27	CAR
2	09:22:12	09:34:55	00:12:43	CAR
2	09:47:53	09:51:15	00:03:22	LGV
2	09:49:32	10:03:59	00:14:27	CAR
2	09:51:50	09:55:01	00:03:11	LGV
2	10:24:14	10:44:45	00:20:31	CAR
2	10:43:12	10:46:57	00:03:45	CAR
2	10:57:21	11:01:36	00:04:15	LGV
2	11:21:11	13:06:02	01:44:51	CAR
2	11:25:44	11:26:43	00:00:59	CAR
2	12:23:34	12:44:01	00:20:27	CAR
2	12:24:09	12:51:28	00:27:19	LGV
2	13:46:11	13:52:36	00:06:25	CAR
2	13:46:31	13:50:28	00:03:57	CAR
2	14:47:48	14:51:10	00:03:22	CAR
2	14:49:33	15:55:38	01:06:05	CAR
2	14:55:02	15:05:10	00:10:08	OG1
2	15:32:45	15:39:59	00:07:14	LGV
2	15:50:10	15:54:41	00:04:31	CAR
2	15:59:09	16:32:06	00:32:57	CAR
2	15:59:24	16:12:11	00:12:47	CAR
2	16:00:15	16:20:46	00:20:31	CAR
2	16:16:16	16:36:45	00:20:29	CAR
2	16:41:55	16:47:31	00:05:36	CAR
2	16:52:48	17:14:17	00:21:29	CAR
2	17:29:01	17:35:40	00:06:39	CAR
2	17:34:50	17:37:46	00:02:56	CAR
2	18:01:59	18:17:44	00:15:45	CAR
2	18:03:54	18:19:06	00:15:12	CAR
2	18:17:29	18:21:50	00:04:21	CAR



Appendix F

Junctions 10	
PICADY 10 - Priority Intersection Module	
Version: 10.0.4.1693	
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Filename: Melton - Goodes Assessment RevB LCC Geometry Comment.j10
Path: P:\20000's\20060\Technical\Junction Modelling\2023 Assessments\Feb 2023
Report generation date: 27/06/2023 17:34:17

»2022, AM
»2022, PM
»2027, AM
»2027, PM
»2027 + Development, AM
»2027 + Development, PM
»2022 CF, AM
»2022 CF, PM
»2027 CF, AM
»2027 CF, PM
»2027 + Development CF, AM
»2027 + Development CF, PM
»2037, AM
»2037, PM
»2037 + Dev, AM
»2037 + Dev, PM

Summary of junction performance

	AM		PM			
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
2022						
Stream B-C	1.9	21.18	0.66	0.4	10.28	0.30
Stream B-A	0.2	21.31	0.19	0.1	18.93	0.09
Stream C-AB	1.2	7.68	0.40	5.9	21.71	0.79
2027						
Stream B-C	2.3	24.58	0.70	0.5	10.74	0.32
Stream B-A	0.3	25.08	0.22	0.1	20.87	0.11
Stream C-AB	1.4	8.00	0.43	8.4	30.37	0.85
2027 + Development						
Stream B-C	3.0	30.63	0.76	0.5	11.35	0.35
Stream B-A	0.4	31.28	0.26	0.1	23.02	0.12
Stream C-AB	1.6	8.63	0.47	15.8	58.67	0.94
2022 CF						
Stream B-C	1.3	14.38	0.57	0.4	10.51	0.31
Stream B-A	0.2	13.83	0.13	0.1	19.88	0.10
Stream C-AB	0.9	6.59	0.36	7.0	25.54	0.82
2027 CF						
Stream B-C	2.5	26.41	0.72	0.5	11.01	0.33
Stream B-A	0.3	27.13	0.24	0.1	22.13	0.11
Stream C-AB	1.4	8.14	0.44	10.7	38.48	0.89
2027 + Development CF						
Stream B-C	3.4	33.49	0.78	0.6	11.62	0.36
Stream B-A	0.4	35.01	0.28	0.1	24.76	0.12
Stream C-AB	1.7	8.85	0.49	20.0	75.13	0.97
2037						
Stream B-C	4.5	44.68	0.84	0.6	12.59	0.38
Stream B-A	0.7	54.77	0.41	0.2	32.64	0.17
Stream C-AB	2.0	9.27	0.52	34.4	123.36	1.03
2037 + Dev						
Stream B-C	7.0	65.74	0.91	0.7	13.61	0.42
Stream B-A	1.5	122.86	0.64	0.3	39.73	0.20
Stream C-AB	2.4	10.25	0.57	52.6	183.22	1.09

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

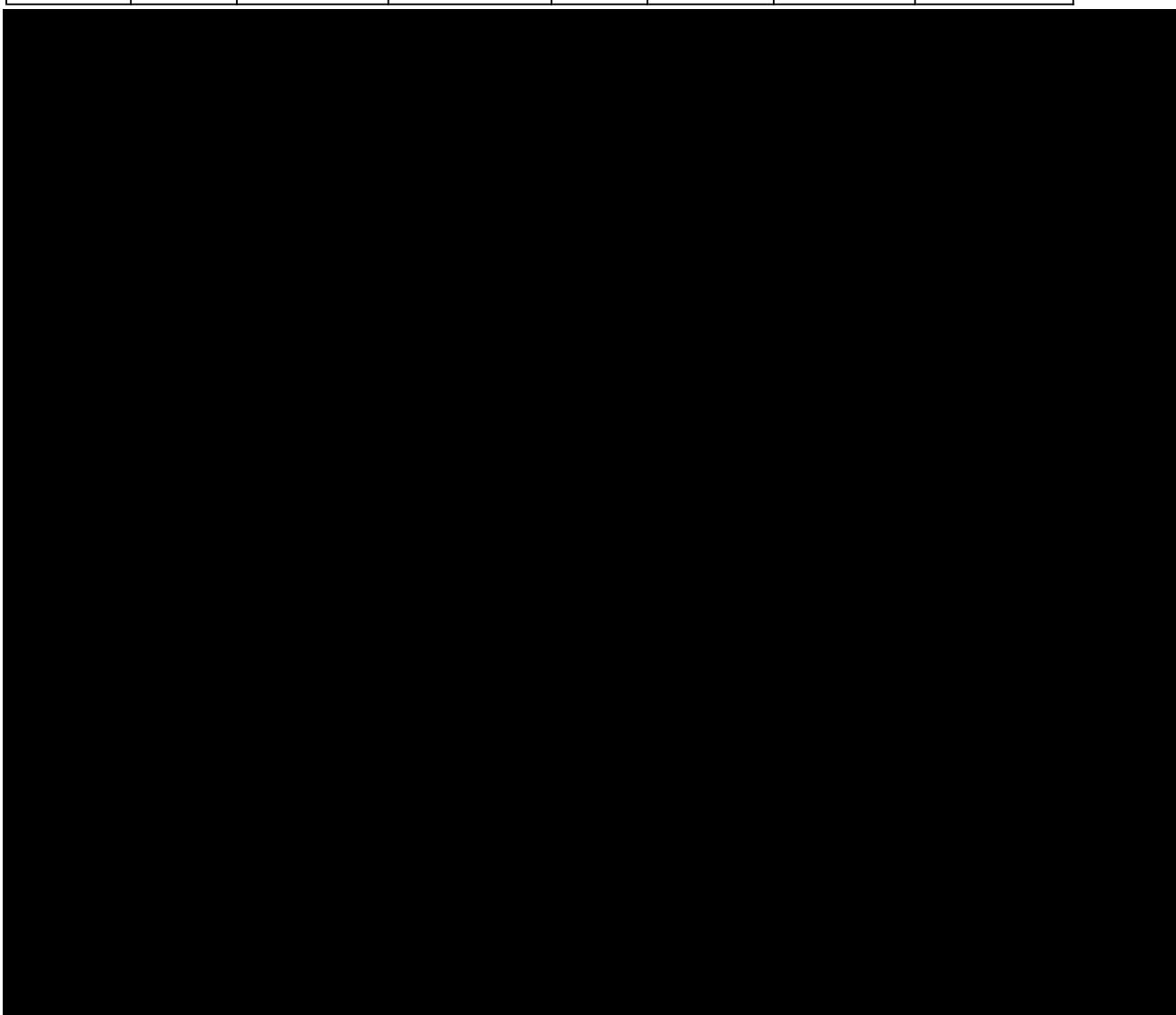
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/04/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\Arcady
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. 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 Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM		ONE HOUR	07:45	09:15	15	✓
D2	2022	PM		ONE HOUR	16:45	18:15	15	✓
D5	2027	AM		ONE HOUR	07:45	09:15	15	✓
D6	2027	PM		ONE HOUR	16:45	18:15	15	✓
D7	2027 + Development	AM		ONE HOUR	07:45	09:15	15	✓
D8	2027 + Development	PM		ONE HOUR	16:45	18:15	15	✓
D9	2022 CF	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D10	2022 CF	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D11	2027 CF	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D12	2027 CF	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D13	2027 + Development CF	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D14	2027 + Development CF	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D15	2037	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D16	2037	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D17	2037 + Dev	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D18	2037 + Dev	PM	Covid Factor	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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.49	A

Arms

Arms

Arm	Name	Description	Arm type
A	Melton Road N		Major
B	Goodes Lane		Minor
C	Melton Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.80			114.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	4.26	2.98	2.94	2.89		1.00	53	23

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	607	0.112	0.282	0.177	0.403
B-C	678	0.105	0.265	-	-
C-B	640	0.250	0.250	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	532	100.000
B		ONE HOUR	✓	339	100.000
C		ONE HOUR	✓	551	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	24	508
	B	38	0	301
	C	418	133	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.66	21.18	1.9	C	276	414
B-A	0.19	21.31	0.2	C	35	52
C-AB	0.40	7.68	1.2	A	245	367
C-A					261	391
A-B					22	33
A-C					466	699

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-C	227	57	563	0.402	224	0.0	0.7	10.637	B
B-A	29	7	378	0.076	28	0.0	0.1	11.111	B
C-AB	171	43	760	0.225	169	0.0	0.5	6.378	A
C-A	244	61			244				
A-B	18	5			18				
A-C	382	96			382				

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-C	271	68	539	0.502	269	0.7	1.0	13.418	B
B-A	34	9	319	0.107	34	0.1	0.1	13.638	B
C-AB	230	57	788	0.292	229	0.5	0.7	6.764	A
C-A	266	66			266				
A-B	22	5			22				
A-C	457	114			457				

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-C	331	83	503	0.659	328	1.0	1.8	20.424	C
B-A	42	10	227	0.184	41	0.1	0.2	20.896	C
C-AB	332	83	828	0.401	330	0.7	1.2	7.610	A
C-A	275	69			275				
A-B	26	7			26				
A-C	559	140			559				

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-C	331	83	502	0.660	331	1.8	1.9	21.183	C
B-A	42	10	224	0.187	42	0.2	0.2	21.315	C
C-AB	333	83	829	0.401	333	1.2	1.2	7.675	A
C-A	274	68			274				
A-B	26	7			26				
A-C	559	140			559				

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-C	271	68	538	0.503	274	1.9	1.0	13.916	B
B-A	34	9	316	0.108	35	0.2	0.1	13.839	B
C-AB	231	58	789	0.292	233	1.2	0.7	6.847	A
C-A	265	66			265				
A-B	22	5			22				
A-C	457	114			457				

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-C	227	57	563	0.403	228	1.0	0.7	10.905	B
B-A	29	7	376	0.076	29	0.1	0.1	11.214	B
C-AB	172	43	761	0.226	173	0.7	0.5	6.446	A
C-A	243	61			243				
A-B	18	5			18				
A-C	382	96			382				

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		9.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.25	A

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	2022	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	582	100.000
B		ONE HOUR	✓	156	100.000
C		ONE HOUR	✓	713	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	54	528
	B	19	0	137
	C	472	241	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Avg. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.30	10.28	0.4	B	126	189
B-A	0.09	18.93	0.1	C	17	26
C-AB	0.79	21.71	5.9	C	492	739
C-A					162	243
A-B					50	74
A-C					485	727

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-C	103	26	562	0.183	102	0.0	0.2	7.890	A
B-A	14	4	353	0.041	14	0.0	0.0	11.481	B
C-AB	333	83	781	0.426	328	0.0	1.1	8.314	A
C-A	204	51			204				
A-B	41	10			41				
A-C	398	99			398				

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-C	123	31	539	0.229	123	0.2	0.3	8.736	A
B-A	17	4	301	0.057	17	0.0	0.1	13.697	B
C-AB	456	114	815	0.560	453	1.1	2.0	10.478	B
C-A	185	46			185				
A-B	49	12			49				
A-C	475	119			475				

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-C	151	38	505	0.299	150	0.3	0.4	10.244	B
B-A	21	5	230	0.091	21	0.1	0.1	18.595	C
C-AB	677	169	864	0.783	663	2.0	5.4	18.938	C
C-A	108	27			108				
A-B	59	15			59				
A-C	581	145			581				

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-C	151	38	504	0.299	151	0.4	0.4	10.283	B
B-A	21	5	226	0.092	21	0.1	0.1	18.934	C
C-AB	687	172	870	0.789	685	5.4	5.9	21.713	C
C-A	98	25			98				
A-B	59	15			59				
A-C	581	145			581				

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)	Unsignalled level of service
B-C	123	31	538	0.229	124	0.4	0.3	8.775	A
B-A	17	4	296	0.058	17	0.1	0.1	13.958	B
C-AB	465	116	824	0.565	480	5.9	2.2	11.686	B
C-A	176	44			176				
A-B	49	12			49				
A-C	475	119			475				

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)	Unsignalled level of service
B-C	103	26	562	0.184	103	0.3	0.2	7.932	A
B-A	14	4	350	0.041	14	0.1	0.0	11.588	B
C-AB	337	84	784	0.429	341	2.2	1.2	8.666	A
C-A	200	50			200				
A-B	41	10			41				
A-C	398	99			398				

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.43	A

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	2027	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	354	100.000
C		ONE HOUR	✓	575	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	25	530
	B	40	0	314
	C	436	139	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.70	24.58	2.3	C	288	432
B-A	0.22	25.08	0.3	D	37	55
C-AB	0.43	8.00	1.4	A	265	397
C-A					263	395
A-B					23	34
A-C					486	730

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-C	236	59	558	0.424	233	0.0	0.7	11.115	B
B-A	30	8	366	0.082	30	0.0	0.1	11.566	B
C-AB	183	46	766	0.239	181	0.0	0.5	6.446	A
C-A	250	62			250				
A-B	19	5			19				
A-C	399	100			399				

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-C	282	71	532	0.531	281	0.7	1.1	14.379	B
B-A	36	9	302	0.119	36	0.1	0.1	14.575	B
C-AB	248	62	796	0.311	247	0.5	0.8	6.897	A
C-A	269	67			269				
A-B	22	6			22				
A-C	476	119			476				

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-C	346	86	493	0.701	341	1.1	2.2	23.328	C
B-A	44	11	203	0.217	43	0.1	0.3	24.306	C
C-AB	361	90	838	0.431	359	0.8	1.3	7.917	A
C-A	272	68			272				
A-B	28	7			28				
A-C	584	146			584				

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-C	346	86	492	0.702	345	2.2	2.3	24.582	C
B-A	44	11	199	0.221	44	0.3	0.3	25.079	D
C-AB	362	91	840	0.432	362	1.3	1.4	8.001	A
C-A	271	68			271				
A-B	28	7			28				
A-C	584	146			584				

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)	Unsignalled level of service
B-C	282	71	531	0.531	287	2.3	1.2	15.105	C
B-A	36	9	298	0.121	37	0.3	0.2	14.885	B
C-AB	249	62	797	0.312	251	1.4	0.8	6.991	A
C-A	268	67			268				
A-B	22	6			22				
A-C	476	119			476				

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)	Unsignalled level of service
B-C	236	59	557	0.424	238	1.2	0.8	11.443	B
B-A	30	8	363	0.083	30	0.2	0.1	11.695	B
C-AB	184	46	767	0.240	185	0.8	0.5	6.523	A
C-A	248	62			248				
A-B	19	5			19				
A-C	399	100			399				

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		13.00	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.00	B

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	2027	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	606	100.000
B		ONE HOUR	✓	163	100.000
C		ONE HOUR	✓	743	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	56	550
	B	20	0	143
	C	492	251	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Avg. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.32	10.74	0.5	B	131	197
B-A	0.11	20.87	0.1	C	18	28
C-AB	0.85	30.37	8.4	D	535	802
C-A					147	220
A-B					51	77
A-C					505	757

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-C	108	27	557	0.193	107	0.0	0.2	8.054	A
B-A	15	4	342	0.044	15	0.0	0.0	11.884	B
C-AB	357	89	788	0.452	351	0.0	1.3	8.620	A
C-A	203	51			203				
A-B	42	11			42				
A-C	414	104			414				

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-C	129	32	533	0.241	128	0.2	0.3	8.985	A
B-A	18	4	288	0.063	18	0.0	0.1	14.408	B
C-AB	492	123	824	0.597	488	1.3	2.3	11.304	B
C-A	176	44			176				
A-B	50	13			50				
A-C	494	124			494				

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-C	157	39	496	0.317	157	0.3	0.5	10.691	B
B-A	22	6	213	0.103	22	0.1	0.1	20.288	C
C-AB	738	184	876	0.842	718	2.3	7.3	23.916	C
C-A	80	20			80				
A-B	62	15			62				
A-C	606	151			606				

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-C	157	39	496	0.318	157	0.5	0.5	10.744	B
B-A	22	6	208	0.106	22	0.1	0.1	20.873	C
C-AB	754	188	886	0.851	750	7.3	8.4	30.373	D
C-A	64	16			64				
A-B	62	15			62				
A-C	606	151			606				

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)	Unsignalled level of service
B-C	129	32	532	0.242	129	0.5	0.3	9.034	A
B-A	18	4	280	0.064	18	0.1	0.1	14.838	B
C-AB	507	127	838	0.605	530	8.4	2.7	13.555	B
C-A	161	40			161				
A-B	50	13			50				
A-C	494	124			494				

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)	Unsignalled level of service
B-C	108	27	557	0.193	108	0.3	0.2	8.104	A
B-A	15	4	339	0.044	15	0.1	0.1	12.020	B
C-AB	361	90	792	0.456	367	2.7	1.4	9.074	A
C-A	198	49			198				
A-B	42	11			42				
A-C	414	104			414				

2027 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		9.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.45	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2027 + 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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	380	100.000
C		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	25	530
	B	40	0	340
	C	436	152	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.76	30.63	3.0	D	312	468
B-A	0.26	31.28	0.4	D	37	55
C-AB	0.47	8.63	1.6	A	289	434
C-A					250	375
A-B					23	34
A-C					486	730

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-C	256	64	558	0.459	253	0.0	0.8	11.801	B
B-A	30	8	355	0.085	30	0.0	0.1	11.953	B
C-AB	200	50	766	0.261	198	0.0	0.6	6.635	A
C-A	242	61			242				
A-B	19	5			19				
A-C	399	100			399				

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-C	306	76	532	0.575	304	0.8	1.3	15.824	C
B-A	36	9	285	0.126	36	0.1	0.2	15.571	C
C-AB	271	68	796	0.340	270	0.6	0.9	7.197	A
C-A	258	64			258				
A-B	22	6			22				
A-C	476	119			476				

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-C	374	94	492	0.762	368	1.3	2.9	28.118	D
B-A	44	11	174	0.253	43	0.2	0.4	29.490	D
C-AB	395	99	839	0.471	392	0.9	1.6	8.511	A
C-A	253	63			253				
A-B	28	7			28				
A-C	584	146			584				

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-C	374	94	491	0.763	374	2.9	3.0	30.632	D
B-A	44	11	168	0.262	44	0.4	0.4	31.276	D
C-AB	396	99	840	0.472	396	1.6	1.6	8.626	A
C-A	251	63			251				
A-B	28	7			28				
A-C	584	146			584				

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)	Unsignalled level of service
B-C	306	76	531	0.576	312	3.0	1.4	17.082	C
B-A	36	9	279	0.129	37	0.4	0.2	16.108	C
C-AB	272	68	798	0.342	275	1.6	0.9	7.322	A
C-A	256	64			256				
A-B	22	6			22				
A-C	476	119			476				

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)	Unsignalled level of service
B-C	256	64	557	0.459	258	1.4	0.9	12.249	B
B-A	30	8	351	0.086	30	0.2	0.1	12.123	B
C-AB	202	50	767	0.263	203	0.9	0.6	6.728	A
C-A	241	60			241				
A-B	19	5			19				
A-C	399	100			399				

2027 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		25.90	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	25.90	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2027 + 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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	606	100.000
B		ONE HOUR	✓	178	100.000
C		ONE HOUR	✓	768	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	56	550
	B	20	0	158
	C	492	276	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Avg. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.35	11.35	0.5	B	145	217
B-A	0.12	23.02	0.1	C	18	28
C-AB	0.94	58.67	15.8	F	594	890
C-A					111	167
A-B					51	77
A-C					505	757

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-C	119	30	557	0.214	118	0.0	0.3	8.260	A
B-A	15	4	333	0.045	15	0.0	0.1	12.195	B
C-AB	392	98	788	0.498	386	0.0	1.5	9.350	A
C-A	186	47			186				
A-B	42	11			42				
A-C	414	104			414				

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-C	142	36	532	0.267	142	0.3	0.4	9.303	A
B-A	18	4	277	0.065	18	0.1	0.1	14.991	B
C-AB	541	135	824	0.657	536	1.5	2.9	13.170	B
C-A	149	37			149				
A-B	50	13			50				
A-C	494	124			494				

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-C	174	43	495	0.351	173	0.4	0.5	11.266	B
B-A	22	6	200	0.110	22	0.1	0.1	21.823	C
C-AB	813	203	877	0.927	777	2.9	11.8	36.428	E
C-A	33	8			33				
A-B	62	15			62				
A-C	606	151			606				

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-C	174	43	494	0.352	174	0.5	0.5	11.347	B
B-A	22	6	191	0.115	22	0.1	0.1	23.018	C
C-AB	843	211	894	0.943	827	11.8	15.8	58.669	F
C-A	2	0.59			2				
A-B	62	15			62				
A-C	606	151			606				

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)	Unsignalled level of service
B-C	142	36	531	0.267	143	0.5	0.4	9.371	A
B-A	18	4	263	0.068	18	0.1	0.1	15.915	C
C-AB	573	143	851	0.673	622	15.8	3.6	20.755	C
C-A	117	29			117				
A-B	50	13			50				
A-C	494	124			494				

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)	Unsignalled level of service
B-C	119	30	557	0.214	119	0.4	0.3	8.319	A
B-A	15	4	329	0.046	15	0.1	0.1	12.378	B
C-AB	399	100	794	0.502	407	3.6	1.6	10.077	B
C-A	179	45			179				
A-B	42	11			42				
A-C	414	104			414				

2022 CF, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.79	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022 CF	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	242	100.000
B		ONE HOUR	✓	346	100.000
C		ONE HOUR	✓	563	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	24	218
B		39	0	307
C		427	136	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.57	14.38	1.3	B	282	423
B-A	0.13	13.83	0.2	B	36	54
C-AB	0.36	6.59	0.9	A	238	357
C-A					279	418
A-B					22	33
A-C					200	300

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-C	231	58	621	0.372	229	0.0	0.6	9.207	A
B-A	29	7	439	0.067	29	0.0	0.1	9.470	A
C-AB	170	42	810	0.210	168	0.0	0.4	5.875	A
C-A	254	64			254				
A-B	18	5			18				
A-C	164	41			164				

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-C	276	69	609	0.453	275	0.6	0.8	10.855	B
B-A	35	9	395	0.089	35	0.1	0.1	10.798	B
C-AB	225	56	845	0.266	224	0.4	0.6	6.091	A
C-A	281	70			281				
A-B	22	5			22				
A-C	196	49			196				

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-C	338	85	591	0.572	336	0.8	1.3	14.170	B
B-A	43	11	326	0.132	43	0.1	0.2	13.732	B
C-AB	317	79	894	0.355	316	0.6	0.9	6.551	A
C-A	302	76			302				
A-B	26	7			26				
A-C	240	60			240				

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-C	338	85	590	0.572	338	1.3	1.3	14.382	B
B-A	43	11	324	0.132	43	0.2	0.2	13.825	B
C-AB	318	80	895	0.355	318	0.9	0.9	6.588	A
C-A	302	75			302				
A-B	26	7			26				
A-C	240	60			240				

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)	Unsignalled level of service
B-C	276	69	609	0.453	278	1.3	0.9	11.050	B
B-A	35	9	393	0.089	35	0.2	0.1	10.870	B
C-AB	226	56	846	0.267	227	0.9	0.6	6.141	A
C-A	280	70			280				
A-B	22	5			22				
A-C	196	49			196				

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)	Unsignalled level of service
B-C	231	58	621	0.372	232	0.9	0.6	9.371	A
B-A	29	7	438	0.067	29	0.1	0.1	9.529	A
C-AB	171	43	810	0.211	171	0.6	0.4	5.925	A
C-A	253	63			253				
A-B	18	5			18				
A-C	164	41			164				

2022 CF, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		10.89	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.89	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 CF	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	596	100.000
B		ONE HOUR	✓	159	100.000
C		ONE HOUR	✓	729	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	55	541
B		19	0	140
C		483	246	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.31	10.51	0.4	B	128	193
B-A	0.10	19.88	0.1	C	17	26
C-AB	0.82	25.54	7.0	D	514	771
C-A					155	232
A-B					50	76
A-C					496	745

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-C	105	26	559	0.188	104	0.0	0.2	7.975	A
B-A	14	4	347	0.041	14	0.0	0.0	11.687	B
C-AB	345	86	785	0.440	340	0.0	1.2	8.468	A
C-A	204	51			204				
A-B	41	10			41				
A-C	407	102			407				

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-C	126	31	535	0.235	126	0.2	0.3	8.866	A
B-A	17	4	294	0.058	17	0.0	0.1	14.056	B
C-AB	475	119	820	0.579	471	1.2	2.2	10.887	B
C-A	181	45			181				
A-B	49	12			49				
A-C	486	122			486				

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-C	154	39	500	0.308	154	0.3	0.4	10.469	B
B-A	21	5	221	0.095	21	0.1	0.1	19.430	C
C-AB	708	177	870	0.814	692	2.2	6.3	21.275	C
C-A	94	24			94				
A-B	61	15			61				
A-C	596	149			596				

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-C	154	39	500	0.308	154	0.4	0.4	10.514	B
B-A	21	5	216	0.097	21	0.1	0.1	19.878	C
C-AB	721	180	879	0.821	718	6.3	7.0	25.544	D
C-A	81	20			81				
A-B	61	15			61				
A-C	596	149			596				

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)	Unsignalled level of service
B-C	126	31	535	0.235	126	0.4	0.3	8.909	A
B-A	17	4	288	0.059	17	0.1	0.1	14.392	B
C-AB	487	122	831	0.586	505	7.0	2.4	12.532	B
C-A	169	42			169				
A-B	49	12			49				
A-C	486	122			486				

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)	Unsignalled level of service
B-C	105	26	559	0.188	106	0.3	0.2	8.022	A
B-A	14	4	344	0.042	14	0.1	0.0	11.804	B
C-AB	350	87	789	0.443	354	2.4	1.3	8.867	A
C-A	199	50			199				
A-B	41	10			41				
A-C	407	102			407				

2027 CF, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.91	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2027 CF	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	566	100.000
B		ONE HOUR	✓	360	100.000
C		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	26	540
B		40	0	320
C		445	141	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.72	26.41	2.5	D	294	440
B-A	0.24	27.13	0.3	D	37	55
C-AB	0.44	8.14	1.4	A	273	409
C-A					265	397
A-B					24	36
A-C					496	743

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-C	241	60	556	0.434	238	0.0	0.8	11.341	B
B-A	30	8	360	0.084	30	0.0	0.1	11.763	B
C-AB	188	47	769	0.245	186	0.0	0.5	6.467	A
C-A	253	63			253				
A-B	20	5			20				
A-C	407	102			407				

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-C	288	72	529	0.543	286	0.8	1.2	14.843	B
B-A	36	9	295	0.122	36	0.1	0.1	14.995	B
C-AB	255	64	799	0.319	254	0.5	0.8	6.941	A
C-A	272	68			272				
A-B	23	6			23				
A-C	485	121			485				

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-C	352	88	489	0.720	347	1.2	2.4	24.829	C
B-A	44	11	192	0.230	43	0.1	0.3	26.109	D
C-AB	374	93	843	0.443	371	0.8	1.4	8.042	A
C-A	272	68			272				
A-B	29	7			29				
A-C	595	149			595				

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-C	352	88	488	0.721	352	2.4	2.5	26.407	D
B-A	44	11	187	0.235	44	0.3	0.3	27.135	D
C-AB	375	94	845	0.444	375	1.4	1.4	8.136	A
C-A	270	68			270				
A-B	29	7			29				
A-C	595	149			595				

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)	Unsignalled level of service
B-C	288	72	529	0.544	293	2.5	1.2	15.708	C
B-A	36	9	290	0.124	37	0.3	0.2	15.381	C
C-AB	257	64	801	0.320	259	1.4	0.8	7.045	A
C-A	270	68			270				
A-B	23	6			23				
A-C	485	121			485				

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)	Unsignalled level of service
B-C	241	60	555	0.434	243	1.2	0.8	11.701	B
B-A	30	8	357	0.084	30	0.2	0.1	11.905	B
C-AB	189	47	770	0.246	191	0.8	0.5	6.550	A
C-A	252	63			252				
A-B	20	5			20				
A-C	407	102			407				

2027 CF, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		16.49	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.49	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2027 CF	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	621	100.000
B		ONE HOUR	✓	166	100.000
C		ONE HOUR	✓	759	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	57	564
B		20	0	146
C		503	256	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.33	11.01	0.5	B	134	201
B-A	0.11	22.13	0.1	C	18	28
C-AB	0.89	38.48	10.7	E	559	839
C-A					137	206
A-B					52	78
A-C					518	776

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-C	110	27	554	0.198	109	0.0	0.2	8.147	A
B-A	15	4	336	0.045	15	0.0	0.1	12.114	B
C-AB	369	92	792	0.467	364	0.0	1.4	8.800	A
C-A	202	50			202				
A-B	43	11			43				
A-C	425	106			425				

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-C	131	33	529	0.248	131	0.2	0.3	9.128	A
B-A	18	4	280	0.064	18	0.1	0.1	14.822	B
C-AB	512	128	829	0.618	507	1.4	2.5	11.825	B
C-A	170	43			170				
A-B	51	13			51				
A-C	507	127			507				

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-C	161	40	492	0.327	160	0.3	0.5	10.949	B
B-A	22	6	204	0.108	22	0.1	0.1	21.327	C
C-AB	773	193	883	0.875	747	2.5	8.9	27.791	D
C-A	63	16			63				
A-B	63	16			63				
A-C	621	155			621				

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-C	161	40	491	0.327	161	0.5	0.5	11.011	B
B-A	22	6	198	0.111	22	0.1	0.1	22.135	C
C-AB	794	198	895	0.887	787	8.9	10.7	38.480	E
C-A	42	10			42				
A-B	63	16			63				
A-C	621	155			621				

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)	Unsignalled level of service
B-C	131	33	528	0.248	132	0.5	0.3	9.184	A
B-A	18	4	271	0.066	18	0.1	0.1	15.409	C
C-AB	532	133	847	0.629	563	10.7	3.0	15.231	C
C-A	150	37			150				
A-B	51	13			51				
A-C	507	127			507				

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)	Unsignalled level of service
B-C	110	27	554	0.198	110	0.3	0.3	8.199	A
B-A	15	4	332	0.045	15	0.1	0.1	12.265	B
C-AB	375	94	797	0.471	381	3.0	1.5	9.329	A
C-A	196	49			196				
A-B	43	11			43				
A-C	425	106			425				

2027 + Development CF, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		10.23	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.23	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 + Development CF	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	566	100.000
B		ONE HOUR	✓	386	100.000
C		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	26	540
	B	40	0	346
	C	445	155	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.78	33.49	3.4	D	317	476
B-A	0.28	35.01	0.4	E	37	55
C-AB	0.49	8.85	1.7	A	300	450
C-A					250	376
A-B					24	36
A-C					496	743

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-C	260	65	555	0.469	257	0.0	0.9	12.054	B
B-A	30	8	348	0.086	30	0.0	0.1	12.185	B
C-AB	207	52	769	0.269	204	0.0	0.6	6.677	A
C-A	245	61			245				
A-B	20	5			20				
A-C	407	102			407				

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-C	311	78	529	0.588	309	0.9	1.4	16.386	C
B-A	36	9	277	0.130	36	0.1	0.2	16.116	C
C-AB	281	70	800	0.351	279	0.6	0.9	7.278	A
C-A	259	65			259				
A-B	23	6			23				
A-C	485	121			485				

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-C	381	95	488	0.781	374	1.4	3.1	30.231	D
B-A	44	11	162	0.272	43	0.2	0.4	32.462	D
C-AB	411	103	844	0.487	408	0.9	1.7	8.721	A
C-A	250	62			250				
A-B	29	7			29				
A-C	595	149			595				

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-C	381	95	487	0.783	380	3.1	3.4	33.487	D
B-A	44	11	155	0.285	44	0.4	0.4	35.011	E
C-AB	413	103	845	0.488	412	1.7	1.7	8.854	A
C-A	248	62			248				
A-B	29	7			29				
A-C	595	149			595				

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)	Unsignalled level of service
B-C	311	78	528	0.589	318	3.4	1.5	17.927	C
B-A	36	9	269	0.133	37	0.4	0.2	16.788	C
C-AB	282	71	802	0.352	285	1.7	1.0	7.416	A
C-A	257	64			257				
A-B	23	6			23				
A-C	485	121			485				

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)	Unsignalled level of service
B-C	260	65	555	0.469	263	1.5	0.9	12.548	B
B-A	30	8	345	0.087	30	0.2	0.1	12.375	B
C-AB	208	52	771	0.270	210	1.0	0.6	6.774	A
C-A	243	61			243				
A-B	20	5			20				
A-C	407	102			407				

2027 + Development CF, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		33.34	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	33.34	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 + Development CF	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	621	100.000
B		ONE HOUR	✓	180	100.000
C		ONE HOUR	✓	784	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	57	564
	B	20	0	160
	C	503	281	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.36	11.62	0.6	B	147	220
B-A	0.12	24.76	0.1	C	18	28
C-AB	0.97	75.13	20.0	F	617	925
C-A					103	154
A-B					52	78
A-C					518	776

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-C	120	30	554	0.217	119	0.0	0.3	8.343	A
B-A	15	4	327	0.046	15	0.0	0.1	12.435	B
C-AB	406	101	792	0.512	399	0.0	1.6	9.574	A
C-A	185	46			185				
A-B	43	11			43				
A-C	425	106			425				

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-C	144	36	529	0.272	143	0.3	0.4	9.432	A
B-A	18	4	270	0.067	18	0.1	0.1	15.429	C
C-AB	562	141	829	0.678	556	1.6	3.2	13.920	B
C-A	143	36			143				
A-B	51	13			51				
A-C	507	127			507				

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-C	176	44	490	0.359	175	0.4	0.6	11.516	B
B-A	22	6	190	0.116	22	0.1	0.1	23.020	C
C-AB	850	213	884	0.962	804	3.2	14.8	43.867	E
C-A	13	3			13				
A-B	63	16			63				
A-C	621	155			621				

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-C	176	44	489	0.360	176	0.6	0.6	11.620	B
B-A	22	6	179	0.123	22	0.1	0.1	24.761	C
C-AB	863	216	892	0.968	842	14.8	20.0	75.131	F
C-A	0	0			0				
A-B	63	16			63				
A-C	621	155			621				

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)	Unsignalled level of service
B-C	144	36	528	0.273	145	0.6	0.4	9.512	A
B-A	18	4	251	0.072	18	0.1	0.1	16.712	C
C-AB	606	151	864	0.701	669	20.0	4.2	26.841	D
C-A	99	25			99				
A-B	51	13			51				
A-C	507	127			507				

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)	Unsignalled level of service
B-C	120	30	554	0.218	121	0.4	0.3	8.406	A
B-A	15	4	323	0.047	15	0.1	0.1	12.650	B
C-AB	413	103	799	0.518	423	4.2	1.7	10.464	C
C-A	177	44			177				
A-B	43	11			43				
A-C	425	106			425				

2037, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		12.91	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.91	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	620	100.000
B		ONE HOUR	✓	395	100.000
C		ONE HOUR	✓	642	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	28	592
B		44	0	351
C		487	155	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.84	44.68	4.5	E	322	483
B-A	0.41	54.77	0.7	F	40	61
C-AB	0.52	9.27	2.0	A	326	488
C-A					264	395
A-B					26	39
A-C					543	815

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-C	264	66	543	0.487	261	0.0	0.9	12.717	B
B-A	33	8	329	0.101	33	0.0	0.1	13.077	B
C-AB	219	55	783	0.280	217	0.0	0.6	6.660	A
C-A	264	66			264				
A-B	21	5			21				
A-C	446	111			446				

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-C	316	79	513	0.615	313	0.9	1.5	17.980	C
B-A	40	10	253	0.157	39	0.1	0.2	18.199	C
C-AB	302	76	817	0.370	301	0.6	1.0	7.335	A
C-A	275	69			275				
A-B	25	6			25				
A-C	532	133			532				

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-C	386	97	464	0.832	377	1.5	4.0	37.693	E
B-A	48	12	129	0.375	47	0.2	0.6	46.284	E
C-AB	452	113	867	0.521	448	1.0	2.0	9.089	A
C-A	255	64			255				
A-B	31	8			31				
A-C	652	163			652				

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-C	386	97	462	0.836	385	4.0	4.5	44.682	E
B-A	48	12	118	0.409	48	0.6	0.7	54.766	F
C-AB	454	114	869	0.523	454	2.0	2.0	9.274	A
C-A	252	63			252				
A-B	31	8			31				
A-C	652	163			652				

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)	Unsignalled level of service
B-C	316	79	511	0.618	327	4.5	1.7	20.769	C
B-A	40	10	242	0.164	41	0.7	0.2	19.581	C
C-AB	305	76	820	0.371	308	2.0	1.1	7.506	A
C-A	273	68			273				
A-B	25	6			25				
A-C	532	133			532				

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)	Unsignalled level of service
B-C	264	66	542	0.487	267	1.7	1.0	13.349	B
B-A	33	8	325	0.102	33	0.2	0.1	13.340	B
C-AB	221	55	785	0.282	223	1.1	0.7	6.773	A
C-A	262	66			262				
A-B	21	5			21				
A-C	446	111			446				

2037, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		55.03	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	55.03	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	683	100.000
B		ONE HOUR	✓	182	100.000
C		ONE HOUR	✓	835	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	63	620
	B	22	0	160
	C	553	282	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.38	12.59	0.6	B	147	220
B-A	0.17	32.64	0.2	D	20	30
C-AB	1.03	123.36	34.4	F	676	1013
C-A					91	136
A-B					58	87
A-C					569	853

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-C	120	30	541	0.222	119	0.0	0.3	8.590	A
B-A	17	4	308	0.054	16	0.0	0.1	13.322	B
C-AB	437	109	809	0.540	430	0.0	1.8	9.905	A
C-A	191	48			191				
A-B	47	12			47				
A-C	467	117			467				

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-C	144	36	513	0.280	143	0.3	0.4	9.831	A
B-A	20	5	246	0.080	20	0.1	0.1	17.143	C
C-AB	618	154	852	0.725	609	1.8	4.1	15.680	C
C-A	133	33			133				
A-B	57	14			57				
A-C	557	139			557				

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-C	176	44	468	0.376	175	0.4	0.6	12.367	B
B-A	24	6	161	0.150	24	0.1	0.2	28.184	D
C-AB	919	230	895	1.027	843	4.1	23.1	62.905	F
C-A	0	0			0				
A-B	69	17			69				
A-C	683	171			683				

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-C	176	44	465	0.379	176	0.6	0.6	12.589	B
B-A	24	6	143	0.169	24	0.2	0.2	32.642	D
C-AB	919	230	897	1.025	874	23.1	34.4	123.358	F
C-A	0	0			0				
A-B	69	17			69				
A-C	683	171			683				

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)	Unsignalled level of service
B-C	144	36	511	0.282	145	0.6	0.4	9.958	A
B-A	20	5	214	0.092	20	0.2	0.1	20.095	C
C-AB	709	177	916	0.774	818	34.4	7.0	65.974	F
C-A	42	10			42				
A-B	57	14			57				
A-C	557	139			557				

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)	Unsignalled level of service
B-C	120	30	541	0.223	121	0.4	0.3	8.663	A
B-A	17	4	301	0.055	17	0.1	0.1	13.704	B
C-AB	451	113	822	0.548	471	7.0	2.1	11.563	G
C-A	178	44			178				
A-B	47	12			47				
A-C	467	117			467				

2037 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		20.13	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	20.13	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2037 + Dev	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	620	100.000
B		ONE HOUR	✓	421	100.000
C		ONE HOUR	✓	655	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	28	592
B		44	0	377
C		487	168	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.91	65.74	7.0	F	346	519
B-A	0.64	122.86	1.5	F	40	61
C-AB	0.57	10.25	2.4	B	353	530
C-A					248	372
A-B					26	39
A-C					543	815

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-C	284	71	543	0.523	280	0.0	1.1	13.616	B
B-A	33	8	317	0.105	33	0.0	0.1	13.655	B
C-AB	238	59	783	0.304	235	0.0	0.7	6.880	A
C-A	255	64			255				
A-B	21	5			21				
A-C	446	111			446				

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-C	339	85	512	0.662	336	1.1	1.9	20.259	C
B-A	40	10	232	0.170	39	0.1	0.2	20.076	C
C-AB	328	82	818	0.401	326	0.7	1.1	7.713	A
C-A	261	65			261				
A-B	25	6			25				
A-C	532	133			532				

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-C	415	104	462	0.898	399	1.9	5.8	48.955	E
B-A	48	12	95	0.508	45	0.2	1.0	74.353	F
C-AB	490	123	867	0.565	485	1.1	2.3	9.978	A
C-A	231	58			231				
A-B	31	8			31				
A-C	652	163			652				

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-C	415	104	458	0.907	410	5.8	7.0	65.739	F
B-A	48	12	76	0.640	46	1.0	1.5	122.857	F
C-AB	493	123	870	0.567	493	2.3	2.4	10.248	B
C-A	228	57			228				
A-B	31	8			31				
A-C	652	163			652				

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)	Unsignalled level of service
B-C	339	85	508	0.668	358	7.0	2.2	26.970	D
B-A	40	10	212	0.187	44	1.5	0.3	23.855	C
C-AB	330	83	821	0.403	335	2.4	1.2	7.935	A
C-A	258	65			258				
A-B	25	6			25				
A-C	532	133			532				

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)	Unsignalled level of service
B-C	284	71	542	0.524	288	2.2	1.1	14.538	B
B-A	33	8	311	0.106	34	0.3	0.1	14.032	B
C-AB	240	60	785	0.306	242	1.2	0.8	7.011	A
C-A	253	63			253				
A-B	21	5			21				
A-C	446	111			446				

2037 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		84.76	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	84.76	F

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2037 + Dev	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	683	100.000
B		ONE HOUR	✓	197	100.000
C		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	63	620
B		22	0	175
C		553	306	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.42	13.61	0.7	B	161	241
B-A	0.20	39.73	0.3	E	20	30
C-AB	1.09	183.22	52.6	F	722	1083
C-A					66	99
A-B					58	87
A-C					569	853

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-C	132	33	541	0.243	130	0.0	0.3	8.825	A
B-A	17	4	300	0.055	16	0.0	0.1	13.705	B
C-AB	474	119	809	0.586	466	0.0	2.2	10.917	B
C-A	172	43			172				
A-B	47	12			47				
A-C	467	117			467				

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-C	157	39	512	0.307	157	0.3	0.4	10.214	B
B-A	20	5	236	0.084	20	0.1	0.1	17.965	C
C-AB	671	168	852	0.787	658	2.2	5.4	19.575	C
C-A	101	25			101				
A-B	57	14			57				
A-C	557	139			557				

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-C	193	48	466	0.413	192	0.4	0.7	13.194	B
B-A	24	6	148	0.164	24	0.1	0.2	31.303	D
C-AB	946	236	871	1.086	839	5.4	32.0	87.256	F
C-A	0	0			0				
A-B	69	17			69				
A-C	683	171			683				

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-C	193	48	459	0.419	193	0.7	0.7	13.613	B
B-A	24	6	122	0.199	24	0.2	0.3	39.726	E
C-AB	946	236	873	1.084	863	32.0	52.6	183.219	F
C-A	0	0			0				
A-B	69	17			69				
A-C	683	171			683				

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)	Unsignalled level of service
B-C	157	39	508	0.310	158	0.7	0.5	10.428	B
B-A	20	5	185	0.107	20	0.3	0.1	23.629	C
C-AB	772	193	917	0.842	888	52.6	23.5	151.888	F
C-A	0	0			0				
A-B	57	14			57				
A-C	557	139			557				

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)	Unsignalled level of service
B-C	132	33	540	0.244	132	0.5	0.3	8.924	A
B-A	17	4	276	0.060	17	0.1	0.1	15.031	C
C-AB	523	131	853	0.613	606	23.5	2.7	21.716	C
C-A	124	31			124				
A-B	47	12			47				
A-C	467	117			467				

Junctions 10	
PICADY 10 - Priority Intersection Module	
Version: 10.0.4.1693	© Copyright TRL Software Limited, 2021
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Filename: Melton - Goodes RevB LCC Geometry Comment improved layout.j10

Path: P:\20000's\20060\Technical\Junction Modelling\2023 Assessments\Feb 2023\Improvement schemes

Report generation date: 17/03/2023 15:57:41

»2022, AM
»2022, PM
»2027, AM
»2027, PM
»2027 + Development, AM
»2027 + Development, PM
»2022 CF, AM
»2022 CF, PM
»2027 CF, AM
»2027 CF, PM
»2027 + Development CF, AM
»2027 + Development CF, PM
»2037, AM
»2037, PM
»2037 + Dev, AM
»2037 + Dev, PM

Summary of junction performance

	AM		PM			
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
2022						
Stream B-C	1.9	21.18	0.66	0.4	10.28	0.30
Stream B-A	0.2	21.27	0.19	0.1	18.65	0.09
Stream C-AB	0.6	8.42	0.30	2.0	11.07	0.55
2027						
Stream B-C	2.3	24.57	0.70	0.5	10.73	0.32
Stream B-A	0.3	25.01	0.22	0.1	20.36	0.10
Stream C-AB	0.6	8.52	0.31	2.4	11.62	0.58
2027 + Development						
Stream B-C	3.0	30.61	0.76	0.5	11.32	0.35
Stream B-A	0.4	31.17	0.26	0.1	21.94	0.11
Stream C-AB	0.7	8.72	0.34	3.1	13.14	0.64
2022 CF						
Stream B-C	1.3	14.38	0.57	0.4	10.51	0.31
Stream B-A	0.2	13.81	0.13	0.1	19.49	0.09
Stream C-AB	0.4	7.24	0.26	2.2	11.34	0.57
2027 CF						
Stream B-C	2.5	26.39	0.72	0.5	10.99	0.33
Stream B-A	0.3	27.05	0.23	0.1	21.42	0.11
Stream C-AB	0.6	8.56	0.32	2.6	11.96	0.60
2027 + Development CF						
Stream B-C	3.4	33.46	0.78	0.6	11.58	0.36
Stream B-A	0.4	34.87	0.28	0.1	23.16	0.12
Stream C-AB	0.8	8.78	0.35	3.5	13.66	0.66
2037						
Stream B-C	4.5	44.58	0.84	0.6	12.45	0.38
Stream B-A	0.7	54.38	0.41	0.2	28.41	0.15
Stream C-AB	0.8	8.84	0.36	4.2	14.43	0.69
2037 + Dev						
Stream B-C	7.0	65.52	0.91	0.7	13.31	0.41
Stream B-A	1.5	121.30	0.64	0.2	31.64	0.16
Stream C-AB	1.0	9.08	0.39	5.7	17.50	0.75

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

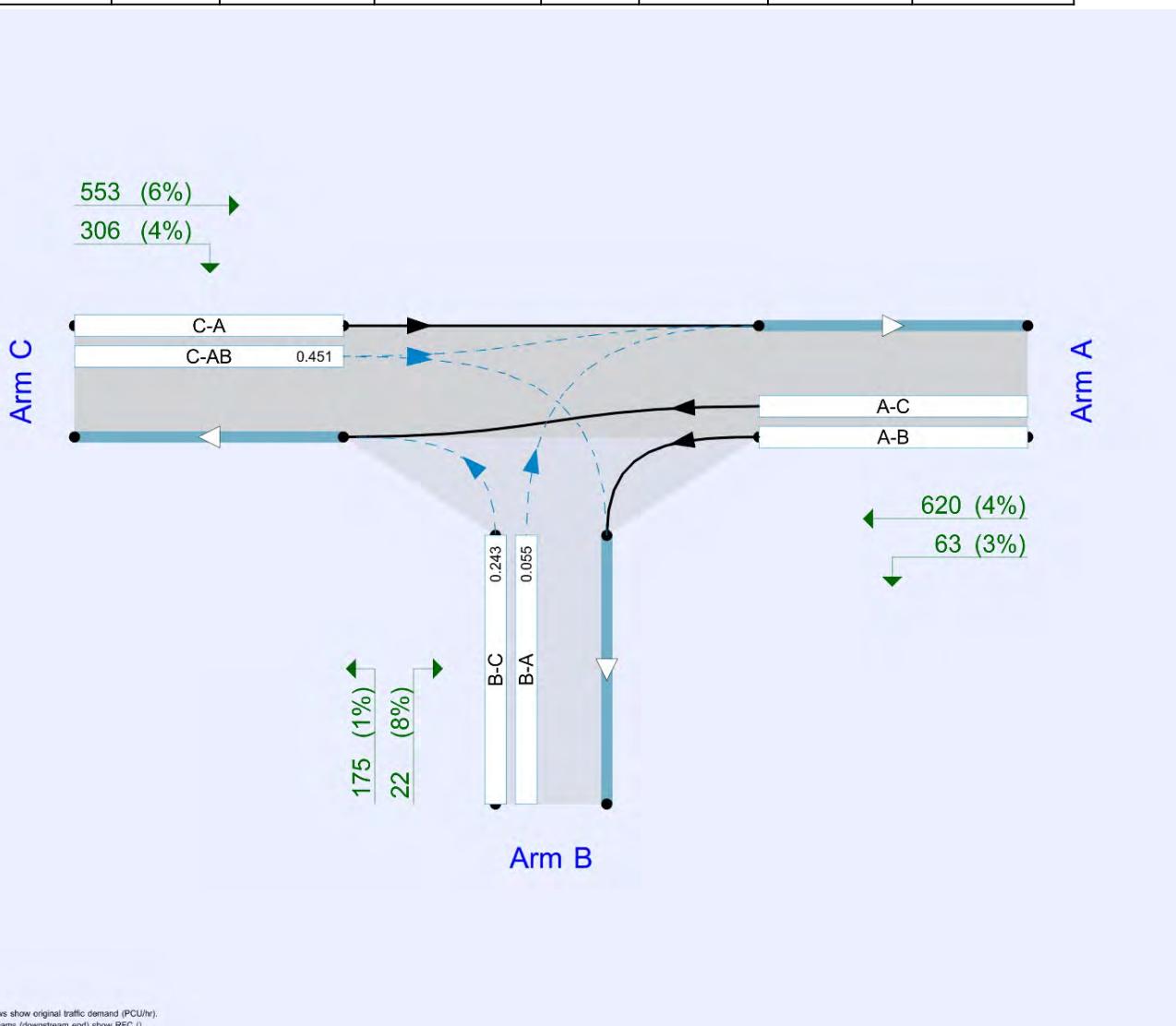
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/04/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\Arcady
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. 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 Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM		ONE HOUR	07:45	09:15	15	✓
D2	2022	PM		ONE HOUR	16:45	18:15	15	✓
D5	2027	AM		ONE HOUR	07:45	09:15	15	✓
D6	2027	PM		ONE HOUR	16:45	18:15	15	✓
D7	2027 + Development	AM		ONE HOUR	07:45	09:15	15	✓
D8	2027 + Development	PM		ONE HOUR	16:45	18:15	15	✓
D9	2022 CF	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D10	2022 CF	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D11	2027 CF	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D12	2027 CF	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D13	2027 + Development CF	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D14	2027 + Development CF	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D15	2037	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D16	2037	PM	Covid Factor	ONE HOUR	16:45	18:15	15	✓
D17	2037 + Dev	AM	Covid Factor	ONE HOUR	07:45	09:15	15	✓
D18	2037 + Dev	PM	Covid Factor	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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	Melton Road N		Major
B	Goodes Lane		Minor
C	Melton Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.80		✓	2.20	114.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	4.26	2.98	2.94	2.89		1.00	53	23

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	607	0.112	0.282	0.177	0.403
B-C	678	0.105	0.265	-	-
C-B	640	0.250	0.250	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	532	100.000
B		ONE HOUR	✓	339	100.000
C		ONE HOUR	✓	551	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	24	508
	B	38	0	301
	C	418	133	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.66	21.18	1.9	C	276	414
B-A	0.19	21.27	0.2	C	35	52
C-AB	0.30	8.42	0.6	A	147	221
C-A					359	538
A-B					22	33
A-C					466	699

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-C	227	57	563	0.402	224	0.0	0.7	10.637	B
B-A	29	7	378	0.076	28	0.0	0.1	11.111	B
C-AB	112	28	602	0.185	111	0.0	0.3	7.621	A
C-A	303	76			303				
A-B	18	5			18				
A-C	382	96			382				

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-C	271	68	539	0.502	269	0.7	1.0	13.417	B
B-A	34	9	319	0.107	34	0.1	0.1	13.630	B
C-AB	141	35	611	0.230	140	0.3	0.4	7.962	A
C-A	355	89			355				
A-B	22	5			22				
A-C	457	114			457				

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-C	331	83	503	0.659	328	1.0	1.8	20.420	C
B-A	42	10	227	0.184	41	0.1	0.2	20.872	C
C-AB	189	47	636	0.297	188	0.4	0.6	8.386	A
C-A	418	104			418				
A-B	26	7			26				
A-C	559	140			559				

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-C	331	83	502	0.660	331	1.8	1.9	21.176	C
B-A	42	10	225	0.186	42	0.2	0.2	21.268	C
C-AB	189	47	637	0.297	189	0.6	0.6	8.416	A
C-A	418	104			418				
A-B	26	7			26				
A-C	559	140			559				

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-C	271	68	539	0.502	274	1.9	1.0	13.914	B
B-A	34	9	316	0.108	35	0.2	0.1	13.819	B
C-AB	141	35	612	0.230	141	0.6	0.4	8.001	A
C-A	355	89			355				
A-B	22	5			22				
A-C	457	114			457				

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)	Unsignalled level of service
B-C	227	57	563	0.403	228	1.0	0.7	10.905	B
B-A	29	7	376	0.076	29	0.1	0.1	11.205	B
C-AB	112	28	602	0.185	112	0.4	0.3	7.667	A
C-A	303	76			303				
A-B	18	5			18				
A-C	382	96			382				

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.84	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.84	A

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	2022	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	582	100.000
B		ONE HOUR	✓	156	100.000
C		ONE HOUR	✓	713	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	54	528
	B	19	0	137
	C	472	241	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Avg. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.30	10.28	0.4	B	126	189
B-A	0.09	18.65	0.1	C	17	26
C-AB	0.55	11.07	2.0	B	316	474
C-A					338	507
A-B					50	74
A-C					485	727

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-C	103	26	562	0.183	102	0.0	0.2	7.890	A
B-A	14	4	353	0.041	14	0.0	0.0	11.481	B
C-AB	225	56	657	0.342	222	0.0	0.7	8.608	A
C-A	312	78			312				
A-B	41	10			41				
A-C	398	99			398				

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-C	123	31	539	0.229	123	0.2	0.3	8.736	A
B-A	17	4	301	0.057	17	0.0	0.1	13.677	B
C-AB	296	74	695	0.426	295	0.7	1.0	9.397	A
C-A	345	86			345				
A-B	49	12			49				
A-C	475	119			475				

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-C	151	38	505	0.299	150	0.3	0.4	10.242	B
B-A	21	5	231	0.091	21	0.1	0.1	18.519	C
C-AB	428	107	773	0.554	424	1.0	2.0	10.839	B
C-A	357	89			357				
A-B	59	15			59				
A-C	581	145			581				

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-C	151	38	505	0.299	151	0.4	0.4	10.277	B
B-A	21	5	229	0.091	21	0.1	0.1	18.648	C
C-AB	428	107	774	0.553	428	2.0	2.0	11.069	B
C-A	357	89			357				
A-B	59	15			59				
A-C	581	145			581				

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)	Unsignalled level of service
B-C	123	31	539	0.229	124	0.4	0.3	8.774	A
B-A	17	4	300	0.057	17	0.1	0.1	13.782	B
C-AB	296	74	697	0.425	300	2.0	1.1	9.647	A
C-A	345	86			345				
A-B	49	12			49				
A-C	475	119			475				

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)	Unsignalled level of service
B-C	103	26	562	0.183	103	0.3	0.2	7.933	A
B-A	14	4	351	0.041	14	0.1	0.0	11.551	B
C-AB	225	56	658	0.342	226	1.1	0.7	8.780	A
C-A	312	78			312				
A-B	41	10			41				
A-C	398	99			398				

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.85	A

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	2027	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	354	100.000
C		ONE HOUR	✓	575	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	25	530
	B	40	0	314
	C	436	139	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.70	24.57	2.3	C	288	432
B-A	0.22	25.01	0.3	D	37	55
C-AB	0.31	8.52	0.6	A	157	235
C-A					371	557
A-B					23	34
A-C					486	730

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-C	236	59	558	0.424	233	0.0	0.7	11.115	B
B-A	30	8	366	0.082	30	0.0	0.1	11.566	B
C-AB	118	29	604	0.195	117	0.0	0.3	7.693	A
C-A	315	79			315				
A-B	19	5			19				
A-C	399	100			399				

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-C	282	71	532	0.531	281	0.7	1.1	14.379	B
B-A	36	9	302	0.119	36	0.1	0.1	14.566	B
C-AB	149	37	615	0.243	149	0.3	0.4	8.047	A
C-A	368	92			368				
A-B	22	6			22				
A-C	476	119			476				

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-C	346	86	493	0.701	341	1.1	2.2	23.322	C
B-A	44	11	203	0.217	43	0.1	0.3	24.271	C
C-AB	203	51	644	0.314	202	0.4	0.6	8.493	A
C-A	431	108			431				
A-B	28	7			28				
A-C	584	146			584				

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-C	346	86	492	0.702	345	2.2	2.3	24.569	C
B-A	44	11	199	0.221	44	0.3	0.3	25.008	D
C-AB	203	51	645	0.314	203	0.6	0.6	8.524	A
C-A	431	108			431				
A-B	28	7			28				
A-C	584	146			584				

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)	Unsignalled level of service
B-C	282	71	532	0.531	287	2.3	1.2	15.099	C
B-A	36	9	299	0.120	37	0.3	0.2	14.854	B
C-AB	149	37	616	0.242	150	0.6	0.4	8.094	A
C-A	368	92			368				
A-B	22	6			22				
A-C	476	119			476				

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)	Unsignalled level of service
B-C	236	59	557	0.424	238	1.2	0.8	11.443	B
B-A	30	8	363	0.083	30	0.2	0.1	11.682	B
C-AB	118	29	604	0.195	118	0.4	0.3	7.742	A
C-A	315	79			315				
A-B	19	5			19				
A-C	399	100			399				

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	606	100.000
B		ONE HOUR	✓	163	100.000
C		ONE HOUR	✓	743	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	56	550
	B	20	0	143
	C	492	251	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Avg. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.32	10.73	0.5	B	131	197
B-A	0.10	20.36	0.1	C	18	28
C-AB	0.58	11.62	2.4	B	340	510
C-A					341	512
A-B					51	77
A-C					505	757

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-C	108	27	557	0.193	107	0.0	0.2	8.054	A
B-A	15	4	342	0.044	15	0.0	0.0	11.884	B
C-AB	239	60	664	0.359	236	0.0	0.7	8.738	A
C-A	321	80			321				
A-B	42	11			42				
A-C	414	104			414				

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-C	129	32	533	0.241	128	0.2	0.3	8.985	A
B-A	18	4	288	0.062	18	0.0	0.1	14.383	B
C-AB	317	79	708	0.448	315	0.7	1.1	9.605	A
C-A	351	88			351				
A-B	50	13			50				
A-C	494	124			494				

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-C	157	39	496	0.317	157	0.3	0.5	10.689	B
B-A	22	6	214	0.103	22	0.1	0.1	20.178	C
C-AB	465	116	795	0.585	460	1.1	2.3	11.310	B
C-A	353	88			353				
A-B	62	15			62				
A-C	606	151			606				

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-C	157	39	496	0.317	157	0.5	0.5	10.732	B
B-A	22	6	213	0.103	22	0.1	0.1	20.363	C
C-AB	465	116	796	0.584	465	2.3	2.4	11.618	B
C-A	353	88			353				
A-B	62	15			62				
A-C	606	151			606				

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)	Unsignalled level of service
B-C	129	32	532	0.241	129	0.5	0.3	9.029	A
B-A	18	4	286	0.063	18	0.1	0.1	14.520	B
C-AB	317	79	709	0.447	322	2.4	1.2	9.930	A
C-A	351	88			351				
A-B	50	13			50				
A-C	494	124			494				

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)	Unsignalled level of service
B-C	108	27	557	0.193	108	0.3	0.2	8.102	A
B-A	15	4	340	0.044	15	0.1	0.1	11.972	B
C-AB	239	60	665	0.359	241	1.2	0.8	8.938	A
C-A	321	80			321				
A-B	42	11			42				
A-C	414	104			414				

2027 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		8.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.74	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2027 + 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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	380	100.000
C		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	25	530
	B	40	0	340
	C	436	152	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.76	30.61	3.0	D	312	468
B-A	0.26	31.17	0.4	D	37	55
C-AB	0.34	8.72	0.7	A	174	261
C-A					365	548
A-B					23	34
A-C					486	730

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-C	256	64	558	0.459	253	0.0	0.8	11.801	B
B-A	30	8	355	0.085	30	0.0	0.1	11.953	B
C-AB	130	33	610	0.214	129	0.0	0.3	7.789	A
C-A	312	78			312				
A-B	19	5			19				
A-C	399	100			399				

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-C	306	76	532	0.575	304	0.8	1.3	15.823	C
B-A	36	9	285	0.126	36	0.1	0.2	15.562	C
C-AB	166	41	624	0.265	165	0.3	0.4	8.176	A
C-A	363	91			363				
A-B	22	6			22				
A-C	476	119			476				

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-C	374	94	492	0.762	368	1.3	2.9	28.110	D
B-A	44	11	175	0.252	43	0.2	0.3	29.442	D
C-AB	226	57	659	0.344	225	0.4	0.7	8.682	A
C-A	421	105			421				
A-B	28	7			28				
A-C	584	146			584				

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-C	374	94	491	0.763	374	2.9	3.0	30.608	D
B-A	44	11	169	0.261	44	0.3	0.4	31.171	D
C-AB	226	57	659	0.344	226	0.7	0.7	8.723	A
C-A	421	105			421				
A-B	28	7			28				
A-C	584	146			584				

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)	Unsignalled level of service
B-C	306	76	531	0.576	312	3.0	1.4	17.077	C
B-A	36	9	280	0.129	37	0.4	0.2	16.070	C
C-AB	166	41	625	0.265	167	0.7	0.5	8.233	A
C-A	363	91			363				
A-B	22	6			22				
A-C	476	119			476				

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)	Unsignalled level of service
B-C	256	64	557	0.459	258	1.4	0.9	12.246	B
B-A	30	8	352	0.086	30	0.2	0.1	12.110	B
C-AB	130	33	610	0.214	131	0.5	0.3	7.847	A
C-A	312	78			312				
A-B	19	5			19				
A-C	399	100			399				

2027 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.99	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.99	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2027 + 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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	606	100.000
B		ONE HOUR	✓	178	100.000
C		ONE HOUR	✓	768	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	56	550
	B	20	0	158
	C	492	276	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Avg. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.35	11.32	0.5	B	145	217
B-A	0.11	21.94	0.1	C	18	28
C-AB	0.64	13.14	3.1	B	386	579
C-A					319	478
A-B					51	77
A-C					505	757

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-C	119	30	557	0.214	118	0.0	0.3	8.260	A
B-A	15	4	333	0.045	15	0.0	0.1	12.195	B
C-AB	268	67	678	0.395	264	0.0	0.8	9.057	A
C-A	310	78			310				
A-B	42	11			42				
A-C	414	104			414				

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-C	142	36	532	0.267	142	0.3	0.4	9.302	A
B-A	18	4	278	0.065	18	0.1	0.1	14.958	B
C-AB	358	90	727	0.493	356	0.8	1.4	10.165	B
C-A	332	83			332				
A-B	50	13			50				
A-C	494	124			494				

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-C	174	43	495	0.351	173	0.4	0.5	11.262	B
B-A	22	6	201	0.110	22	0.1	0.1	21.659	C
C-AB	531	133	826	0.643	525	1.4	3.0	12.607	B
C-A	314	79			314				
A-B	62	15			62				
A-C	606	151			606				

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-C	174	43	495	0.351	174	0.5	0.5	11.320	B
B-A	22	6	199	0.111	22	0.1	0.1	21.938	C
C-AB	531	133	827	0.642	531	3.0	3.1	13.135	B
C-A	314	79			314				
A-B	62	15			62				
A-C	606	151			606				

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)	Unsignalled level of service
B-C	142	36	532	0.267	143	0.5	0.4	9.359	A
B-A	18	4	275	0.065	18	0.1	0.1	15.154	C
C-AB	358	90	729	0.492	365	3.1	1.5	10.667	B
C-A	332	83			332				
A-B	50	13			50				
A-C	494	124			494				

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)	Unsignalled level of service
B-C	119	30	557	0.214	119	0.4	0.3	8.317	A
B-A	15	4	331	0.045	15	0.1	0.1	12.302	B
C-AB	268	67	678	0.395	270	1.5	0.9	9.321	A
C-A	310	78			310				
A-B	42	11			42				
A-C	414	104			414				

2022 CF, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.30	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2022 CF	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	242	100.000
B		ONE HOUR	✓	346	100.000
C		ONE HOUR	✓	563	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	24	218
B		39	0	307
C		427	136	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.57	14.38	1.3	B	282	423
B-A	0.13	13.81	0.2	B	36	54
C-AB	0.26	7.24	0.4	A	145	218
C-A					371	557
A-B					22	33
A-C					200	300

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-C	231	58	621	0.372	229	0.0	0.6	9.207	A
B-A	29	7	439	0.067	29	0.0	0.1	9.470	A
C-AB	113	28	654	0.172	112	0.0	0.2	6.899	A
C-A	311	78			311				
A-B	18	5			18				
A-C	164	41			164				

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-C	276	69	609	0.453	275	0.6	0.8	10.855	B
B-A	35	9	395	0.089	35	0.1	0.1	10.794	B
C-AB	140	35	670	0.209	140	0.2	0.3	7.068	A
C-A	366	92			366				
A-B	22	5			22				
A-C	196	49			196				

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-C	338	85	591	0.572	336	0.8	1.3	14.169	B
B-A	43	11	326	0.132	43	0.1	0.2	13.722	B
C-AB	184	46	702	0.261	183	0.3	0.4	7.230	A
C-A	436	109			436				
A-B	26	7			26				
A-C	240	60			240				

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-C	338	85	590	0.572	338	1.3	1.3	14.381	B
B-A	43	11	324	0.132	43	0.2	0.2	13.808	B
C-AB	184	46	703	0.261	183	0.4	0.4	7.244	A
C-A	436	109			436				
A-B	26	7			26				
A-C	240	60			240				

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)	Unsignalled level of service
B-C	276	69	609	0.453	278	1.3	0.9	11.048	B
B-A	35	9	394	0.089	35	0.2	0.1	10.858	B
C-AB	140	35	671	0.209	141	0.4	0.3	7.092	A
C-A	366	92			366				
A-B	22	5			22				
A-C	196	49			196				

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)	Unsignalled level of service
B-C	231	58	621	0.372	232	0.9	0.6	9.369	A
B-A	29	7	438	0.067	29	0.1	0.1	9.523	A
C-AB	113	28	654	0.172	113	0.3	0.2	6.940	A
C-A	311	78			311				
A-B	18	5			18				
A-C	164	41			164				

2022 CF, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.98	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2022 CF	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	596	100.000
B		ONE HOUR	✓	159	100.000
C		ONE HOUR	✓	729	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	55	541
B		19	0	140
C		483	246	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.31	10.51	0.4	B	128	193
B-A	0.09	19.49	0.1	C	17	26
C-AB	0.57	11.34	2.2	B	329	493
C-A					340	511
A-B					50	76
A-C					496	745

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-C	105	26	559	0.188	104	0.0	0.2	7.975	A
B-A	14	4	347	0.041	14	0.0	0.0	11.687	B
C-AB	232	58	661	0.351	229	0.0	0.7	8.677	A
C-A	317	79			317				
A-B	41	10			41				
A-C	407	102			407				

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-C	126	31	535	0.235	126	0.2	0.3	8.865	A
B-A	17	4	294	0.058	17	0.0	0.1	14.033	B
C-AB	307	77	701	0.437	305	0.7	1.1	9.503	A
C-A	349	87			349				
A-B	49	12			49				
A-C	486	122			486				

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-C	154	39	500	0.308	154	0.3	0.4	10.467	B
B-A	21	5	222	0.094	21	0.1	0.1	19.338	C
C-AB	447	112	784	0.570	443	1.1	2.1	11.076	B
C-A	356	89			356				
A-B	61	15			61				
A-C	596	149			596				

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-C	154	39	500	0.308	154	0.4	0.4	10.506	B
B-A	21	5	220	0.095	21	0.1	0.1	19.492	C
C-AB	447	112	785	0.569	447	2.1	2.2	11.341	B
C-A	356	89			356				
A-B	61	15			61				
A-C	596	149			596				

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)	Unsignalled level of service
B-C	126	31	535	0.235	126	0.4	0.3	8.906	A
B-A	17	4	292	0.058	17	0.1	0.1	14.150	B
C-AB	307	77	703	0.437	311	2.2	1.2	9.791	A
C-A	349	87			349				
A-B	49	12			49				
A-C	486	122			486				

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)	Unsignalled level of service
B-C	105	26	559	0.188	106	0.3	0.2	8.020	A
B-A	14	4	345	0.041	14	0.1	0.0	11.765	B
C-AB	232	58	661	0.351	234	1.2	0.7	8.862	A
C-A	317	79			317				
A-B	41	10			41				
A-C	407	102			407				

2027 CF, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		7.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.29	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2027 CF	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	566	100.000
B		ONE HOUR	✓	360	100.000
C		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	26	540
B		40	0	320
C		445	141	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.72	26.39	2.5	D	294	440
B-A	0.23	27.05	0.3	D	37	55
C-AB	0.32	8.56	0.6	A	160	240
C-A					377	566
A-B					24	36
A-C					496	743

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-C	241	60	556	0.434	238	0.0	0.8	11.341	B
B-A	30	8	360	0.084	30	0.0	0.1	11.763	B
C-AB	120	30	604	0.199	119	0.0	0.3	7.719	A
C-A	321	80			321				
A-B	20	5			20				
A-C	407	102			407				

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-C	288	72	529	0.543	286	0.8	1.2	14.843	B
B-A	36	9	295	0.122	36	0.1	0.1	14.985	B
C-AB	153	38	617	0.247	152	0.3	0.4	8.079	A
C-A	374	94			374				
A-B	23	6			23				
A-C	485	121			485				

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-C	352	88	489	0.720	347	1.2	2.4	24.821	C
B-A	44	11	192	0.230	43	0.1	0.3	26.068	D
C-AB	208	52	648	0.321	207	0.4	0.6	8.528	A
C-A	437	109			437				
A-B	29	7			29				
A-C	595	149			595				

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-C	352	88	489	0.721	352	2.4	2.5	26.390	D
B-A	44	11	188	0.235	44	0.3	0.3	27.049	D
C-AB	208	52	648	0.321	208	0.6	0.6	8.564	A
C-A	437	109			437				
A-B	29	7			29				
A-C	595	149			595				

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)	Unsignalled level of service
B-C	288	72	529	0.544	293	2.5	1.2	15.703	C
B-A	36	9	291	0.124	37	0.3	0.2	15.347	C
C-AB	153	38	618	0.247	153	0.6	0.4	8.126	A
C-A	374	94			374				
A-B	23	6			23				
A-C	485	121			485				

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)	Unsignalled level of service
B-C	241	60	555	0.434	243	1.2	0.8	11.703	B
B-A	30	8	358	0.084	30	0.2	0.1	11.891	B
C-AB	120	30	605	0.199	121	0.4	0.3	7.771	A
C-A	321	80			321				
A-B	20	5			20				
A-C	407	102			407				

2027 CF, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.30	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2027 CF	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	621	100.000
B		ONE HOUR	✓	166	100.000
C		ONE HOUR	✓	759	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	57	564
B		20	0	146
C		503	256	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.33	10.99	0.5	B	134	201
B-A	0.11	21.42	0.1	C	18	28
C-AB	0.60	11.96	2.6	B	354	530
C-A					343	514
A-B					52	78
A-C					518	776

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-C	110	27	554	0.198	109	0.0	0.2	8.147	A
B-A	15	4	336	0.045	15	0.0	0.1	12.114	B
C-AB	246	62	668	0.368	243	0.0	0.8	8.813	A
C-A	325	81			325				
A-B	43	11			43				
A-C	425	106			425				

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-C	131	33	529	0.248	131	0.2	0.3	9.128	A
B-A	18	4	281	0.064	18	0.1	0.1	14.792	B
C-AB	329	82	714	0.460	327	0.8	1.2	9.729	A
C-A	354	88			354				
A-B	51	13			51				
A-C	507	127			507				

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-C	161	40	492	0.327	160	0.3	0.5	10.946	B
B-A	22	6	205	0.107	22	0.1	0.1	21.191	C
C-AB	486	121	808	0.602	481	1.2	2.5	11.601	B
C-A	350	87			350				
A-B	63	16			63				
A-C	621	155			621				

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-C	161	40	491	0.327	161	0.5	0.5	10.994	B
B-A	22	6	204	0.108	22	0.1	0.1	21.418	C
C-AB	486	121	808	0.601	486	2.5	2.6	11.963	B
C-A	350	87			350				
A-B	63	16			63				
A-C	621	155			621				

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)	Unsignalled level of service
B-C	131	33	529	0.248	132	0.5	0.3	9.177	A
B-A	18	4	278	0.065	18	0.1	0.1	14.954	B
C-AB	329	82	716	0.459	334	2.6	1.3	10.101	B
C-A	354	88			354				
A-B	51	13			51				
A-C	507	127			507				

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)	Unsignalled level of service
B-C	110	27	554	0.198	110	0.3	0.3	8.199	A
B-A	15	4	334	0.045	15	0.1	0.1	12.206	B
C-AB	246	62	669	0.368	248	1.3	0.8	9.028	A
C-A	325	81			325				
A-B	43	11			43				
A-C	425	106			425				

2027 + Development CF, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		9.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2027 + Development CF	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	566	100.000
B		ONE HOUR	✓	386	100.000
C		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	26	540
	B	40	0	346
	C	445	155	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.78	33.46	3.4	D	317	476
B-A	0.28	34.87	0.4	D	37	55
C-AB	0.35	8.78	0.8	A	179	269
C-A					371	557
A-B					24	36
A-C					496	743

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-C	260	65	555	0.469	257	0.0	0.9	12.054	B
B-A	30	8	348	0.086	30	0.0	0.1	12.185	B
C-AB	134	33	611	0.219	132	0.0	0.3	7.823	A
C-A	318	80			318				
A-B	20	5			20				
A-C	407	102			407				

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-C	311	78	529	0.588	309	0.9	1.4	16.385	C
B-A	36	9	277	0.130	36	0.1	0.2	16.104	C
C-AB	170	43	627	0.272	170	0.3	0.5	8.219	A
C-A	369	92			369				
A-B	23	6			23				
A-C	485	121			485				

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-C	381	95	488	0.781	374	1.4	3.1	30.225	D
B-A	44	11	162	0.271	43	0.2	0.4	32.400	D
C-AB	234	59	663	0.353	233	0.5	0.8	8.738	A
C-A	427	107			427				
A-B	29	7			29				
A-C	595	149			595				

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-C	381	95	487	0.783	380	3.1	3.4	33.457	D
B-A	44	11	155	0.284	44	0.4	0.4	34.871	D
C-AB	234	59	664	0.353	234	0.8	0.8	8.782	A
C-A	427	107			427				
A-B	29	7			29				
A-C	595	149			595				

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)	Unsignalled level of service
B-C	311	78	528	0.589	318	3.4	1.5	17.923	C
B-A	36	9	270	0.133	37	0.4	0.2	16.739	C
C-AB	170	43	628	0.272	172	0.8	0.5	8.281	A
C-A	369	92			369				
A-B	23	6			23				
A-C	485	121			485				

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)	Unsignalled level of service
B-C	260	65	555	0.469	263	1.5	0.9	12.549	B
B-A	30	8	345	0.087	30	0.2	0.1	12.358	B
C-AB	134	33	611	0.219	134	0.5	0.3	7.885	A
C-A	318	80			318				
A-B	20	5			20				
A-C	407	102			407				

2027 + Development CF, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.22	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2027 + Development CF	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	621	100.000
B		ONE HOUR	✓	180	100.000
C		ONE HOUR	✓	784	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
	A	0	57	564
	B	20	0	160
	C	503	281	0

Vehicle Mix

HV %s

From		To		
		A	B	C
	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.36	11.58	0.6	B	147	220
B-A	0.12	23.16	0.1	C	18	28
C-AB	0.66	13.66	3.5	B	400	600
C-A					319	479
A-B					52	78
A-C					518	776

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-C	120	30	554	0.217	119	0.0	0.3	8.343	A
B-A	15	4	327	0.046	15	0.0	0.1	12.435	B
C-AB	276	69	682	0.404	272	0.0	0.9	9.140	A
C-A	315	79			315				
A-B	43	11			43				
A-C	425	106			425				

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-C	144	36	529	0.272	143	0.3	0.4	9.432	A
B-A	18	4	270	0.067	18	0.1	0.1	15.391	C
C-AB	371	93	734	0.505	369	0.9	1.5	10.315	B
C-A	334	83			334				
A-B	51	13			51				
A-C	507	127			507				

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-C	176	44	491	0.359	175	0.4	0.6	11.511	B
B-A	22	6	192	0.115	22	0.1	0.1	22.815	C
C-AB	554	139	839	0.660	547	1.5	3.3	13.023	B
C-A	309	77			309				
A-B	63	16			63				
A-C	621	155			621				

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-C	176	44	490	0.359	176	0.6	0.6	11.578	B
B-A	22	6	190	0.116	22	0.1	0.1	23.160	C
C-AB	554	139	840	0.660	554	3.3	3.5	13.656	B
C-A	309	77			309				
A-B	63	16			63				
A-C	621	155			621				

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)	Unsignalled level of service
B-C	144	36	528	0.272	145	0.6	0.4	9.493	A
B-A	18	4	267	0.067	18	0.1	0.1	15.624	C
C-AB	371	93	736	0.504	378	3.5	1.6	10.897	B
C-A	334	83			334				
A-B	51	13			51				
A-C	507	127			507				

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)	Unsignalled level of service
B-C	120	30	554	0.217	121	0.4	0.3	8.403	A
B-A	15	4	325	0.046	15	0.1	0.1	12.552	B
C-AB	276	69	682	0.404	278	1.6	1.0	9.428	A
C-A	315	79			315				
A-B	43	11			43				
A-C	425	106			425				

2037, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		11.96	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.96	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2037	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	620	100.000
B		ONE HOUR	✓	395	100.000
C		ONE HOUR	✓	642	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	28	592
B		44	0	351
C		487	155	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.84	44.58	4.5	E	322	483
B-A	0.41	54.38	0.7	F	40	61
C-AB	0.36	8.84	0.8	A	185	278
C-A					404	606
A-B					26	39
A-C					543	815

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-C	264	66	543	0.487	261	0.0	0.9	12.717	B
B-A	33	8	329	0.101	33	0.0	0.1	13.077	B
C-AB	136	34	610	0.223	135	0.0	0.3	7.883	A
C-A	347	87			347				
A-B	21	5			21				
A-C	446	111			446				

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-C	316	79	513	0.615	313	0.9	1.5	17.978	C
B-A	40	10	253	0.156	39	0.1	0.2	18.181	C
C-AB	175	44	628	0.279	174	0.3	0.5	8.277	A
C-A	402	101			402				
A-B	25	6			25				
A-C	532	133			532				

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-C	386	97	465	0.832	377	1.5	4.0	37.664	E
B-A	48	12	130	0.374	47	0.2	0.6	46.153	E
C-AB	244	61	671	0.364	243	0.5	0.8	8.790	A
C-A	462	116			462				
A-B	31	8			31				
A-C	652	163			652				

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-C	386	97	462	0.836	385	4.0	4.5	44.581	E
B-A	48	12	119	0.407	48	0.6	0.7	54.378	F
C-AB	244	61	672	0.364	244	0.8	0.8	8.841	A
C-A	462	116			462				
A-B	31	8			31				
A-C	652	163			652				

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)	Unsignalled level of service
B-C	316	79	511	0.617	327	4.5	1.7	20.753	C
B-A	40	10	243	0.163	41	0.7	0.2	19.499	C
C-AB	175	44	629	0.278	176	0.8	0.5	8.346	A
C-A	402	101			402				
A-B	25	6			25				
A-C	532	133			532				

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)	Unsignalled level of service
B-C	264	66	542	0.487	267	1.7	1.0	13.350	B
B-A	33	8	326	0.102	33	0.2	0.1	13.321	B
C-AB	136	34	610	0.223	137	0.5	0.4	7.952	A
C-A	347	87			347				
A-B	21	5			21				
A-C	446	111			446				

2037, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.49	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2037	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	683	100.000
B		ONE HOUR	✓	182	100.000
C		ONE HOUR	✓	835	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	63	620
B		22	0	160
C		553	282	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.38	12.45	0.6	B	147	220
B-A	0.15	28.41	0.2	D	20	30
C-AB	0.69	14.43	4.2	B	427	640
C-A					339	509
A-B					58	87
A-C					569	853

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-C	120	30	541	0.222	119	0.0	0.3	8.590	A
B-A	17	4	308	0.054	16	0.0	0.1	13.322	B
C-AB	287	72	690	0.415	283	0.0	1.0	9.191	A
C-A	342	86			342				
A-B	47	12			47				
A-C	467	117			467				

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-C	144	36	513	0.280	143	0.3	0.4	9.830	A
B-A	20	5	247	0.080	20	0.1	0.1	17.084	C
C-AB	392	98	752	0.522	389	1.0	1.7	10.427	B
C-A	359	90			359				
A-B	57	14			57				
A-C	557	139			557				

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-C	176	44	469	0.376	175	0.4	0.6	12.354	B
B-A	24	6	164	0.148	24	0.1	0.2	27.750	D
C-AB	602	151	875	0.688	593	1.7	4.0	13.549	B
C-A	317	79			317				
A-B	69	17			69				
A-C	683	171			683				

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-C	176	44	468	0.376	176	0.6	0.6	12.453	B
B-A	24	6	161	0.150	24	0.2	0.2	28.409	D
C-AB	602	151	876	0.687	601	4.0	4.2	14.428	B
C-A	317	79			317				
A-B	69	17			69				
A-C	683	171			683				

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)	Unsignalled level of service
B-C	144	36	512	0.281	145	0.6	0.4	9.910	A
B-A	20	5	243	0.081	20	0.2	0.1	17.439	C
C-AB	392	98	753	0.520	401	4.2	1.8	11.186	B
C-A	359	90			359				
A-B	57	14			57				
A-C	557	139			557				

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)	Unsignalled level of service
B-C	120	30	541	0.223	121	0.4	0.3	8.661	A
B-A	17	4	305	0.054	17	0.1	0.1	13.473	B
C-AB	287	72	691	0.415	290	1.8	1.0	9.522	A
C-A	342	86			342				
A-B	47	12			47				
A-C	467	117			467				

2037 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		18.90	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.90	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2037 + Dev	AM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	620	100.000
B		ONE HOUR	✓	421	100.000
C		ONE HOUR	✓	655	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	28	592
B		44	0	377
C		487	168	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.91	65.52	7.0	F	346	519
B-A	0.64	121.30	1.5	F	40	61
C-AB	0.39	9.08	1.0	A	204	307
C-A					397	595
A-B					26	39
A-C					543	815

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-C	284	71	543	0.523	280	0.0	1.1	13.616	B
B-A	33	8	317	0.105	33	0.0	0.1	13.655	B
C-AB	149	37	617	0.242	148	0.0	0.4	7.983	A
C-A	344	86			344				
A-B	21	5			21				
A-C	446	111			446				

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-C	339	85	512	0.662	336	1.1	1.9	20.253	C
B-A	40	10	233	0.170	39	0.1	0.2	20.054	C
C-AB	193	48	639	0.302	192	0.4	0.6	8.415	A
C-A	396	99			396				
A-B	25	6			25				
A-C	532	133			532				

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-C	415	104	462	0.898	399	1.9	5.8	48.907	E
B-A	48	12	96	0.507	46	0.2	1.0	74.057	F
C-AB	271	68	688	0.395	270	0.6	0.9	9.013	A
C-A	450	112			450				
A-B	31	8			31				
A-C	652	163			652				

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-C	415	104	458	0.906	410	5.8	7.0	65.523	F
B-A	48	12	76	0.636	46	1.0	1.5	121.303	F
C-AB	271	68	688	0.394	271	0.9	1.0	9.079	A
C-A	450	112			450				
A-B	31	8			31				
A-C	652	163			652				

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)	Unsignalled level of service
B-C	339	85	508	0.667	358	7.0	2.2	26.908	D
B-A	40	10	213	0.186	44	1.5	0.3	23.699	C
C-AB	193	48	640	0.301	194	1.0	0.6	8.504	A
C-A	396	99			396				
A-B	25	6			25				
A-C	532	133			532				

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)	Unsignalled level of service
B-C	284	71	542	0.524	288	2.2	1.1	14.535	B
B-A	33	8	312	0.106	34	0.3	0.1	14.006	B
C-AB	149	37	617	0.242	150	0.6	0.4	8.061	A
C-A	344	86			344				
A-B	21	5			21				
A-C	446	111			446				

2037 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.98	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2037 + Dev	PM	Covid Factor	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	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	683	100.000
B		ONE HOUR	✓	197	100.000
C		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To		
		A	B	C
A		0	63	620
B		22	0	175
C		553	306	0

Vehicle Mix

HV %s

From		To		
		A	B	C
A		0	3	4
B		8	0	1
C		6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.41	13.31	0.7	B	161	241
B-A	0.16	31.64	0.2	D	20	30
C-AB	0.75	17.50	5.7	C	478	717
C-A					310	465
A-B					58	87
A-C					569	853

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-C	132	33	541	0.243	130	0.0	0.3	8.825	A
B-A	17	4	300	0.055	16	0.0	0.1	13.705	B
C-AB	317	79	705	0.451	313	0.0	1.1	9.556	A
C-A	329	82			329				
A-B	47	12			47				
A-C	467	117			467				

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-C	157	39	512	0.307	157	0.3	0.4	10.212	B
B-A	20	5	237	0.084	20	0.1	0.1	17.888	C
C-AB	438	109	773	0.566	434	1.1	2.0	11.158	B
C-A	335	84			335				
A-B	57	14			57				
A-C	557	139			557				

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-C	193	48	467	0.413	192	0.4	0.7	13.167	B
B-A	24	6	151	0.161	24	0.1	0.2	30.572	D
C-AB	679	170	910	0.746	666	2.0	5.4	15.811	C
C-A	267	67			267				
A-B	69	17			69				
A-C	683	171			683				

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-C	193	48	466	0.414	193	0.7	0.7	13.315	B
B-A	24	6	147	0.165	24	0.2	0.2	31.640	D
C-AB	679	170	911	0.746	678	5.4	5.7	17.503	C
C-A	267	67			267				
A-B	69	17			69				
A-C	683	171			683				

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)	Unsignalled level of service
B-C	157	39	512	0.307	158	0.7	0.5	10.319	B
B-A	20	5	232	0.085	20	0.2	0.1	18.415	C
C-AB	438	109	775	0.565	451	5.7	2.3	12.418	B
C-A	335	84			335				
A-B	57	14			57				
A-C	557	139			557				

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)	Unsignalled level of service
B-C	132	33	541	0.244	132	0.5	0.3	8.907	A
B-A	17	4	297	0.056	17	0.1	0.1	13.890	B
C-AB	317	79	706	0.450	322	2.3	1.2	10.001	B
C-A	329	82			329				
A-B	47	12			47				
A-C	467	117			467				



Appendix G



Stage 1 Road Safety Audit

Melton Road – Goodes Lane Junction, Syston

Proposed Right Turn Lane

Date: 30/05/2023

Report produced for: Taylor Wimpey

Report requested by: DTA Transport Planning Consultants

On behalf of: Leicestershire County Council

Report prepared by: Elaine Bingham, Road Safety Consulting Ltd

Reference: RSC/EB/DL/22142

Document Control Sheet

Project Title Melton Road-Goodes Lane Junction, Syston
 Proposed Right Turn Lane

Report Title Stage 1 Road Safety Audit
 Reference: RSC/EB/DL/22142

Revision -

Status Final

Control Date 30/05/2023

Record of Issue

Issue	Author	Date	Check	Date	Authorised	Date
Final	EB	25/05/23	DL	26/05/23	EB	30/05/23

Distribution

Organisation	Contact	Copies
DTA Transport Planning Consultants	Simon Tucker	Ecopy

1. Introduction

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the proposed improvements to the Melton Road-Goodes Lane junction in association with a residential development on land north of Barkby Road in Syston. The Audit was carried out during May 2023.
- 1.2. This Road Safety Audit was produced for (client organisation): Taylor Wimpey, requested by (design organisation): DTA Transport Planning Consultants, on behalf of (overseeing organisation): Leicestershire County Council.
- 1.3. The Audit Team membership was as follows:

Audit Team Leader
Elaine Bingham
B Eng (Hons), MCIHT, MSoRSA
Certificate of Competence (Road Safety Audit)

Audit Team Member
Duncan Lord,
IEng, FIHE, Certificate of Competence (Road Safety Audit)
- 1.4. The audit took place at the offices of Road Safety Consulting Ltd between 23rd and 30th May 2023. The audit was undertaken in accordance with the email instruction from Simon Tucker at DTA Transport Planning Consultants. The report has been prepared with reference to DMRB – GG 119 – Road Safety Audit, with exceptions set out in paragraph 2.4.
- 1.5. The Audit Team visited the site together on the 23rd May 2023 at 2.30pm. Weather at the time of the audit was sunny and dry. The road surface was dry. Traffic flows were moderate. No pedestrians or cyclists were observed.
- 1.6. The audit comprised an examination of the information provided by the Design Organisation and listed in Appendix 1.
- 1.7. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.8. All comments and recommendations are referenced to the design drawing and the locations have been indicated on plans in Appendix 2.

2. Items Considered

2.1. Scheme Proposals

- 2.1.1. The proposed residential development consists of up to 196 dwellings on land on the northern side of Barkby Lane to the east of Empingham Drive.
- 2.1.2. The proposed improvements to the Melton Road-Goodes Lane junction consists of:
 - widening the southeast bound approach to provide carriageway space for a right turn lane on Melton Road and alterations to the kerb radii's into Goodes Lane.
 - Removal of the parking spaces on the northeast bound side of Melton Road;
 - the removal of the bus layby for the southeast bound bus service on Melton Road
- 2.1.3. The proposals are shown on DTA drawing 20060-08 Rev B.

2.2. Information Provided to the Audit Team

- 2.2.1. Information that has been provided to the Audit Team, for the purpose of this audit, is as outlined within Appendix 1 of this report.

2.3. Departures from Standards (Design)

- 2.3.1. The Audit Team has not been advised of any Departures from Standard

2.4. Departures from Standards (Road Safety Audit)

- 2.4.1. This Road Safety Audit has been produced, with reference to DMRB – GG 119 – Road Safety Audit with the following exception.
 - A formally approved Road Safety Audit brief has not been provided by Leicestershire County Council to the Audit Team, however the Audit Team received a supporting email with relevant background data and information, and therefore did not consider that the lack of a formal brief would compromise the production of a Road Safety Audit for these proposals.
 - Section 5 of this report provides additional Observations, that are outside of the scope of GG119 (which specifically excludes the provision of additional comments within Road Safety Audit report). These comments, whilst considered outside the scope of the audit, have been produced to assist the designer in providing a safe design where any safety comment may be conditional on receiving more detailed information.

3. Items Raised at Previous Road Safety Audits

- 3.1. The Audit Team is not aware of any previous Road Safety Audits being carried on these proposals.

4. Items Raised by this Stage 1 Road Safety Audit

4.1. Problem

Location: Melton Road- Goodes Lane

Summary: Pedestrian to vehicle collisions

The removal of the parking bays outside the Syston Day Nursery may result in the displaced parking to park on Goodes Lane. This may increase the number of pedestrians with small children needing to cross Melton Road. It is acknowledged that there is a controlled crossing approximately 250m to the south of Goodes Lane junction, however it is likely that pedestrians will not deviate off their route and may attempt to cross Melton Road within the right turn lane area. During busy periods pedestrians may wait in the hatched area for a gap in traffic. This may lead to an increased risk of pedestrian to vehicle collisions.

Recommendation:

It is recommended that an appropriate pedestrian facility is provided, measure may include but not limited to incorporating a pedestrian refuge within the hatched area of the junction.

End of Safety Comments

5. Issues identified during the Stage 1 Road Safety Audit that are outside the Terms of Reference

5.1. ISSUE

Location: Goodes Lane

Reason considered to be outside the Terms of Reference: Detail Design Issue

The alterations to the kerb lines into Goodes Lane effects the existing uncontrolled crossing dropped kerb and tactile paving provision. It is recommended that appropriate dropped kerbs and tactile paving is provided.

5.2. ISSUE

Location: Melton Road at Puffin Crossing

Reason considered to be outside the Terms of Reference: Design Clarification

Details of the kerb line tie in at the Puffin crossing has not been shown on the drawing. The alterations to the kerb line may affect the edge clearance between the kerb line and traffic signal heads. Insufficient edge clearance may lead to vehicles hitting and damaging the traffic signal equipment. It is recommended that at the detail design stage the edge clearance is checked to ensure that sufficient distance is provided between the kerb edge and the traffic signal heads.

5.3. ISSUE

Location: Melton Road at Puffin Crossing

Reason considered to be outside the Terms of Reference: Detail Design Issue

The zig zag lines for the Puffin crossing would need to be adjusted to suit the new layout, in accordance with Traffic Signs Manual Chapter 6.

6. Audit Team Statement

We certify that this Stage 1 Road Safety Audit has been carried with reference to GG 119.

Audit Team Leader

Elaine Bingham,
B Eng (Hons), MCIHT, MSoRSA
NH Certificate of Competence (Road Safety Audit)

Signed: *E. Bingham* Dated 25th May 2023

Director of Road Safety Consulting Ltd

Audit Team Member

Duncan Lord,
IEng, FIHE
NH Certificate of Competence (Road Safety Audit)

Signed: *D. Lord* Dated 26th May 2023

Consultant working on behalf of Road Safety Consulting Ltd

Road Safety Consulting Ltd
4 Paramore Close
Whetstone
Leicestershire
LE8 6EY

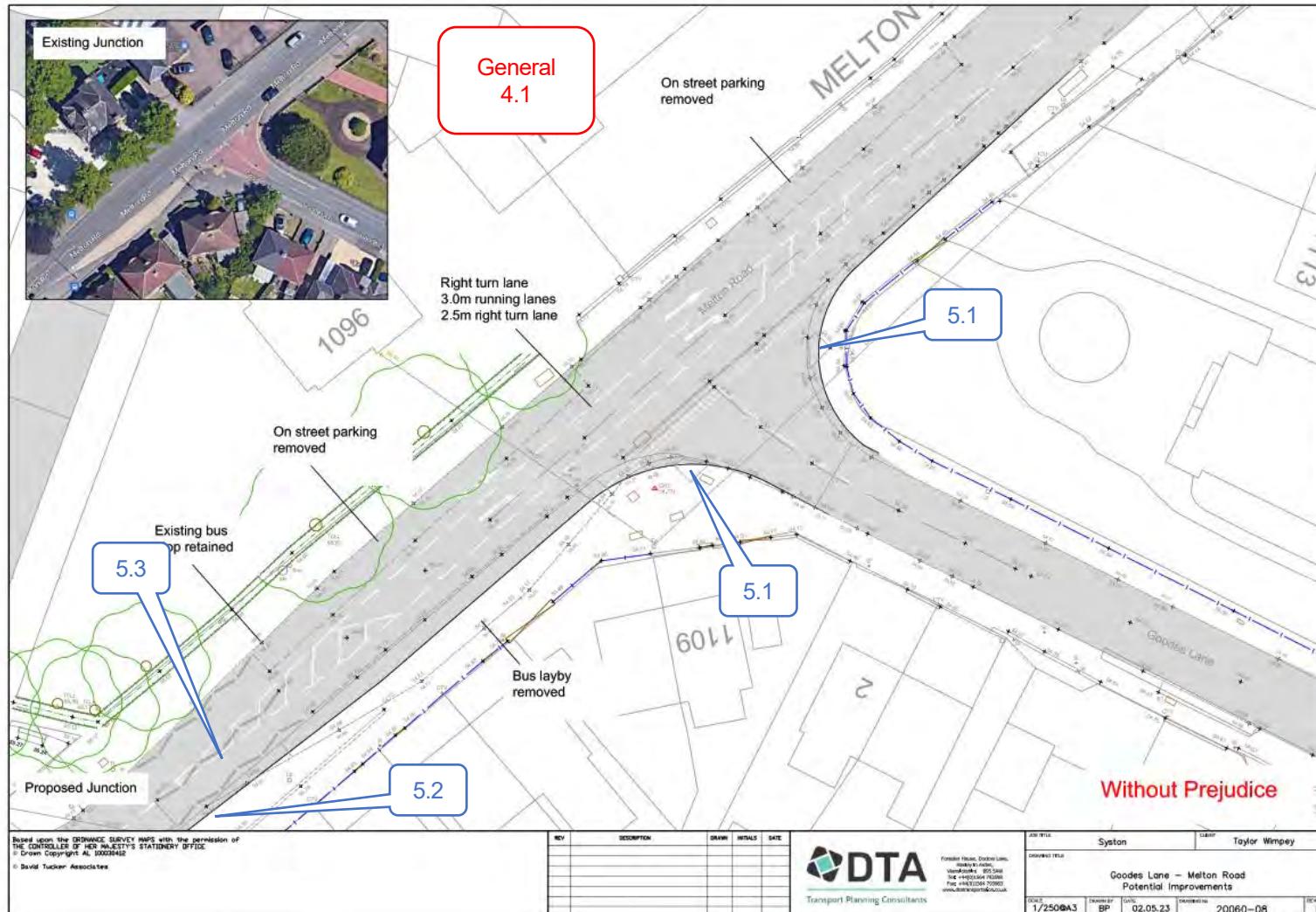
APPENDIX 1: Information Provided

List of Information Provided

Drawing Reference Number	Revision	Title
20060-08	B	Goodes Lane – Melton Road Potential Improvements

APPENDIX 2: Drawing Showing Problem Locations

Problem numbers shown on the attached drawing refer to Problem numbers within the report.





Appendix H

User and Project Details

Project:	
Title:	
Location:	Fosse Way_High Street, Syston
Additional detail:	
File name:	Fosse Way_High Street_RevD.lsg3x
Author:	
Company:	David Tucker Associates
Address:	

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Ind. Arrow	B	4	4
D	Traffic		7	7

Phase Intergreens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A	-	5	5	
	B	-		-	7
	C	5	-		7
	D	7	7	5	

Phase Delays

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

Prohibited Stage Change

		To Stage	1	2	3
From Stage	1	5	7		
	2	5		7	
	3	7	X		

Phases in Stage

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

Give-Way Lane Input Data

Junction: Unnamed Junction												
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)	
1/1 (Fosse Way (south))	6/1 (Right)	1439	0	2/1	1.09	All	3.00	3.00	0.50	3	3.00	

Lane Input Data

Junction: Unnamed Junction													
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)	
1/1 (Fosse Way (south))	O	B C	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf	
2/1 (Fosse Way (north))	U	A	2	3	60.0	Geom	-	3.70	0.00		Arm 6 Right	16.00	
3/1 (High Street)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Ahead	Inf	
4/1 (Fosse Way (south))	U		2	3	60.0	Inf	-	-	-		Arm 6 Left	17.00	
5/1 (Fosse Way (north))	U		2	3	60.0	Inf	-	-	-		Arm 4 Left	15.00	
6/1 (High Street)	U		2	3	60.0	Inf	-	-	-		Arm 5 Right	21.00	

Lane Saturation Flows

Scenario 1: '2022 Base AM Peak' (FG1: '2022 Base AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction												
Lane		Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	24.7 %	1882	1882				
				Arm 6 Right	16.00	75.3 %						
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	50.5 %	1902	1902				
				Arm 6 Left	17.00	49.5 %						
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	69.4 %	1773	1773				
				Arm 5 Right	21.00	30.6 %						
4/1 (Fosse Way (south) Lane 1)		Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)		Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)		Infinite Saturation Flow						Inf	Inf			

Scenario 2: '2022 Base PM Peak' (FG2: '2022 Base PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	3.6 %	1848	1848			
				Arm 6 Right	16.00	96.4 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	54.5 %	1908	1908			
				Arm 6 Left	17.00	45.5 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	65.6 %	1775	1775			
				Arm 5 Right	21.00	34.4 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 3: '2027 Base AM Peak' (FG3: '2027 AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	24.5 %	1882	1882			
				Arm 6 Right	16.00	75.5 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	50.1 %	1901	1901			
				Arm 6 Left	17.00	49.9 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	69.4 %	1773	1773			
				Arm 5 Right	21.00	30.6 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 4: '2027 Base PM Peak' (FG4: '2027 PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	27.4 %	1887	1887			
				Arm 6 Right	16.00	72.6 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	53.8 %	1907	1907			
				Arm 6 Left	17.00	46.2 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	65.8 %	1775	1775			
				Arm 5 Right	21.00	34.2 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 5: '2027 Base + Dev AM Peak' (FG5: '2027 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	23.9 %	1881	1881			
				Arm 6 Right	16.00	76.1 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	49.9 %	1901	1901			
				Arm 6 Left	17.00	50.1 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	70.6 %	1773	1773			
				Arm 5 Right	21.00	29.4 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 6: '2027 Base + Dev PM Peak' (FG6: '2027+ Dev PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	26.4 %	1885	1885			
				Arm 6 Right	16.00	73.6 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	53.4 %	1907	1907			
				Arm 6 Left	17.00	46.6 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.3 %	1775	1775			
				Arm 5 Right	21.00	33.7 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 7: '2037 Base AM Peak' (FG7: '2037 AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	24.5 %	1882	1882			
				Arm 6 Right	16.00	75.5 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	50.1 %	1901	1901			
				Arm 6 Left	17.00	49.9 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	69.4 %	1773	1773			
				Arm 5 Right	21.00	30.6 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 8: '2037 Base PM Peak' (FG8: '2037 AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	27.5 %	1887	1887			
				Arm 6 Right	16.00	72.5 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	53.9 %	1907	1907			
				Arm 6 Left	17.00	46.1 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	65.8 %	1775	1775			
				Arm 5 Right	21.00	34.2 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 9: '2037 Base + Dev AM Peak' (FG9: '2037 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction											
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)			
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	24.0 %	1881	1881			
				Arm 6 Right	16.00	76.0 %					
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	50.0 %	1901	1901			
				Arm 6 Left	17.00	50.0 %					
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	70.5 %	1773	1773			
				Arm 5 Right	21.00	29.5 %					
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf			
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf			
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf			

Scenario 10: '2037 Base + Dev PM Peak' (FG10: '2037 + Dev PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Fosse Way (south))	4.00	0.00	Y	Arm 5 Ahead	Inf	26.5 %	1885	1885		
				Arm 6 Right	16.00	73.5 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	53.5 %	1907	1907		
				Arm 6 Left	17.00	46.5 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.4 %	1775	1775		
				Arm 5 Right	21.00	33.6 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Base AM Peak'	08:00	09:00	01:00	
2: '2022 Base PM Peak'	17:00	18:00	01:00	
3: '2027 AM Peak'	08:00	09:00	01:00	
4: '2027 PM Peak'	17:00	18:00	01:00	
5: '2027 + Dev AM Peak'	08:00	09:00	01:00	
6: '2027+ Dev PM Peak'	17:00	18:00	01:00	
7: '2037 AM Peak'	08:00	09:00	01:00	
8: '2037 AM Peak'	17:00	18:00	01:00	
9: '2037 + Dev AM Peak'	08:00	09:00	01:00	
10: '2037 + Dev PM Peak'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2022 Base AM Peak'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	164	167	331
	B	132	0	299	431
	C	130	396	0	526
	Tot.	262	560	466	1288

FG2: '2022 Base PM Peak'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	157	188	345
	B	195	0	372	567
	C	15	407	0	422
	Tot.	210	564	560	1334

FG3: '2027 AM Peak'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	173	174	347
	B	142	0	322	464
	C	135	416	0	551
	Tot.	277	589	496	1362

FG4: '2027 PM Peak'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	168	196	364
	B	205	0	394	599
	C	164	434	0	598
	Tot.	369	602	590	1561

FG5: '2027 + Dev AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	175	174	349
	B	145	0	348	493
	C	135	429	0	564
	Tot.	280	604	522	1406

FG6: '2027+ Dev PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	171	196	367
	B	207	0	408	615
	C	164	458	0	622
	Tot.	371	629	604	1604

FG7: '2037 AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	190	191	381
	B	155	0	352	507
	C	148	455	0	603
	Tot.	303	645	543	1491

FG8: '2037 AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	184	215	399
	B	225	0	432	657
	C	180	475	0	655
	Tot.	405	659	647	1711

FG9: '2037 + Dev AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	191	191	382
	B	158	0	378	536
	C	148	469	0	617
	Tot.	306	660	569	1535

FG10: '2037 + Dev PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	187	215	402
	B	226	0	446	672
	C	180	500	0	680
	Tot.	406	687	661	1754

Stage Timings

Scenario 1: '2022 Base AM Peak' (FG1: '2022 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	48	12	41
Change Point	0	55	72

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	69.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	69.5%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	65	12	526	1882	758	69.4%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	48	-	331	1902	777	42.6%
3/1	High Street Left Right	U	N/A	N/A	D		1	41	-	431	1773	621	69.5%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	262	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
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	-	-	305	81	10	9.7	2.6	0.8	13.1	-	-	-	-
Unnamed Junction	-	-	305	81	10	9.7	2.6	0.8	13.1	-	-	-	-
1/1	526	526	305	81	10	3.4	1.1	0.8	5.3	36.3	14.0	1.1	15.2
2/1	331	331	-	-	-	2.3	0.4	-	2.7	29.5	7.8	0.4	8.2
3/1	431	431	-	-	-	4.0	1.1	-	5.1	42.9	12.3	1.1	13.5
4/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	29.6	Total Delay for Signalled Lanes (pcuHr):	13.14	Cycle Time (s):	120				
				PRC Over All Lanes (%):	29.6	Total Delay Over All Lanes(pcuHr):	13.14						

Stage Timings

Scenario 2: '2022 Base PM Peak' (FG2: '2022 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	30	21	50
Change Point	0	37	63

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	75.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	75.2%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	56	21	422	1848	564	74.9%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	30	-	345	1908	493	70.0%
3/1	High Street Left Right	U	N/A	N/A	D		1	50	-	567	1775	754	75.2%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
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	-	-	97	299	10	12.3	4.1	0.8	17.2	-	-	-	-
Unnamed Junction	-	-	97	299	10	12.3	4.1	0.8	17.2	-	-	-	-
1/1	422	422	97	299	10	3.8	1.5	0.8	6.1	51.8	12.7	1.5	14.1
2/1	345	345	-	-	-	3.9	1.1	-	5.0	52.3	10.3	1.1	11.5
3/1	567	567	-	-	-	4.6	1.5	-	6.1	38.6	15.9	1.5	17.4
4/1	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	19.7	Total Delay for Signalled Lanes (pcuHr):	17.16	Cycle Time (s):	120				
				PRC Over All Lanes (%):	19.7	Total Delay Over All Lanes(pcuHr):	17.16						

Stage Timings

Scenario 3: '2027 Base AM Peak' (FG3: '2027 AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	48	12	41
Change Point	0	55	72

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	74.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	74.8%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	65	12	551	1882	738	74.6%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	48	-	347	1901	776	44.7%
3/1	High Street Left Right	U	N/A	N/A	D		1	41	-	464	1773	621	74.8%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	589	Inf	Inf	0.0%
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	-	-	292	114	10	10.7	3.3	0.9	14.9	-	-	-	-
Unnamed Junction	-	-	292	114	10	10.7	3.3	0.9	14.9	-	-	-	-
1/1	551	551	292	114	10	3.8	1.4	0.9	6.1	39.8	15.6	1.4	17.1
2/1	347	347	-	-	-	2.5	0.4	-	2.9	29.9	8.3	0.4	8.7
3/1	464	464	-	-	-	4.4	1.5	-	5.9	45.6	13.5	1.5	15.0
4/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	20.4	Total Delay for Signalled Lanes (pcuHr):	14.85	Cycle Time (s):	120				
				PRC Over All Lanes (%):	20.4	Total Delay Over All Lanes(pcuHr):	14.85						

Stage Timings

Scenario 4: '2027 Base PM Peak' (FG4: '2027 PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	47	9	45
Change Point	0	54	68

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	88.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	88.0%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	61	9	598	1887	681	87.9%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	47	-	364	1907	763	47.7%
3/1	High Street Left Right	U	N/A	N/A	D		1	45	-	599	1775	680	88.0%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	602	Inf	Inf	0.0%
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	-	-	269	154	11	13.4	7.2	0.9	21.5	-	-	-	-
Unnamed Junction	-	-	269	154	11	13.4	7.2	0.9	21.5	-	-	-	-
1/1	598	598	269	154	11	5.0	3.4	0.9	9.2	55.6	18.6	3.4	22.0
2/1	364	364	-	-	-	2.7	0.5	-	3.2	31.2	8.9	0.5	9.4
3/1	599	599	-	-	-	5.7	3.4	-	9.1	54.8	18.5	3.4	21.9
4/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	2.2	Total Delay for Signalled Lanes (pcuHr):	21.52	Cycle Time (s):	120				
				PRC Over All Lanes (%):	2.2	Total Delay Over All Lanes(pcuHr):	21.52						

Stage Timings

Scenario 5: '2027 Base + Dev AM Peak' (FG5: '2027 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	40	19	42
Change Point	0	47	71

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	77.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	77.6%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	64	19	564	1881	727	77.5%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	40	-	349	1901	650	53.7%
3/1	High Street Left Right	U	N/A	N/A	D		1	42	-	493	1773	635	77.6%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	280	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
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	-	-	203	215	11	12.0	4.0	0.8	16.8	-	-	-	-
Unnamed Junction	-	-	203	215	11	12.0	4.0	0.8	16.8	-	-	-	-
1/1	564	564	203	215	11	4.3	1.7	0.8	6.8	43.2	16.5	1.7	18.1
2/1	349	349	-	-	-	3.1	0.6	-	3.7	37.8	9.3	0.6	9.9
3/1	493	493	-	-	-	4.7	1.7	-	6.4	46.6	14.5	1.7	16.2
4/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	16.0	Total Delay for Signalled Lanes (pcuHr):	16.81	Cycle Time (s):	120				
				PRC Over All Lanes (%):	16.0	Total Delay Over All Lanes(pcuHr):	16.81						

Stage Timings

Scenario 6: '2027 Base + Dev PM Peak' (FG6: '2027+ Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	52	5	44
Change Point	0	59	69

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	92.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	92.4%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	62	5	622	1885	680	91.5%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	52	-	367	1907	842	43.6%
3/1	High Street Left Right	U	N/A	N/A	D		1	44	-	615	1775	666	92.4%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
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	-	-	320	126	12	13.6	10.1	1.0	24.7	-	-	-	-
Unnamed Junction	-	-	320	126	12	13.6	10.1	1.0	24.7	-	-	-	-
1/1	622	622	320	126	12	5.1	4.6	1.0	10.7	62.2	19.7	4.6	24.3
2/1	367	367	-	-	-	2.4	0.4	-	2.7	26.9	8.4	0.4	8.7
3/1	615	615	-	-	-	6.1	5.1	-	11.2	65.5	19.5	5.1	24.5
4/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%): -2.7	Total Delay for Signalled Lanes (pcuHr): 24.68	Cycle Time (s): 120							
				PRC Over All Lanes (%): -2.7	Total Delay Over All Lanes(pcuHr): 24.68								

Stage Timings

Scenario 7: '2037 Base AM Peak' (FG7: '2037 AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	31	29	41
Change Point	0	38	72

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	82.7%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	65	29	603	1882	729	82.7%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	31	-	381	1901	507	75.2%
3/1	High Street Left Right	U	N/A	N/A	D		1	41	-	507	1773	621	81.7%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	645	Inf	Inf	0.0%
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	-	-	85	359	11	14.2	5.9	0.7	20.8	-	-	-	-
Unnamed Junction	-	-	85	359	11	14.2	5.9	0.7	20.8	-	-	-	-
1/1	603	603	85	359	11	4.9	2.3	0.7	7.9	47.1	18.1	2.3	20.4
2/1	381	381	-	-	-	4.3	1.5	-	5.7	54.3	11.6	1.5	13.1
3/1	507	507	-	-	-	5.0	2.2	-	7.2	50.8	15.4	2.2	17.5
4/1	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	8.8	Total Delay for Signalled Lanes (pcuHr):	20.79	Cycle Time (s):	120				
				PRC Over All Lanes (%):	8.8	Total Delay Over All Lanes(pcuHr):	20.79						

Stage Timings

Scenario 8: '2037 Base PM Peak' (FG8: '2037 AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	36	21	44
Change Point	0	43	69

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	98.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	98.7%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	62	21	655	1887	672	97.5%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	36	-	399	1907	588	67.9%
3/1	High Street Left Right	U	N/A	N/A	D		1	44	-	657	1775	666	98.7%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	647	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%
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	-	-	126	327	22	17.0	21.2	0.8	38.9	-	-	-	-
Unnamed Junction	-	-	126	327	22	17.0	21.2	0.8	38.9	-	-	-	-
1/1	655	655	126	327	22	6.2	9.3	0.8	16.3	89.3	21.5	9.3	30.8
2/1	399	399	-	-	-	4.0	1.0	-	5.1	45.7	11.5	1.0	12.6
3/1	657	657	-	-	-	6.8	10.8	-	17.6	96.6	21.7	10.8	32.6
4/1	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%): -9.7	Total Delay for Signalled Lanes (pcuHr): 38.95	Cycle Time (s): 120							
PRC Over All Lanes (%): -9.7				Total Delay Over All Lanes(pcuHr): 38.95									

Stage Timings

Scenario 9: '2037 Base + Dev AM Peak' (FG9: '2037 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	39	21	41
Change Point	0	46	72

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	86.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	86.4%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	65	21	617	1881	714	86.4%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	39	-	382	1901	634	60.3%
3/1	High Street Left Right	U	N/A	N/A	D		1	41	-	536	1773	621	86.4%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	569	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	660	Inf	Inf	0.0%
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	-	-	169	288	12	14.0	6.7	0.8	21.6	-	-	-	-
Unnamed Junction	-	-	169	288	12	14.0	6.7	0.8	21.6	-	-	-	-
1/1	617	617	169	288	12	5.1	3.0	0.8	8.9	51.9	18.9	3.0	21.8
2/1	382	382	-	-	-	3.5	0.8	-	4.3	40.5	10.6	0.8	11.4
3/1	536	536	-	-	-	5.4	3.0	-	8.4	56.2	16.5	3.0	19.5
4/1	569	569	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	660	660	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	21.56	Cycle Time (s):	120				
				PRC Over All Lanes (%):	4.2	Total Delay Over All Lanes(pcuHr):	21.56						

Stage Timings

Scenario 10: '2037 Base + Dev PM Peak' (FG10: '2037 + Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	33	24	44
Change Point	0	40	69

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Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	101.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	101.8%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	62	24	680	1885	668	101.8%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	33	-	402	1907	540	74.4%
3/1	High Street Left Right	U	N/A	N/A	D		1	44	-	672	1775	666	101.0%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	406	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
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	-	-	92	365	35	19.1	32.5	0.7	52.3	-	-	-	-
Unnamed Junction	-	-	92	365	35	19.1	32.5	0.7	52.3	-	-	-	-
1/1	680	668	92	365	35	7.3	16.4	0.7	24.4	129.1	23.1	16.4	39.5
2/1	402	402	-	-	-	4.4	1.4	-	5.8	51.8	12.1	1.4	13.5
3/1	672	666	-	-	-	7.5	14.7	-	22.1	118.5	22.6	14.7	37.3
4/1	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	401	401	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%): -13.1	Total Delay for Signalled Lanes (pcuHr): 52.29	Cycle Time (s): 120							
				PRC Over All Lanes (%): -13.1	Total Delay Over All Lanes(pcuHr): 52.29								

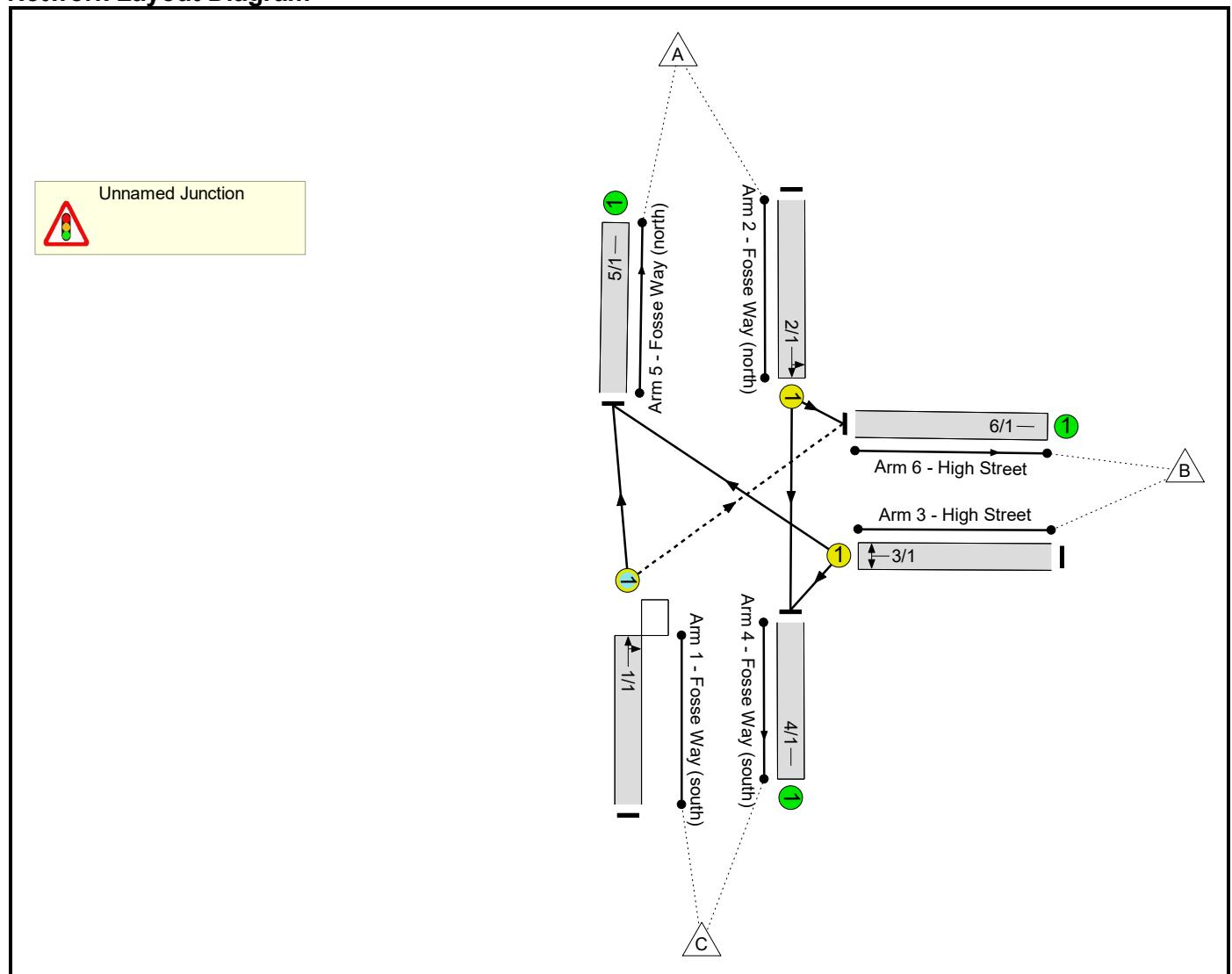
Full Input Data And Results

Full Input Data And Results

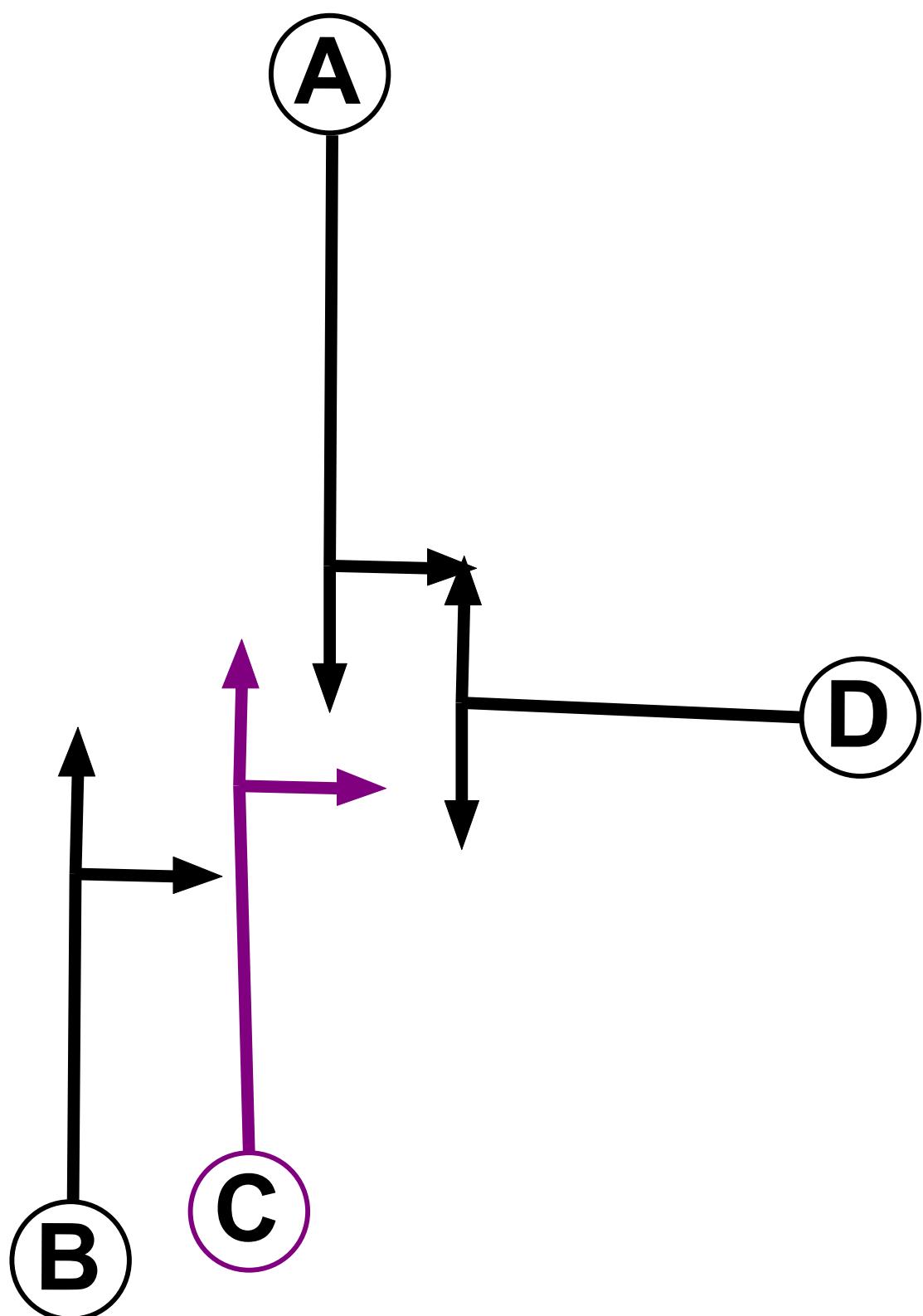
User and Project Details

Project:	
Title:	
Location:	Fosse Way_High Street, Syston
Additional detail:	
File name:	Fosse Way_High Street_RevD.lsg3x
Author:	
Company:	David Tucker Associates
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Ind. Arrow	B	4	4
D	Traffic		7	7

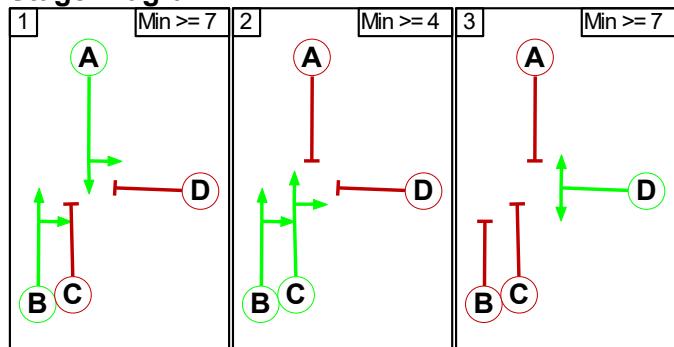
Phase Intergreens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A	-	5	5	
	B	-	-	-	7
	C	5	-	-	7
	D	7	7	5	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1	-	5	7
	2	5	-	7
	3	7	X	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Fosse Way (south))	6/1 (Right)	1439	0	2/1	1.09	All	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction													
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)	
1/1 (Fosse Way (south))	O	B C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Ahead	Inf	
											Arm 6 Right	16.00	
2/1 (Fosse Way (north))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 4 Ahead	Inf	
											Arm 6 Left	17.00	
3/1 (High Street)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Left	15.00	
											Arm 5 Right	21.00	
4/1 (Fosse Way (south))	U		2	3	60.0	Inf	-	-	-	-	-	-	
5/1 (Fosse Way (north))	U		2	3	60.0	Inf	-	-	-	-	-	-	
6/1 (High Street)	U		2	3	60.0	Inf	-	-	-	-	-	-	

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Base AM Peak'	08:00	09:00	01:00	
2: '2022 Base PM Peak'	17:00	18:00	01:00	
3: '2027 AM Peak'	08:00	09:00	01:00	
4: '2027 PM Peak'	17:00	18:00	01:00	
5: '2027 + Dev AM Peak'	08:00	09:00	01:00	
6: '2027+ Dev PM Peak'	17:00	18:00	01:00	

Scenario 1: '2022 Base AM Peak' (FG1: '2022 Base AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	164	167	331
	B	132	0	299	431
	C	130	396	0	526
	Tot.	262	560	466	1288

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2022 Base AM Peak
Junction: Unnamed Junction	
1/1	526
2/1	331
3/1	431
4/1	466
5/1	262
6/1	560

Lane Saturation Flows

Junction: Unnamed Junction										
Lane		Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	24.7 %	1817	1817		
				Arm 6 Right	16.00	75.3 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	50.5 %	1902	1902		
				Arm 6 Left	17.00	49.5 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	69.4 %	1773	1773		
				Arm 5 Right	21.00	30.6 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Scenario 2: '2022 Base PM Peak' (FG2: '2022 Base PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	157	188	345
Origin	B	195	0	372	567
	C	15	407	0	422
	Tot.	210	564	560	1334

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Base PM Peak
Junction: Unnamed Junction	
1/1	422
2/1	345
3/1	567
4/1	560
5/1	210
6/1	564

Lane Saturation Flows

Junction: Unnamed Junction										
Lane		Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	3.6 %	1784	1784		
				Arm 6 Right	16.00	96.4 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	54.5 %	1908	1908		
				Arm 6 Left	17.00	45.5 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	65.6 %	1775	1775		
				Arm 5 Right	21.00	34.4 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Scenario 3: '2027 Base AM Peak' (FG3: '2027 AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	173	174	347
Origin	B	142	0	322	464
	C	135	416	0	551
	Tot.	277	589	496	1362

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2027 Base AM Peak
Junction: Unnamed Junction	
1/1	551
2/1	347
3/1	464
4/1	496
5/1	277
6/1	589

Lane Saturation Flows

Junction: Unnamed Junction										
Lane		Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	24.5 %	1816	1816		
				Arm 6 Right	16.00	75.5 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	50.1 %	1901	1901		
				Arm 6 Left	17.00	49.9 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	69.4 %	1773	1773		
				Arm 5 Right	21.00	30.6 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Scenario 4: '2027 Base PM Peak' (FG4: '2027 PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	168	196	364
Origin	B	205	0	394	599
	C	164	434	0	598
	Tot.	369	602	590	1561

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2027 Base PM Peak
Junction: Unnamed Junction	
1/1	598
2/1	364
3/1	599
4/1	590
5/1	369
6/1	602

Lane Saturation Flows

Junction: Unnamed Junction										
Lane		Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	27.4 %	1821	1821		
				Arm 6 Right	16.00	72.6 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	53.8 %	1907	1907		
				Arm 6 Left	17.00	46.2 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	65.8 %	1775	1775		
				Arm 5 Right	21.00	34.2 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Scenario 5: '2027 Base + Dev AM Peak' (FG5: '2027 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	175	174	349
B	145	0	348	493	
C	135	429	0	564	
Tot.	280	604	522	1406	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2027 Base + Dev AM Peak
Junction: Unnamed Junction	
1/1	564
2/1	349
3/1	493
4/1	522
5/1	280
6/1	604

Lane Saturation Flows

Junction: Unnamed Junction										
Lane		Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)	
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	23.9 %	1816	1816		
				Arm 6 Right	16.00	76.1 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	49.9 %	1901	1901		
				Arm 6 Left	17.00	50.1 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	70.6 %	1773	1773		
				Arm 5 Right	21.00	29.4 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Scenario 6: '2027 Base + Dev PM Peak' (FG6: '2027+ Dev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	171	196	367
Origin	B	207	0	408	615
	C	164	458	0	622
	Tot.	371	629	604	1604

Full Input Data And Results

Traffic Lane Flows

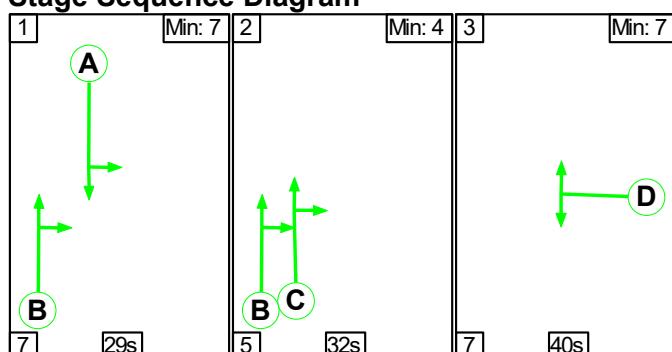
Lane	Scenario 6: 2027 Base + Dev PM Peak
Junction: Unnamed Junction	
1/1	622
2/1	367
3/1	615
4/1	604
5/1	371
6/1	629

Lane Saturation Flows

Junction: Unnamed Junction										
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)		
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	26.4 %	1819	1819		
				Arm 6 Right	16.00	73.6 %				
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	53.4 %	1907	1907		
				Arm 6 Left	17.00	46.6 %				
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.3 %	1775	1775		
				Arm 5 Right	21.00	33.7 %				
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf		
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf		
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf		

Scenario 1: '2022 Base AM Peak' (FG1: '2022 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

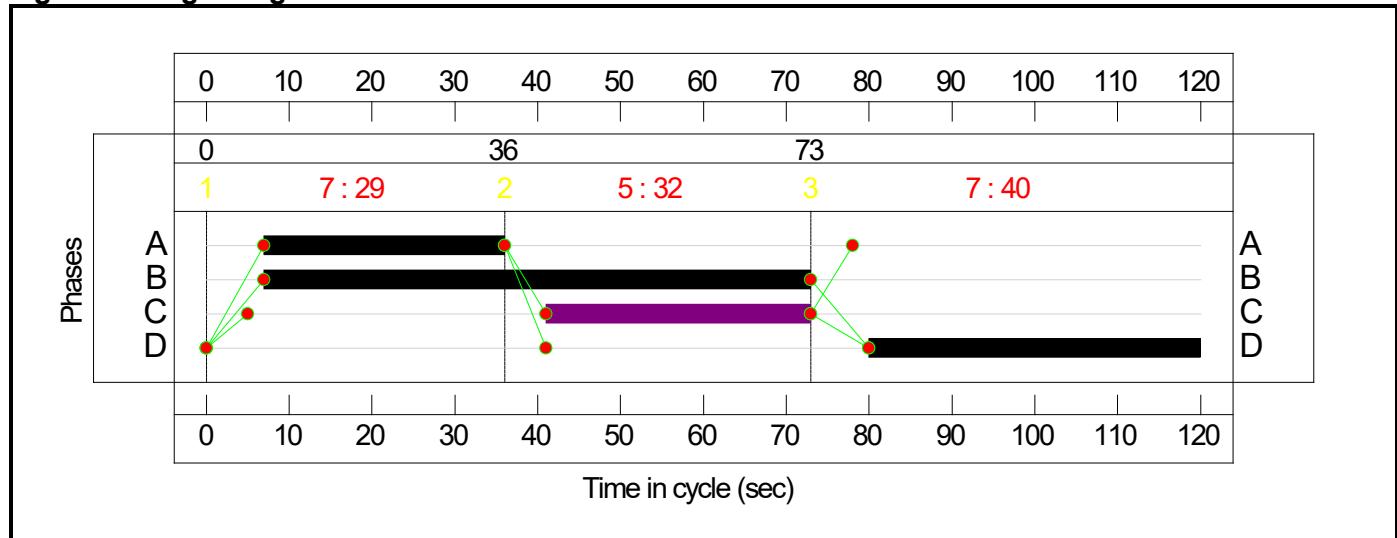


Stage Timings

Stage	1	2	3
Duration	29	32	40
Change Point	0	36	73

Full Input Data And Results

Signal Timings Diagram

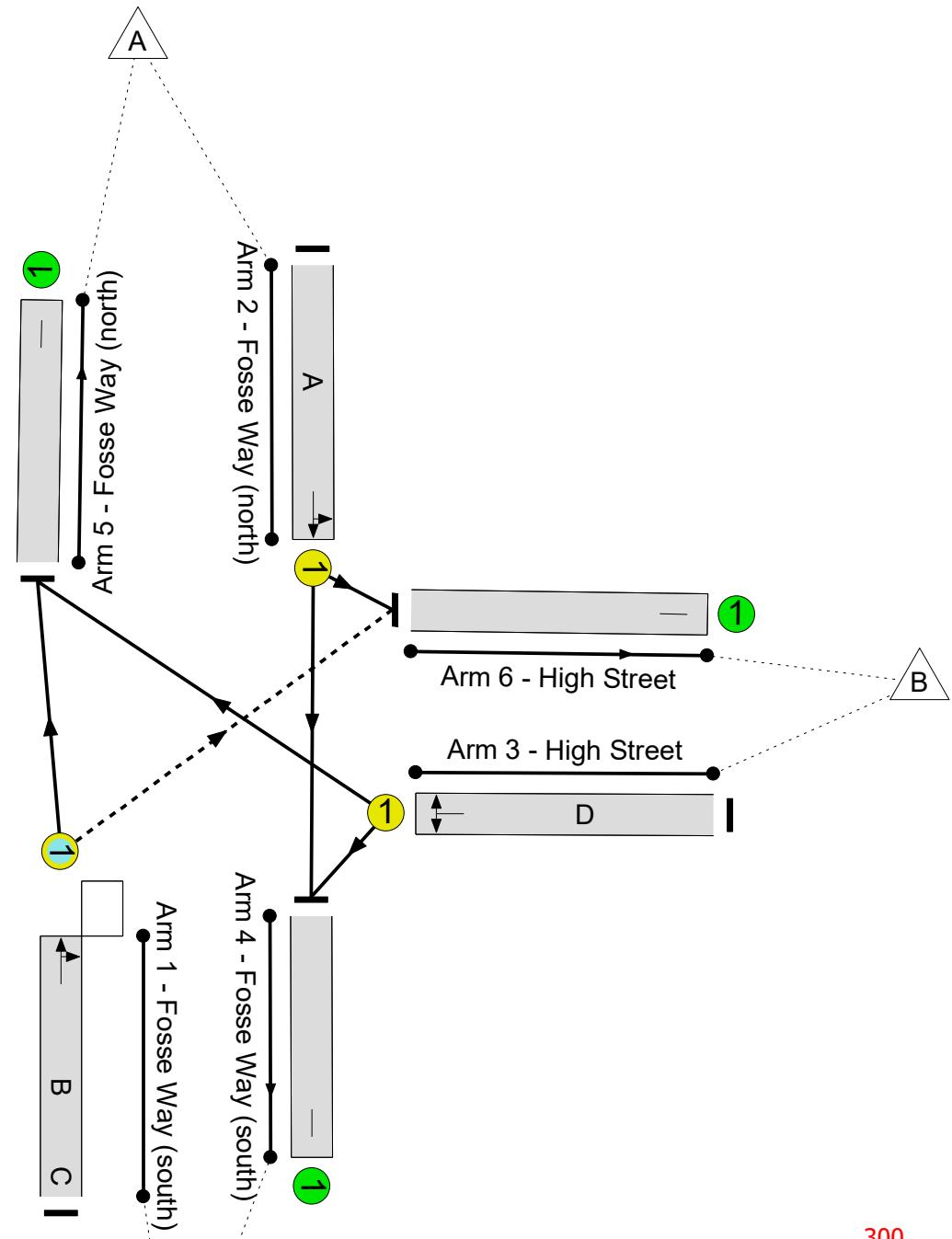


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 26.3 %
Total Traffic Delay: 15.8 pcuHr



Full Input Data And Results

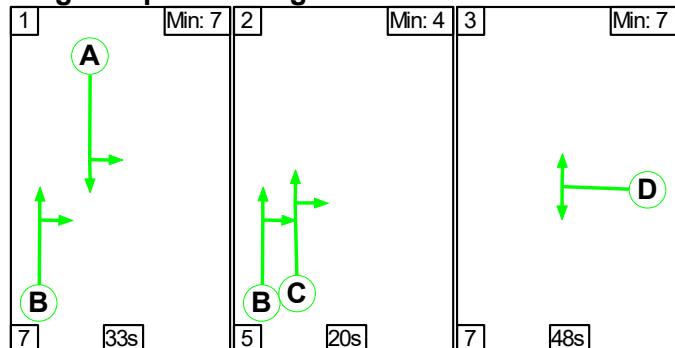
Network Results

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	-	-	N/A	-	-	-	-	-	-	-	-	-	71.3%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	71.3%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	66	32	526	1817	738	71.3%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	29	-	331	1902	475	69.6%
3/1	High Street Left Right	U	N/A	N/A	D		1	40	-	431	1773	606	71.1%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	262	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
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	-	-	99	291	7	11.8	3.6	0.4	15.8	-	-	-	-
Unnamed Junction	-	-	99	291	7	11.8	3.6	0.4	15.8	-	-	-	-
1/1	526	526	99	291	7	3.9	1.2	0.4	5.6	38.2	14.6	1.2	15.8
2/1	331	331	-	-	-	3.8	1.1	-	4.9	53.1	9.9	1.1	11.1
3/1	431	431	-	-	-	4.1	1.2	-	5.3	44.5	12.5	1.2	13.7
4/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	26.3	Total Delay for Signalled Lanes (pcuHr):			15.80	Cycle Time (s): 120			
				PRC Over All Lanes (%):	26.3	Total Delay Over All Lanes(pcuHr):			15.80				

Full Input Data And Results

Scenario 2: '2022 Base PM Peak' (FG2: '2022 Base PM Peak', Plan 1: 'Network Control Plan 1')

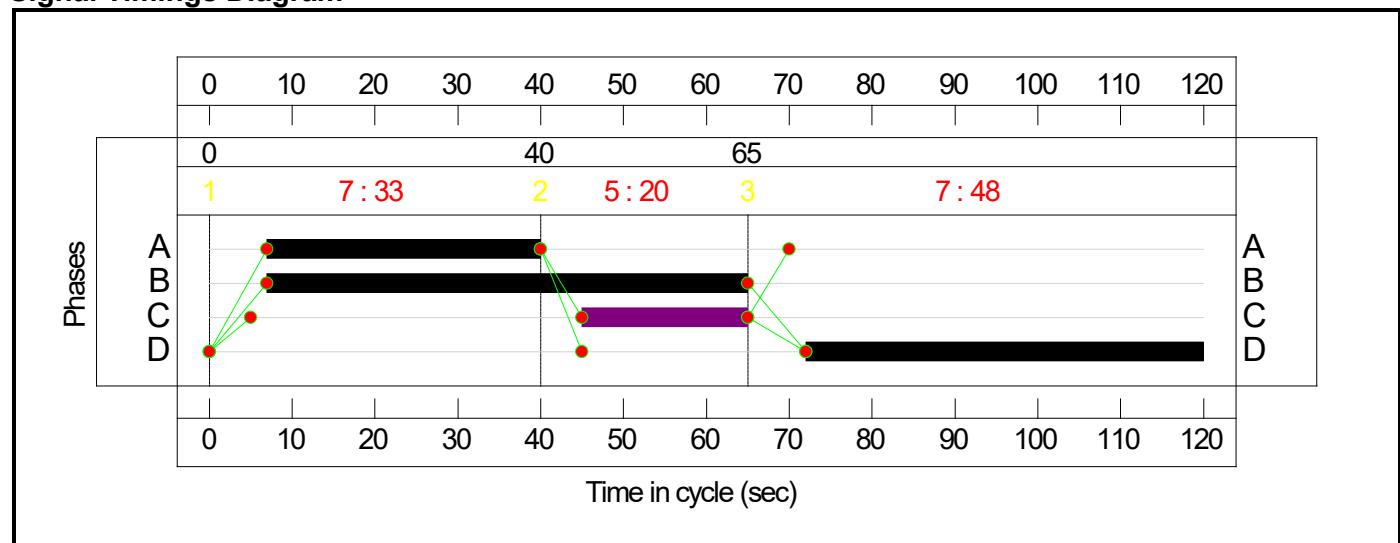
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	33	20	48
Change Point	0	40	65

Signal Timings Diagram

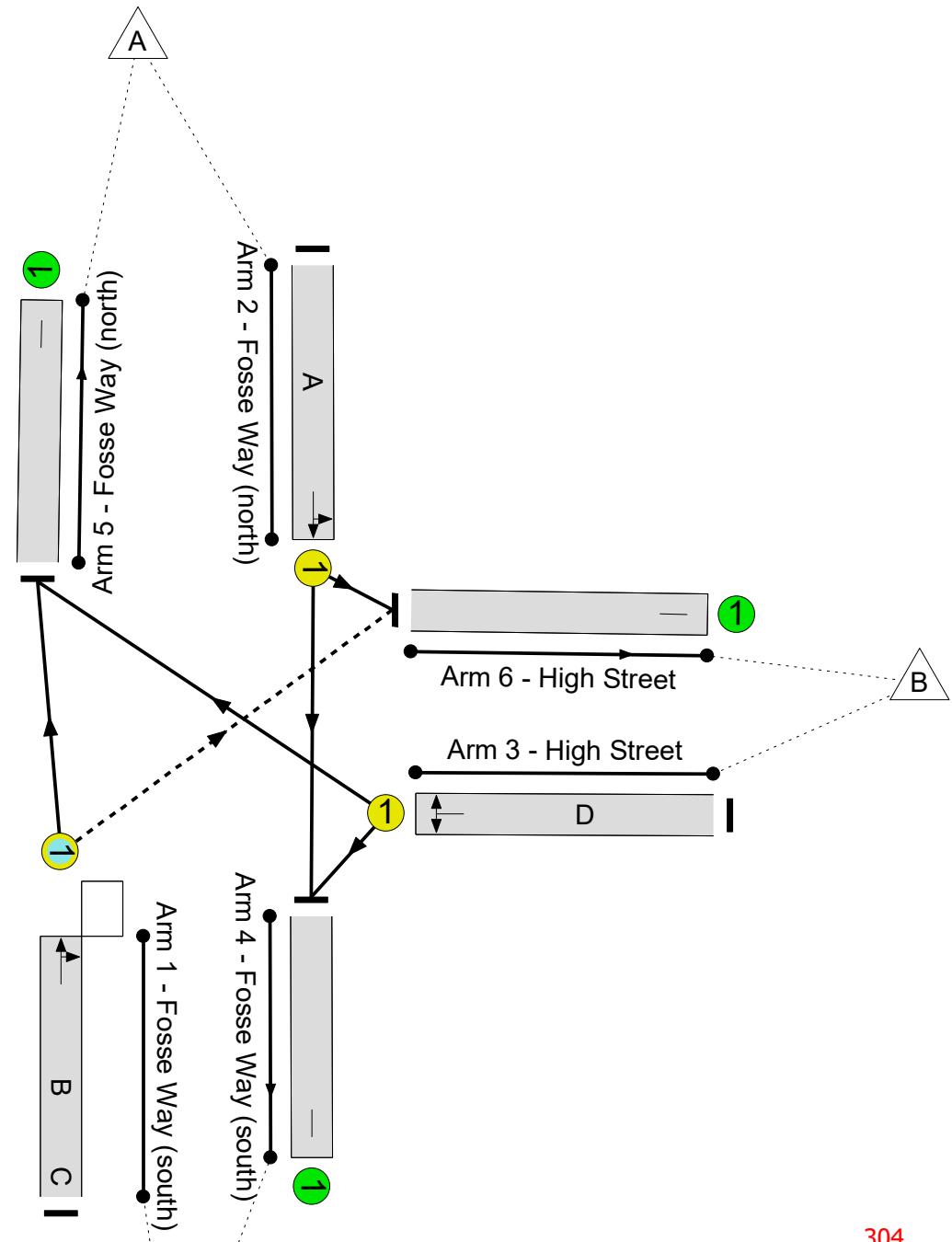


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 15.0 %
Total Traffic Delay: 17.4 pcuHr



Full Input Data And Results

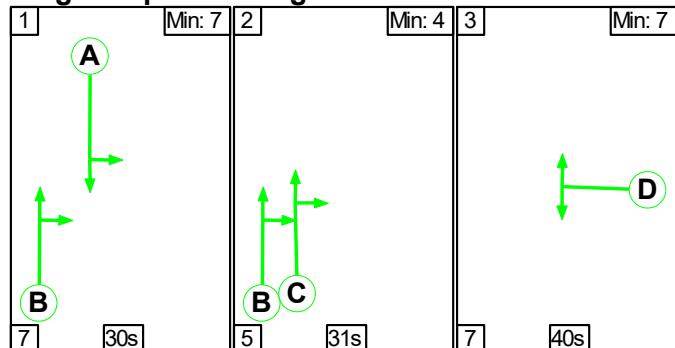
Network Results

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	-	-	N/A	-	-	-	-	-	-	-	-	-	78.2%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	78.2%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	58	20	422	1784	542	77.9%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	33	-	345	1908	541	63.8%
3/1	High Street Left Right	U	N/A	N/A	D		1	48	-	567	1775	725	78.2%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
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	-	-	133	267	7	12.4	4.3	0.6	17.4	-	-	-	-
Unnamed Junction	-	-	133	267	7	12.4	4.3	0.6	17.4	-	-	-	-
1/1	422	422	133	267	7	4.0	1.7	0.6	6.3	53.4	12.8	1.7	14.5
2/1	345	345	-	-	-	3.6	0.9	-	4.5	46.7	10.0	0.9	10.8
3/1	567	567	-	-	-	4.9	1.8	-	6.6	42.0	16.4	1.8	18.1
4/1	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	15.0	Total Delay for Signalled Lanes (pcuHr):			17.36	Cycle Time (s): 120			
				PRC Over All Lanes (%):	15.0	Total Delay Over All Lanes(pcuHr):			17.36				

Full Input Data And Results

Scenario 3: '2027 Base AM Peak' (FG3: '2027 AM Peak', Plan 1: 'Network Control Plan 1')

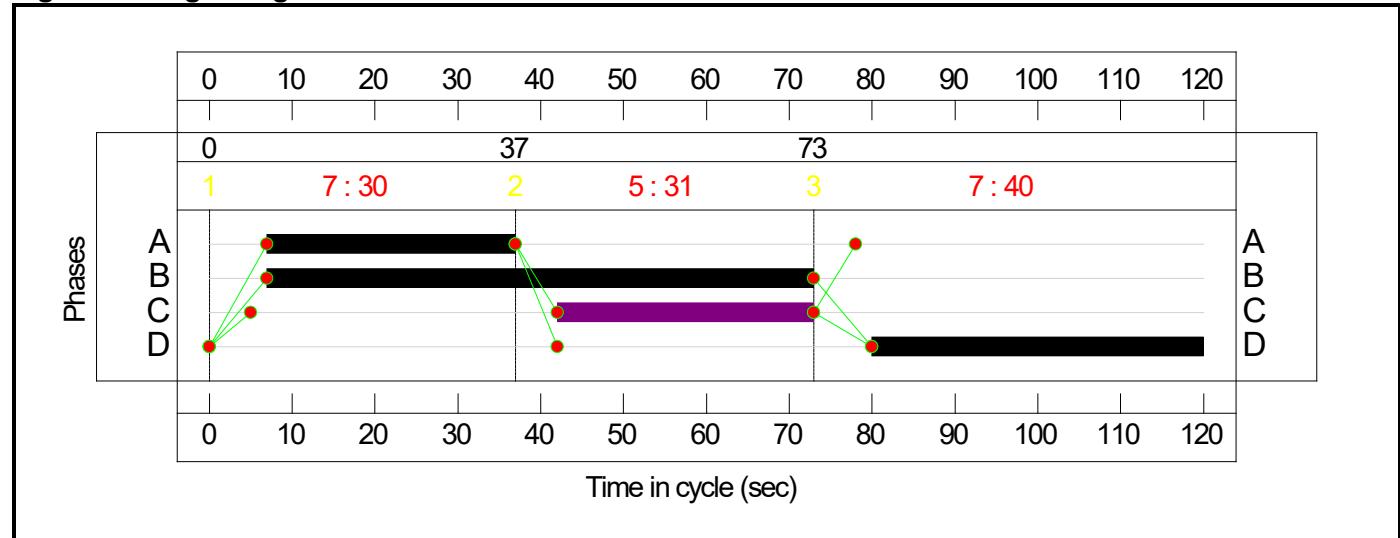
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	30	31	40
Change Point	0	37	73

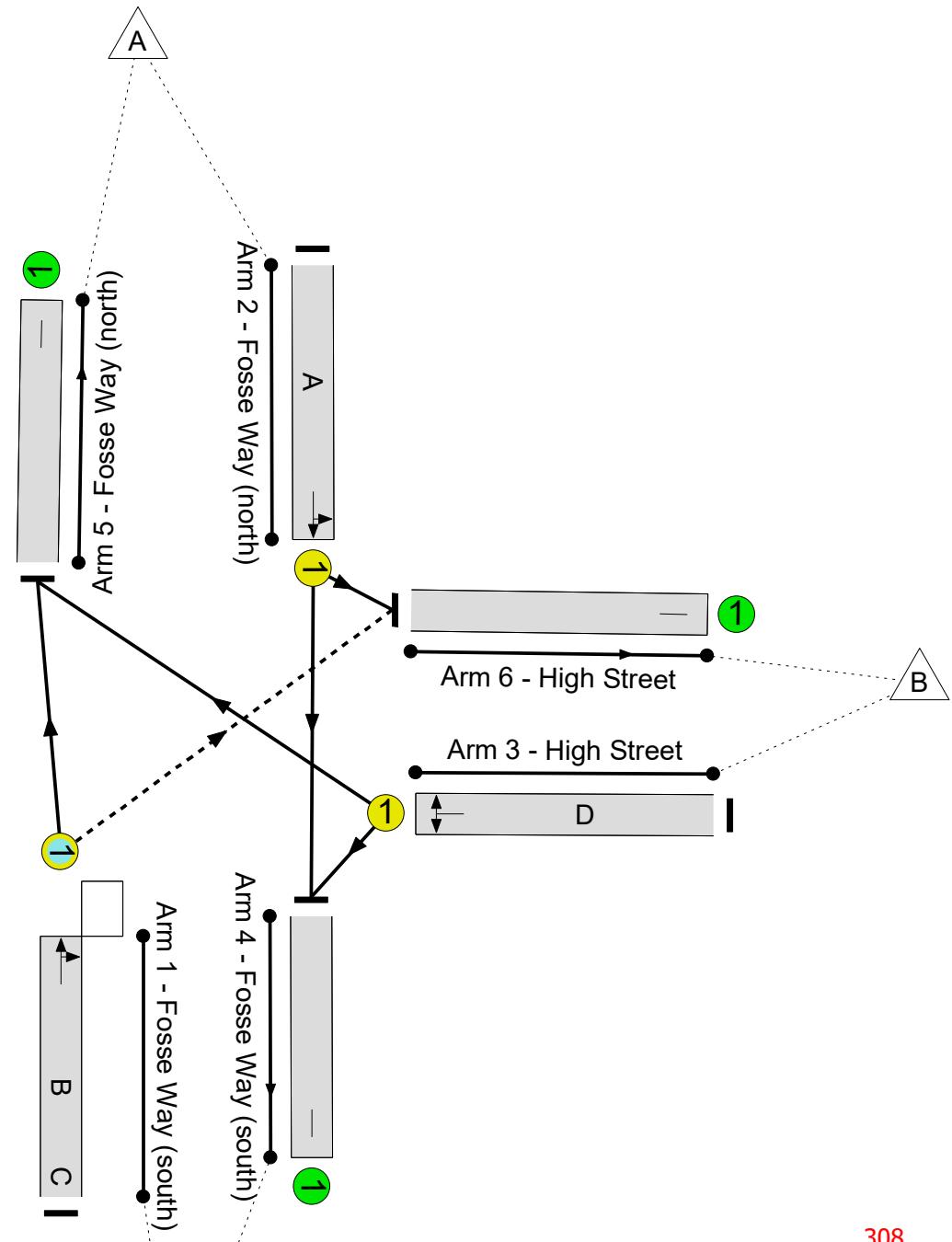
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 17.5 %
Total Traffic Delay: 17.6 pcuHr



Full Input Data And Results

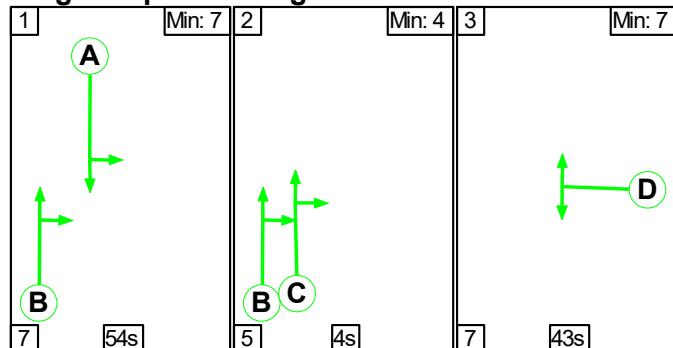
Network Results

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	-	-	N/A	-	-	-	-	-	-	-	-	-	76.6%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	76.6%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	66	31	551	1816	720	76.5%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	30	-	347	1901	491	70.7%
3/1	High Street Left Right	U	N/A	N/A	D		1	40	-	464	1773	606	76.6%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	589	Inf	Inf	0.0%
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	-	-	97	312	7	12.8	4.4	0.4	17.6	-	-	-	-
Unnamed Junction	-	-	97	312	7	12.8	4.4	0.4	17.6	-	-	-	-
1/1	551	551	97	312	7	4.4	1.6	0.4	6.4	41.8	15.8	1.6	17.4
2/1	347	347	-	-	-	3.9	1.2	-	5.1	52.7	10.4	1.2	11.6
3/1	464	464	-	-	-	4.5	1.6	-	6.1	47.6	13.8	1.6	15.4
4/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	17.5	Total Delay for Signalled Lanes (pcuHr):			17.62	Cycle Time (s): 120			
				PRC Over All Lanes (%):	17.5	Total Delay Over All Lanes(pcuHr):			17.62				

Full Input Data And Results

Scenario 4: '2027 Base PM Peak' (FG4: '2027 PM Peak', Plan 1: 'Network Control Plan 1')

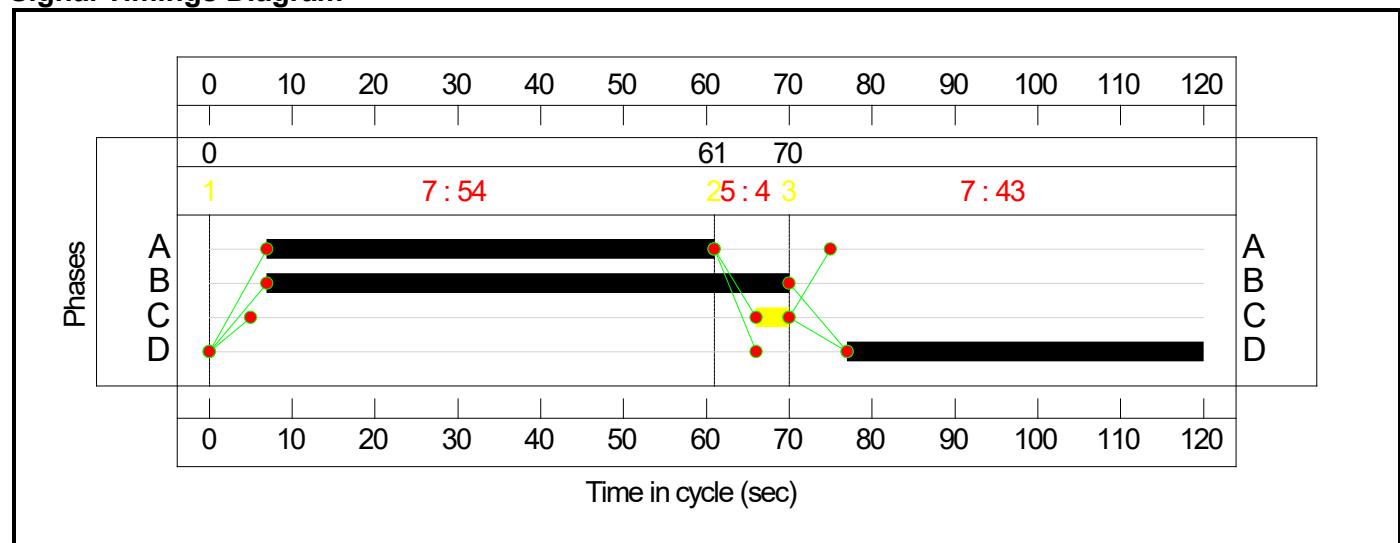
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	54	4	43
Change Point	0	61	70

Signal Timings Diagram

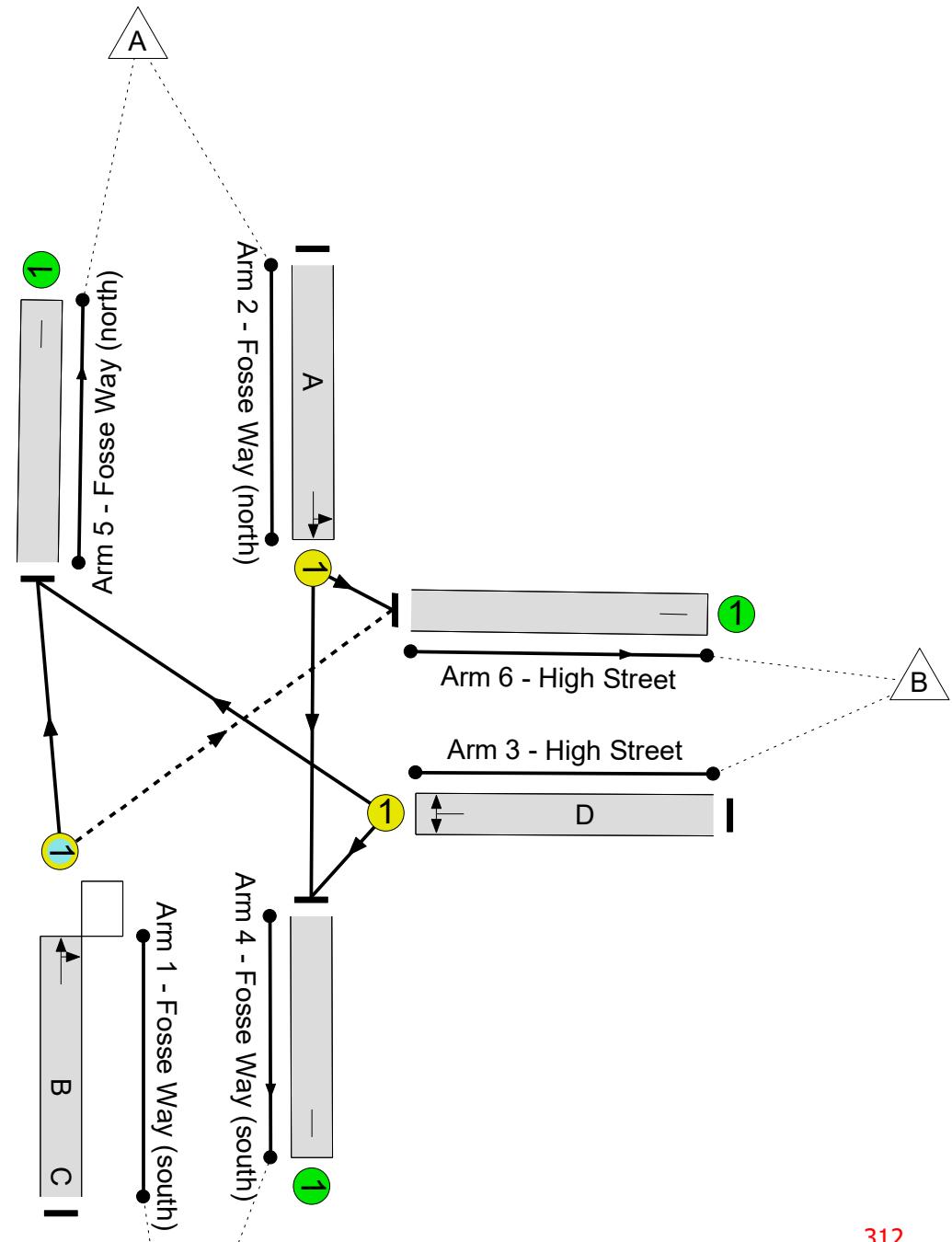


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -2.3 %
Total Traffic Delay: 23.6 pcuHr



Full Input Data And Results

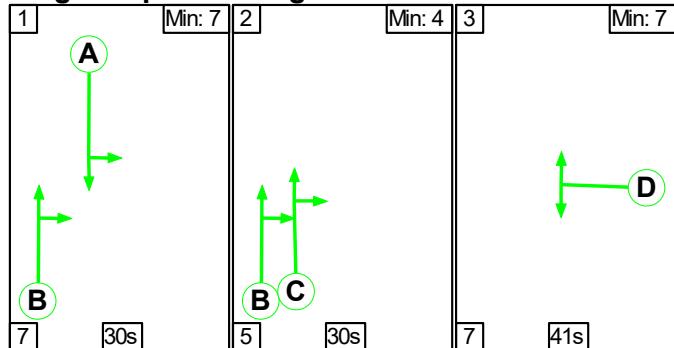
Network Results

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	-	-	N/A	-	-	-	-	-	-	-	-	-	92.0%	
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	92.0%	
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	63	4	598	1821	658	90.9%	
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	54	-	364	1907	874	41.6%	
3/1	High Street Left Right	U	N/A	N/A	D		1	43	-	599	1775	651	92.0%	
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%	
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%	
6/1	High Street	U	N/A	N/A	-		-	-	-	602	Inf	Inf	0.0%	
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	-	-	343	84	7	13.3	9.6	0.7	23.6	-	-	-	-	
Unnamed Junction	-	-	343	84	7	13.3	9.6	0.7	23.6	-	-	-	-	
1/1	598	598	343	84	7	5.1	4.4	0.7	10.1	60.8	18.9	4.4	23.3	
2/1	364	364	-	-	-	2.2	0.4	-	2.6	25.3	8.1	0.4	8.4	
3/1	599	599	-	-	-	6.0	4.9	-	10.9	65.6	19.0	4.9	23.8	
4/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1				PRC for Signalled Lanes (%): -2.3	Total Delay for Signalled Lanes (pcuHr): 23.57	Cycle Time (s): 120								
				PRC Over All Lanes (%): -2.3	Total Delay Over All Lanes(pcuHr): 23.57									

Full Input Data And Results

Scenario 5: '2027 Base + Dev AM Peak' (FG5: '2027 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

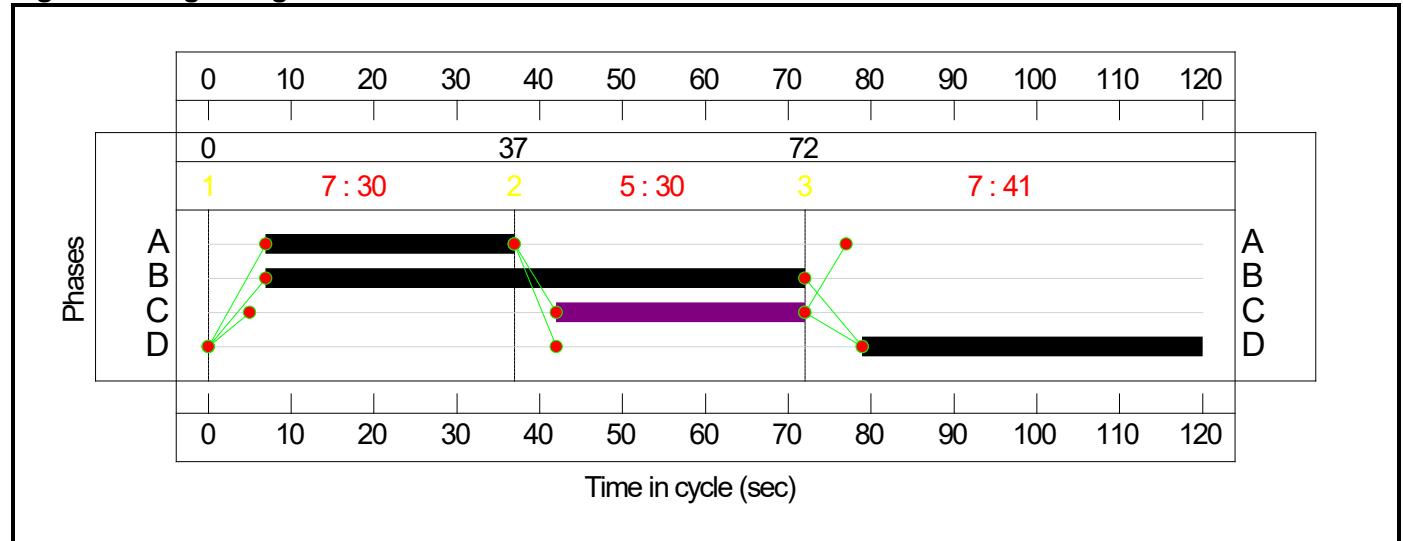
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	30	30	41
Change Point	0	37	72

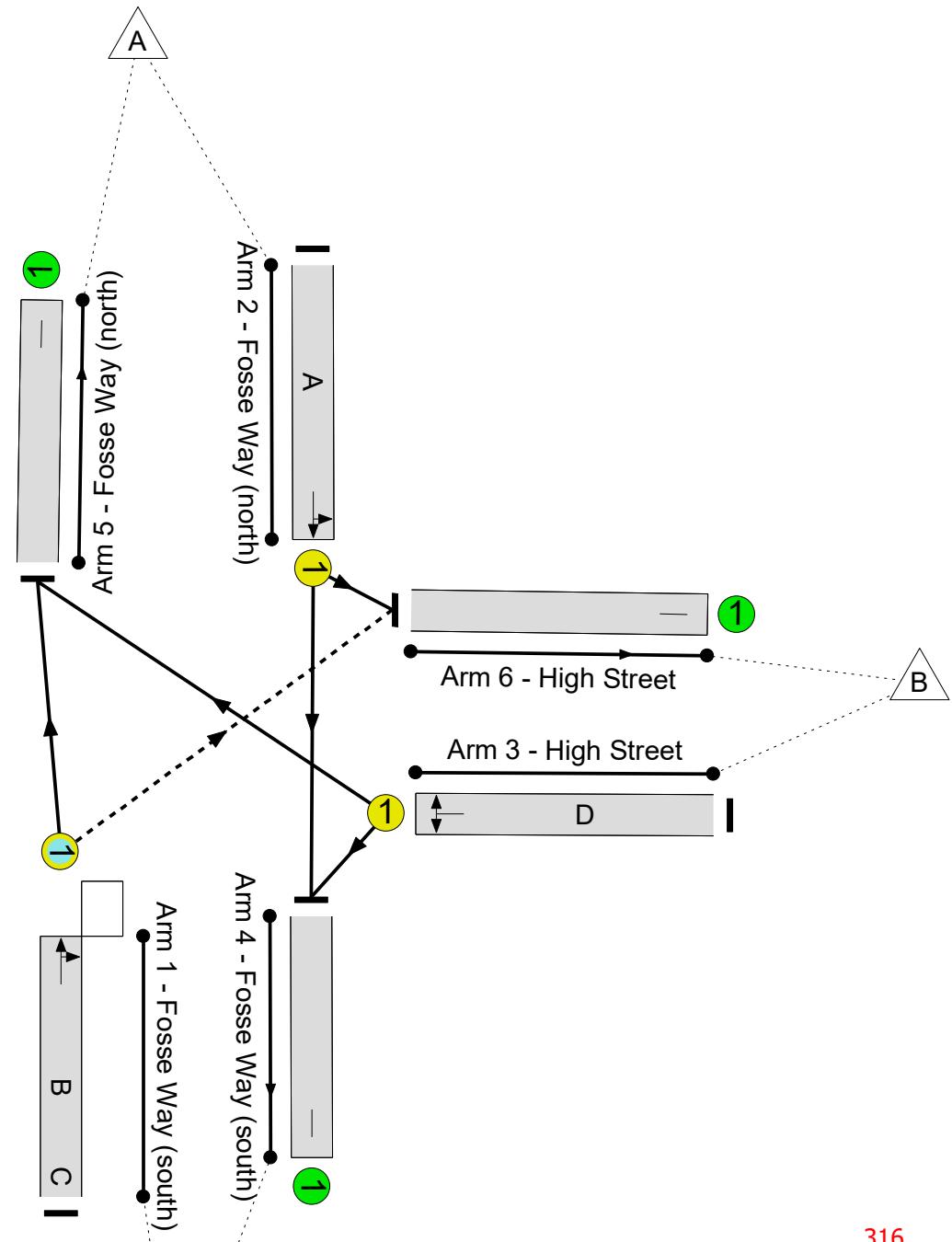
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 12.2 %
Total Traffic Delay: 18.9 pcuHr



Full Input Data And Results

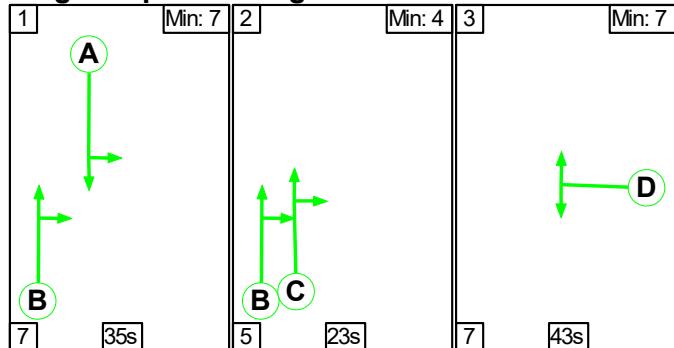
Network Results

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	-	-	N/A	-	-	-	-	-	-	-	-	-	80.2%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	80.2%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	65	30	564	1816	703	80.2%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	30	-	349	1901	491	71.1%
3/1	High Street Left Right	U	N/A	N/A	D		1	41	-	493	1773	621	79.4%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	280	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
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	-	-	97	325	7	13.4	5.1	0.5	18.9	-	-	-	-
Unnamed Junction	-	-	97	325	7	13.4	5.1	0.5	18.9	-	-	-	-
1/1	564	564	97	325	7	4.7	2.0	0.5	7.1	45.3	16.6	2.0	18.6
2/1	349	349	-	-	-	3.9	1.2	-	5.1	52.9	10.6	1.2	11.8
3/1	493	493	-	-	-	4.8	1.9	-	6.7	48.8	14.8	1.9	16.7
4/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):	12.2	Total Delay for Signalled Lanes (pcuHr):			18.91	Cycle Time (s): 120			
				PRC Over All Lanes (%):	12.2	Total Delay Over All Lanes(pcuHr):			18.91				

Full Input Data And Results

Scenario 6: '2027 Base + Dev PM Peak' (FG6: '2027+ Dev PM Peak', Plan 1: 'Network Control Plan 1')

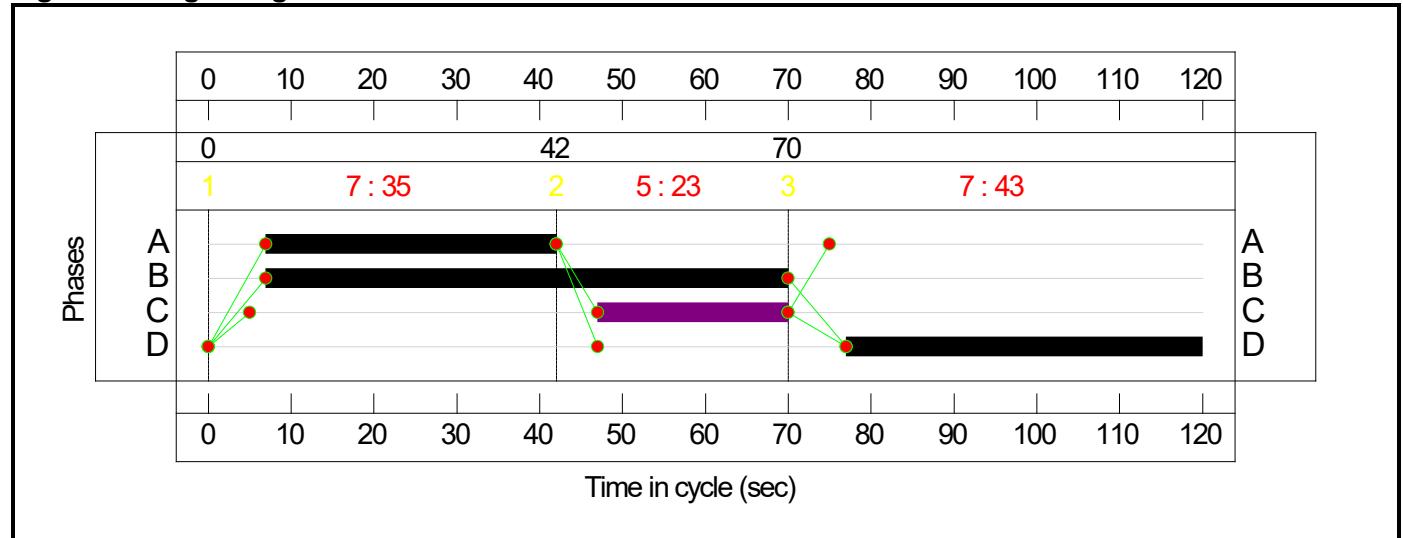
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	35	23	43
Change Point	0	42	70

Signal Timings Diagram

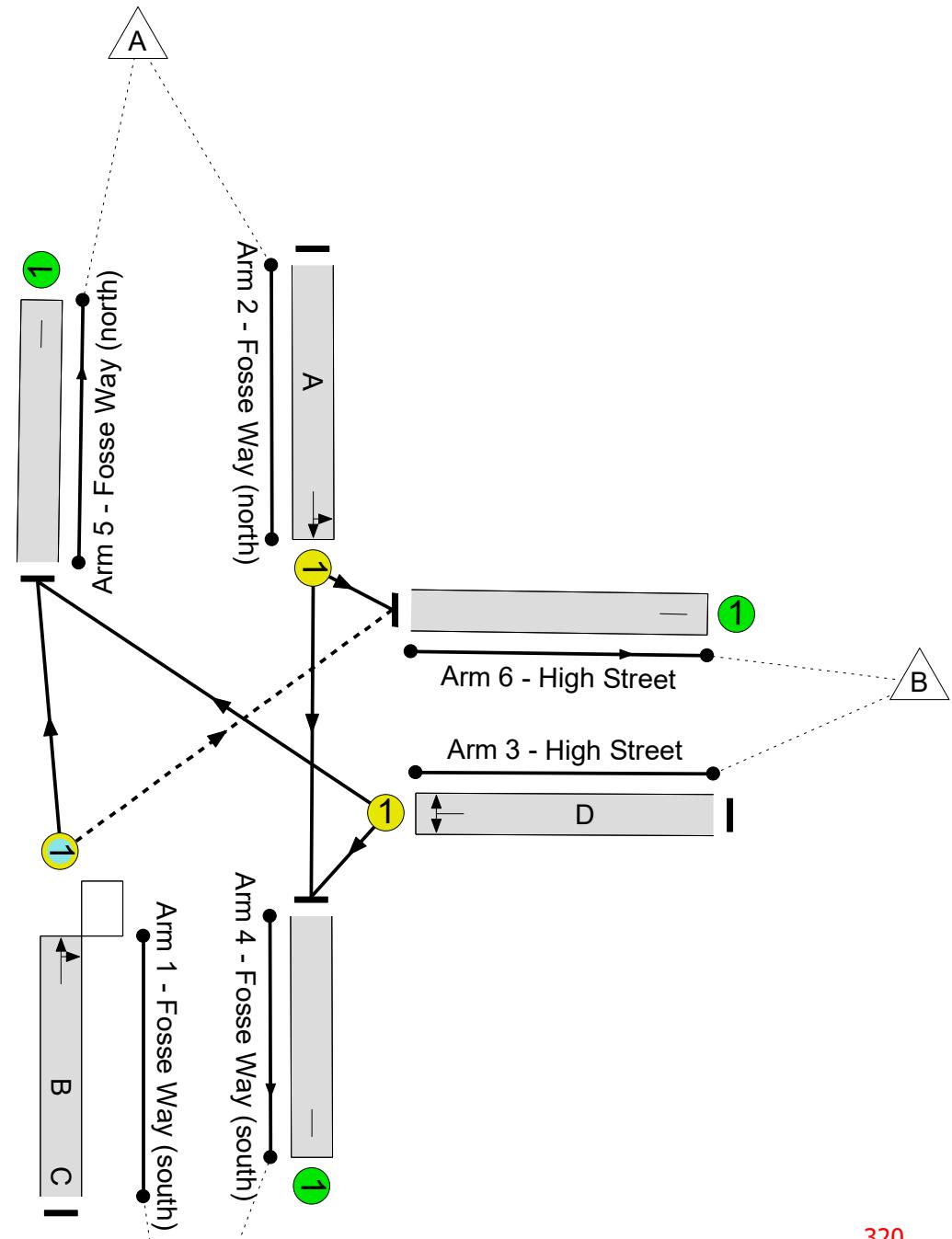


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -5.0 %
Total Traffic Delay: 29.7 pcuHr



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	-	-	N/A	-	-	-	-	-	-	-	-	-	94.5%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	94.5%
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	63	23	622	1819	660	94.2%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	35	-	367	1907	572	64.1%
3/1	High Street Left Right	U	N/A	N/A	D		1	43	-	615	1775	651	94.5%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
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	-	-	138	312	8	15.9	13.4	0.5	29.7	-	-	-	-
Unnamed Junction	-	-	138	312	8	15.9	13.4	0.5	29.7	-	-	-	-
1/1	622	622	138	312	8	5.9	6.1	0.5	12.5	72.4	20.0	6.1	26.2
2/1	367	367	-	-	-	3.7	0.9	-	4.6	45.1	10.6	0.9	11.5
3/1	615	615	-	-	-	6.3	6.3	-	12.6	73.9	19.8	6.3	26.2
4/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%): -5.0	Total Delay for Signalled Lanes (pcuHr): 29.74	Cycle Time (s): 120							
				PRC Over All Lanes (%): -5.0	Total Delay Over All Lanes(pcuHr): 29.74								



Appendix I



Stage 1 Road Safety Audit

Fosse Way-High Street Junction, Syston

Proposed Improvements

Date: 30/05/2023

Report produced for: Taylor Wimpey

Report requested by: DTA Transport Planning Consultants

On behalf of: Leicestershire County Council

Report prepared by: Elaine Bingham, Road Safety Consulting Ltd

Reference: RSC/EB/DL/22140

Document Control Sheet

Project Title Fosse Way-High Street Junction, Syston
 Proposed Improvements

Report Title Stage 1 Road Safety Audit
 Reference: RSC/EB/DL/22140

Revision -

Status Final

Control Date 30/05/2023

Record of Issue

Issue	Author	Date	Check	Date	Authorised	Date
Final	EB	25/05/23	DL	26/05/23	EB	30/05/23

Distribution

Organisation	Contact	Copies
DTA Transport Planning Consultants	Simon Tucker	Ecopy

Road Safety Consulting Ltd
4 Paramore Close
Whetstone
Leicestershire
LE8 6EY
Registered in England and Wales
Company Number 5225549

1. Introduction

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the proposed improvements to the Fosse Way-High Street junction in association with a residential development on land north of Barkby Road in Syston. The Audit was carried out during May 2023.
- 1.2. This Road Safety Audit was produced for (client organisation): Taylor Wimpey, requested by (design organisation): DTA Transport Planning Consultants, on behalf of (overseeing organisation): Leicestershire County Council.
- 1.3. The Audit Team membership was as follows:

Audit Team Leader
Elaine Bingham
B Eng (Hons), MCIHT, MSoRSA
Certificate of Competence (Road Safety Audit)

Audit Team Member
Duncan Lord,
IEng, FIHE, Certificate of Competence (Road Safety Audit)
- 1.4. The audit took place at the offices of Road Safety Consulting Ltd between 23rd and 30th May 2023. The audit was undertaken in accordance with the email instruction from Simon Tucker at DTA Transport Planning Consultants. The report has been prepared with reference to DMRB – GG 119 – Road Safety Audit, with exceptions set out in paragraph 2.4.
- 1.5. The Audit Team visited the site together on the 23rd May 2023 at 1.30pm. Weather at the time of the audit was sunny and dry. The road surface was dry. Traffic flows were moderate. No pedestrians or cyclists were observed.
- 1.6. The audit comprised an examination of the information provided by the Design Organisation and listed in Appendix 1.
- 1.7. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.8. All comments and recommendations are referenced to the design drawing and the locations have been indicated on plans in Appendix 2.

2. Items Considered

2.1. Scheme Proposals

- 2.1.1. The proposed residential development consists of up to 196 dwellings on land on the northern side of Barkby Lane to the east of Empingham Drive.
- 2.1.2. The proposed improvements to the Fosse Way-High Street junction consists of:
 - widening the northbound approach to provide carriageway space for a ahead vehicle to pass a vehicle waiting to turn right into the High Street;
 - relaxing the radii kerb between the Fosse Way southbound approach and the High Street to ease the left turn into the High Street;
 - the relocation of the stop lines on all three approaches; and
 - extending the footway on the northeast side into the High Street to allow the uncontrolled pedestrian crossing on the High Street to be relocated further east.
- 2.1.3. The proposals are shown on DTA drawing 20060-08-2 Rev B.

2.2. Information Provided to the Audit Team

- 2.2.1. Information that has been provided to the Audit Team, for the purpose of this audit, is as outlined within Appendix 1 of this report.

2.3. Departures from Standards (Design)

- 2.3.1. The Audit Team has not been advised of any Departures from Standard

2.4. Departures from Standards (Road Safety Audit)

- 2.4.1. This Road Safety Audit has been produced, with reference to DMRB – GG 119 – Road Safety Audit with the following exception.
 - A formally approved Road Safety Audit brief has not been provided by Leicestershire County Council to the Audit Team, however the Audit Team received a supporting email with relevant background data and information, and therefore did not consider that the lack of a formal brief would compromise the production of a Road Safety Audit for these proposals.

-
- Section 5 of this report provides additional Observations, that are outside of the scope of GG119 (which specifically excludes the provision of additional comments within Road Safety Audit report). These comments, whilst considered outside the scope of the audit, have been produced to assist the designer in providing a safe design where any safety comment may be conditional on receiving more detailed information.

3. Items Raised at Previous Road Safety Audits

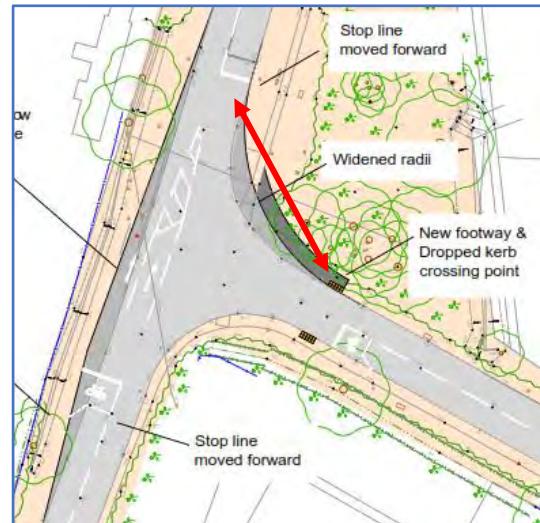
- 3.1. The Audit Team is not aware of any previous Road Safety Audits being carried on these proposals.

4. Items Raised by this Stage 1 Road Safety Audit

4.1. Problem

Location: Uncontrolled Crossing Point on the High Street

Summary: Risk of pedestrian / vehicle collisions



Vegetation may restrict inter-visibility between vehicles turning left into the High Street and pedestrians crossing from north to south at the relocated crossing point. This could result in pedestrians stepping out into the carriageway, to cross the High Street, and being struck and injured by vehicles turning left into the High Street from the Fosse Way.

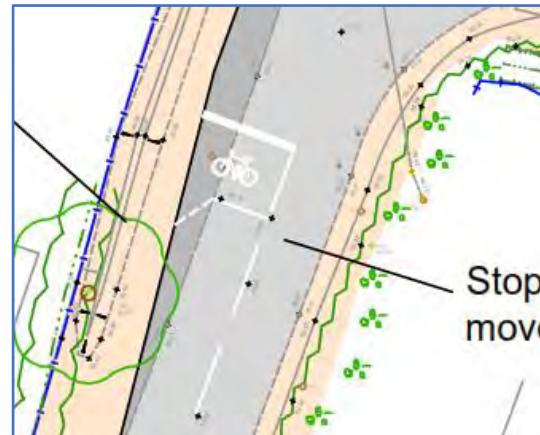
Recommendation:

It is recommended that adequate inter-visibility is provided at all times. This may require the vegetation to be removed.

4.2. Problem

Location: Fosse Way – Northbound approach

Summary: Risk of late braking or fail to stop type collisions



The fir tree in advance of the stop line, may restrict forward visibility to the relocated nearside primary traffic signal head on this approach. The existing offside primary traffic signal head is currently overgrown by vegetation. Obscured visibility to the red aspects may result in late breaking rear end shunt type collisions or fail to stop at a red signal type collisions.

Recommendation:

It is recommended that adequate visibility to the primary signal heads is provided at all times. This may require the vegetation to be cut back or removed.

End of Safety Comments

5. Issues identified during the Stage 1 Road Safety Audit that are outside the Terms of Reference

5.1. ISSUE

Location: Fosse Way - western side and north-eastern corner.

Reason considered to be outside the Terms of Reference: Detail Design Issue

There are existing signs, and a lighting column within the verge area. The widening of the carriageway will bring the kerb line closer to the signs. If there is insufficient edge clearance to the signs it may lead to vehicles clipping and damaging the signs. It is recommended that at the detail design stage the edge clearance is checked to ensure that sufficient distance is provided between the kerb edge and the signs.



6. Audit Team Statement

We certify that this Stage 1 Road Safety Audit has been carried with reference to GG 119.

Audit Team Leader

Elaine Bingham,
B Eng (Hons), MCIHT, MSoRSA
NH Certificate of Competence (Road Safety Audit)

Signed: *E. Bingham* Dated 25th May 2023

Director of Road Safety Consulting Ltd

Audit Team Member

Duncan Lord,
IEng, FIHE
NH Certificate of Competence (Road Safety Audit)

Signed: *D. Lord* Dated 26th May 2023

Consultant working on behalf of Road Safety Consulting Ltd

Road Safety Consulting Ltd
4 Paramore Close
Whetstone
Leicestershire
LE8 6EY

APPENDIX 1: Information Provided**List of Information Provided**

Drawing Reference Number	Revision	Title
20060-08-2	B	Fosse Way – High Street Potential Improvements

APPENDIX 2: Drawing Showing Problem Locations

Problem numbers shown on the attached drawing refer to Problem numbers within the report.





Appendix J

ARCADIS REF	AGREEMENT / DATE	ITEM NO.	DESCRIPTION	Fosse Way - High St Junction	Goodes Lanes - Potential	Melton Rd Junction	COMMENTS
				Drawing ref: 20060-08-2 rev b	Drawing ref: 20060-08 rev b	Drawing ref: 20060-04	
200			SECTION 278 HIGHWAYS	£ 135,083	£ 81,793	£ 303,412	
			Sub-Total	£ 135,083	£ 81,793	£ 303,412	
			SUB-TOTAL DIRECT WORKS	£ 135,083	£ 81,793	£ 303,412	
			GENERAL OVERHEADS & PRELIMINARIES				
3200			FINANCE / LEGALS				
3200.1			Legal Costs - S278, S38, S104, easements	£ 12,500	£ 12,500	£ 12,500	Provisional allowance for legal fees for the respective agreements.
3200.2			Legal Cost - Consultant Appointments	£ 2,500	£ 2,500	£ 2,500	
3200.3			Part 1 Compensation Claims				Excluded
			Sub-Total	£ 15,000	£ 15,000	£ 15,000	
			SUB-TOTAL GENERAL OVERHEADS & PRELIMINARIES	£ 15,000	£ 15,000	£ 15,000	
			PROFESSIONAL/LOCAL AUTHORITY FEES				
4100			STRATEGIC PLANNING AND MASTERPLAN				
4100.1			Planning Fees @ 0.75% of Construction Costs	£ 1,013	£ 613	£ 2,276	
4100.2			Pre-application fees for highways	£ 2,500	£ 2,500	£ 2,500	
			Sub-Total	£ 3,513	£ 3,113	£ 4,776	
4300			ENGINEERING DESIGN				
4300.1			Engineering Design Fees for On-Site Works				
4300.2			Engineering Design Fees for Section 278 Works	£ 10,807	£ 6,543	£ 24,273	Allowance for off-site engineering design fees @ 8%
			Sub-Total	£ 10,807	£ 6,543	£ 24,273	
4600			SITE SUPERVISION				
4600.1			Infrastructure Site Supervision & Administration for Construction Works	£ 2,702	£ 1,636	£ 6,068	Allowance for site supervision and administration fees @ 2%
4600.2			CDM Management	£ 1,351	£ 818	£ 3,034	Allowance for CDM management fees @ 1%
			Sub-Total	£ 4,052	£ 2,454	£ 9,102	
4700			PROJECT MANAGEMENT				
4700.1			Project Management Fees for Construction Works	£ 1,891	£ 1,145	£ 4,248	Allowance for Project management fees @ 1.4%
			Sub-Total	£ 1,891	£ 1,145	£ 4,248	
4800			COST MANAGEMENT				
4800.1			Quantity Surveyor Fees for Construction Works	£ 1,756	£ 1,063	£ 3,944	Allowance for Cost management fees @ 1.3%
			Sub-Total	£ 1,756	£ 1,063	£ 3,944	



Syston, Leicestershire

S278 JUNCTIONS COST ESTIMATE

All Costs at 2Q2023

ARCADIS REF	AGREEMENT / DATE	ITEM NO.	DESCRIPTION	Fosse Way - High St Junction	Goodes Lanes - Potential	Melton Rd Junction	COMMENTS
				Drawing ref: 20060-08-2 rev b	Drawing ref: 20060-08 rev b	Drawing ref: 20060-04	
4900			LOCAL AUTHORITY FEES				
4900.1			Local Authority Fees	£ 29,859	£ 23,997	£ 48,375	S38/S278/S104/landscaping inspection fees and allowance for S38/S278/S104 bonding costs
4900.2			Section 38 Commuted Sums				
4900.3			Section 278 Commuted Sums	£ 13,508	£ 8,179	£ 30,341	S278 commuted sum allowance for 15 year maintenance period
4900.4			Management Company Set Up Costs				
			Sub-Total	£ 43,367	£ 32,177	£ 78,717	
			SUB-TOTAL (PROFESSIONAL/LOCAL AUTHORITY FEES)	£ 65,387	£ 46,496	£ 125,060	
			CONTINGENCY	£ 43,094	£ 28,658	£ 88,694	20%
			GRAND TOTAL	£ 258,564	£ 171,946	£ 532,166	

Fosse Way – High Street Junction**Arcadis Ref 200.1**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	SITE CLEARANCE				
A	General site clearance/breaking out existing material	1	item	5,000.00	5,000.00
B	Remove existing trees	0	nr	250.00	-
C	Remove Existing Kerbs	106	m	12.80	1,360.00
D	Remove Existing Edging	0	m	12.81	-
E	Remove existing lighting columns	1	nr	150.00	150.00
F	Remove existing telegraph pole	0	nr	150.00	-
G	Remove existing cabinet box	0	nr		-
H	Remove existing signs	6	nr	100.00	600.00
I	Remove Bollards	0	nr	100.00	-
J	Remove litter bin, taking and set aside, and reposition	0	nr	100.00	-
K	Remove existing post & wire fence	0	m	5.00	-
L	Remove existing manholes	0	nr	-	-
M	Remove existing road gulley and backfill with concrete	2	nr	150.00	300.00
	SURFACE TREATMENT				
N	Excavation ne 1.5m deep	113	m³	15.00	1,694.01
O	Excavated material disposed off site	113	m³	36.00	4,065.62
P	Completion of formation/sub formation	169	m²	1.00	168.98
Q	Extra over for excavation in hard material	2	m³	35.00	62.69
R	Excavation of soft spots; fill and compact with suitable material (allowed 5%)	6	m³	40.00	240.00
		Carried forward			13,641.29

Fosse Way – High Street Junction**Arcadis Ref 200.1**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				13,641.29
	Road Widening				
A	Compaction of fill	113	m³	1.00	112.93
B	Capping	56	m³	47.79	2,676.36
C	Type 1 Sub-Base	28	m³	73.00	2,044.09
D	Tarmac comprising surface course; 45 mm thick; binder course; 80 mm thick; base course; 205 mm thick	135	m²	92.65	12,477.18
E	EO Block Paving; in carriageway; 80mm thick, sharp sand 30mm thick; base course, 90mm thick AC20;	0	m²	39.00	-
F	Granite setts; in carriageway; 80mm thick, sharp sand 30mm thick, mortar and concrete binder; base course, 200mm thick AC32	0	m²	172.00	-
G	Conservation kerbs; straight, curved; complete with bed and surround	0	m	47.93	-
H	PCC kerbs; straight, curved; flush (K4,5)	104	m	36.00	3,744.36
I	Channels	0	m	30.00	-
J	Additional in-situ concrete mix for kerbs		m³	115.00	-
K	Plane relay and regulate 40mm surface course	756	m²	35.00	26,455.80
L	Over run strip carriageway around roundabout	0	m²	118.34	-
M	Plane off and relay with new coloured asphalt surface course, approx. 70m²		item	2,500.00	-
	Crossovers				
N	Crossover comprising surface course; 40 mm thick HRA; binder course; 60 mm thick AC20; base course; 130 mm thick	0	m²	86.80	-
	Carried forward				61,152.01

Fosse Way – High Street Junction**Arcadis Ref 200.1**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				61,152.01
	<u>Footway / Cycleway</u>				
A	Footway comprising 25mm AC6, 60mm thick AC20 binder course on 150mm thick Type 1 sub base (DBM)	34	m ²	52.34	1,795.79
B	Edging; straight, curved; complete with bed	21	m	19.26	397.91
C	Tactile paving	3	m ²	120.00	369.60
D	Extra over for tactile paving		m ²	43.15	-
E	Plane and Relay 25mm surface course	0	m ²	22.00	-
	STREET LIGHTING				
F	Lighting columns 6m high; every 25m	1	nr	1,750.00	1,750.00
G	Connections including draw pit and duct, and additional service trench	1	nr	1,457.78	1,457.78
H	Feeder Pillars		nr	1,457.78	-
	TRAFFIC SIGNS ETC AND MARKINGS				
I	Traffic signs mounted back to back on single post; non lit	6	nr	500.00	3,000.00
J	White lining and yellow lining to carriageway	1	item	1,500.00	1,500.00
K	Relocate traffic lights	2	nr	10,000.00	20,000.00
L	Bus Stop		nr	20,000.00	-
M	Flag pole for Bus Stop	0	nr		-
N	Pedestrian crossing	0	nr	25,000.00	-
O	New Fencing	0	m		-
P	Relocate concrete marker posts	3	nr	100.00	300.00
	Carried forward				91,723.09

Fosse Way – High Street Junction**Arcadis Ref 200.1**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				91,723.09
	FORMAL LANDSCAPING				
A	Street trees planted within verge or swales; pit - assume Acer x freemanii 'Autumn Blaze', SM, 20-25cm (RB), 500-550cm high, 3x, min 2.4m clear stem or similar	0	nr	2,000.00	-
B	Topsoil & seed to verge areas	0	m ²	5.00	-
C	Shrub planting to verge areas		m ²	20.00	-
D	12 months maintenance	12.50	%		-
	STATUTORY UTILITIES				
E	Allowance for utility diversions		item	100,000.00	-
	SW Drainage				
F	Gullies	2	nr	423.41	846.82
G	225mm carrier drain pipe n.e. 1.5m deep	0	m	91.93	-
H	150mm gully drain connecting pipe	10	m	139.20	1,392.00
I	New SW manholes	0	nr	2,377.91	-
J	Connection to existing SW sewer	1	nr	5,000.00	5,000.00
K	Allowance for Swale		item	5,000.00	-
	Sub-Total				98,961.91
L	Unmeasured items / Design Development	5	%		4,948.10
	Sub-Total				103,910.01
M	Preliminaries - main contractor	30	%		31,173.00
	TOTAL			£	135,083.01

To Summary

135,083.01

Goodes Lane – Melton Road Junction - Potential Improvements**Arcadis Ref 200.4**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	SITE CLEARANCE				
A	General site clearance/breaking out existing material	1	item	5,000.00	5,000.00
B	Remove existing trees	0	nr	250.00	-
C	Remove Existing Kerbs	150	m	12.80	1,919.49
D	Remove Existing Edging	0	m	12.81	-
E	Remove existing lighting columns	0	nr	150.00	-
F	Remove existing telegraph pole	0	nr	150.00	-
G	Remove existing cabinet box	0	nr		-
H	Remove existing signs	0	nr	100.00	-
I	Remove Bollards	0	nr	100.00	-
J	Remove litter bin, taking and set aside, and reposition	0	nr	100.00	-
K	Remove existing post & wire fence	0	m	5.00	-
L	Remove existing manholes	0	nr		-
M	Remove existing road gulley and backfill with concrete	3	nr	150.00	450.00
	SURFACE TREATMENT				
N	Excavation ne 1.5m deep	29	m³	15.00	438.52
O	Excavated material disposed off site	29	m³	36.00	1,052.44
P	Completion of formation/sub formation	89	m²	1.00	88.92
Q	Extra over for excavation in hard material	27	m³	35.00	933.66
R	Excavation of soft spots; fill and compact with suitable material (allowed 5%)	1	m³	40.00	40.00
		Carried forward			9,923.02

Goodes Lane – Melton Road Junction - Potential Improvements**Arcadis Ref 200.4**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				9,923.02
	Road Widening				
A	Compaction of fill	29	m³	1.00	29.23
B	Capping	26	m³	47.79	1,257.35
C	Type 1 Sub-Base	13	m³	73.00	960.32
D	Tarmac comprising surface course; 45 mm thick; binder course; 80 mm thick; base course; 205 mm thick	37	m²	92.65	3,472.52
E	EO Block Paving screed	136	m²	39.00	5,294.64
F	Granite setts; in carriageway; 80mm thick, sharp sand 30mm thick, mortar and concrete binder; base course, 200mm thick AC32	0	m²	172.00	-
G	Conservation kerbs; straight, curved; complete with bed and surround	0	m	47.93	-
H	PCC kerbs; straight, curved; flush (K4,5)	100	m	36.00	3,615.84
I	Channels	0	m	30.00	-
J	Additional in-situ concrete mix for kerbs		m³	115.00	-
K	Plane relay and regulate 40mm surface course	743	m²	35.00	25,988.20
L	Over run strip carriageway around roundabout	0	m²	118.34	-
M	Plane off and relay with new coloured asphalt surface course, approx. 70m2		item	2,500.00	-
	Crossovers				
N	Crossover comprising surface course; 40 mm thick HRA; binder course; 60 mm thick AC20; base course; 130 mm thick	0	m²	86.80	-
	Carried forward				50,541.13

Goodes Lane – Melton Road Junction - Potential Improvements**Arcadis Ref 200.4**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				50,541.13
	<u>Footway / Cycleway</u>				
A	Footway comprising 25mm AC6, 60mm thick AC20 binder course on 150mm thick Type 1 sub base (DBM)	51	m ²	52.34	2,692.37
B	Edging; straight, curved; complete with bed	0	m	19.26	-
C	Tactile paving	2	m ²	120.00	273.60
D	Extra over for tactile paving		m ²	43.15	-
E	Plane and Relay 25mm surface course	48	m ²	22.00	1,056.00
	STREET LIGHTING				
F	Lighting columns 6m high; every 25m	0	nr	1,750.00	-
G	Connections including draw pit and duct, and additional service trench	0	nr	1,457.78	-
H	Feeder Pillars	0	nr	1,457.78	-
	TRAFFIC SIGNS ETC AND MARKINGS				
I	Traffic signs mounted back to back on single post; non lit	0	nr	500.00	-
J	White lining and yellow lining to carriageway	2	item	1,000.00	2,000.00
K	3 way signalised junction	0	nr	50,000.00	-
L	Bus Stop	0	nr	20,000.00	-
M	Flag pole for Bus Stop	0	nr		-
N	Pedestrian crossing	0	nr	25,000.00	-
O	New Fencing	0	m		-
	Carried forward				56,563.10

Goodes Lane – Melton Road Junction - Potential Improvements**Arcadis Ref 200.4**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				56,563.10
	FORMAL LANDSCAPING				
A	Street trees planted within verge or swales; pit - assume Acer x freemanii 'Autumn Blaze', SM, 20-25cm (RB), 500-550cm high, 3x, min 2.4m clear stem or similar	0	nr	2,000.00	-
B	Topsoil & seed to verge areas	0	m ²	5.00	-
C	Shrub planting to verge areas		m ²	20.00	-
D	12 months maintenance	12.50	%		-
	STATUTORY UTILITIES				
E	Allowance for utility diversions		item	100,000.00	-
	SW Drainage				
F	Gullies	3	nr	423.41	1,270.23
G	225mm carrier drain pipe n.e. 1.5m deep	0	m	91.93	-
H	150mm gully drain connecting pipe	15	m	139.20	2,088.00
I	New SW manholes	0	nr	2,377.91	-
J	Connection to existing SW sewer		nr	5,000.00	-
K	Allowance for Swale		item	5,000.00	-
	Sub-Total				59,921.33
L	Unmeasured items / Design Development	5	%		2,996.07
	Sub-Total				62,917.40
M	Preliminaries - main contractor	30	%		18,875.22
	TOTAL			£	81,792.62
	To Summary				81,792.62

Melton Road Junction**Arcadis Ref 200.3**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	SITE CLEARANCE				
A	General site clearance/breaking out existing material	1	item	5,000.00	5,000.00
B	Remove existing trees	0	nr	250.00	-
C	Remove Existing Kerbs	124	m	12.80	1,589.89
D	Remove Existing Edging	0	m	12.81	-
E	Remove existing lighting columns	0	nr	150.00	-
F	Remove existing telegraph pole	0	nr	150.00	-
G	Remove existing cabinet box	0	nr		-
H	Remove existing signs	12	nr	100.00	1,200.00
I	Remove Bollards	4	nr	100.00	400.00
J	Remove litter bin, taking and set aside, and reposition	0	nr	100.00	-
K	Remove existing pedestrian guardrail	9	m	75.00	668.25
L	Remove existing manholes	0	nr		-
M	Remove existing road gulley and backfill with concrete	2	nr	150.00	300.00
	SURFACE TREATMENT				
N	Excavation ne 1.5m deep	94	m³	15.00	1,416.60
O	Excavated material disposed off site	94	m³	36.00	3,399.85
P	Completion of formation/sub formation	133	m²	1.00	133.41
Q	Extra over for excavation in hard material	40	m³	35.00	1,400.81
R	Excavation of soft spots; fill and compact with suitable material (allowed 5%)	5	m³	40.00	200.00
		Carried forward			15,708.81

Melton Road Junction**Arcadis Ref 200.3**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				15,708.81
	Road Widening				
A	Compaction of fill	94	m³	1.00	94.44
B	Capping	52	m³	47.79	2,474.92
C	Type 1 Sub-Base	26	m³	73.00	1,890.24
D	Tarmac comprising surface course; 45 mm thick; binder course; 80 mm thick; base course; 205 mm thick	116	m²	92.65	10,739.99
E	EO Block Paving; in carriageway; 80mm thick, sharp sand 30mm thick; base course, 90mm thick AC20;	0	m²	39.00	-
F	Granite setts; in carriageway; 80mm thick, sharp sand 30mm thick, mortar and concrete binder; base course, 200mm thick AC32	0	m²	172.00	-
G	Conservation kerbs; straight, curved; complete with bed and surround	0	m	47.93	-
H	PCC kerbs; straight, curved; flush (K4,5)	113	m	36.00	4,082.76
I	Channels	0	m	30.00	-
J	Additional in-situ concrete mix for kerbs		m³	115.00	-
K	Plane relay and regulate 40mm surface course	1027	m²	35.00	35,933.10
L	Over run strip carriageway around roundabout	0	m²	118.34	-
M	Plane off and relay with new coloured asphalt surface course, approx. 70m²		item	2,500.00	-
	Crossovers				
N	Crossover comprising surface course; 40 mm thick HRA; binder course; 60 mm thick AC20; base course; 130 mm thick	0	m²	86.80	-
	Carried forward				70,924.26

Melton Road Junction**Arcadis Ref 200.3**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				70,924.26
A	<u>Footway / Cycleway</u>				
A	Footway comprising 25mm AC6, 60mm thick AC20 binder course on 150mm thick Type 1 sub base (DBM)	17	m ²	52.34	915.43
B	Edging; straight, curved; complete with bed	0	m	19.26	-
C	Tactile paving	45	m ²	120.00	5,383.20
D	Extra over for tactile paving		m ²	43.15	-
E	Plane and Relay 25mm surface course	0	m ²	22.00	-
	STREET LIGHTING				
F	Lighting columns 6m high; every 25m	0	nr	1,750.00	-
G	Connections including draw pit and duct, and additional service trench	0	nr	1,457.78	-
H	Feeder Pillars		nr	1,457.78	-
	TRAFFIC SIGNS ETC AND MARKINGS				
I	Traffic signs mounted back to back on single post; non lit	12	nr	500.00	6,000.00
J	White lining and yellow lining to carriageway	2	item	1,500.00	3,000.00
K	4 way signalised junction	1	nr	125,000.00	125,000.00
L	Bus Stop		nr	20,000.00	-
M	Flag pole for Bus Stop	0	nr		-
N	Pedestrian crossing	0	nr	25,000.00	inc. above
O	1050mm x 2000mm Galvanised pedestrian guardrail in concrete	30	m	200.00	6,078.00
P	Road studs	548	nr	5.00	2,740.00
	Carried forward				220,040.89

Melton Road Junction**Arcadis Ref 200.3**

Ref	Work Item Description	Quantity	Unit	Rate £	Total £
	Brought forward				220,040.89
	FORMAL LANDSCAPING				
A	Street trees planted within verge or swales; pit - assume Acer x freemanii 'Autumn Blaze', SM, 20-25cm (RB), 500-550cm high, 3x, min 2.4m clear stem or similar	0	nr	2,000.00	-
B	Topsoil & seed to verge areas	0	m ²	5.00	-
C	Shrub planting to verge areas		m ²	20.00	-
D	12 months maintenance	12.50	%		-
	STATUTORY UTILITIES				
E	Allowance for utility diversions		item	100,000.00	-
	SW Drainage				
F	Gullies	2	nr	423.41	846.82
G	225mm carrier drain pipe n.e. 1.5m deep	0	m	91.93	-
H	150mm gully drain connecting pipe	10	m	139.20	1,392.00
I	New SW manholes	0	nr	2,377.91	-
J	Connection to existing SW sewer		nr	5,000.00	-
K	Allowance for Swale		item	5,000.00	-
	Sub-Total				222,279.71
L	Unmeasured items / Design Development	5	%		11,113.99
	Sub-Total				233,393.70
M	Preliminaries - main contractor	30	%		70,018.11
	TOTAL			£	303,411.81

To Summary

303,411.81

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