

LEICESTERSHIRE COUNTY COUNCIL

PROPOSED RESIDENTIAL DEVELOPMENT
ON LAND OFF BARTON ROAD, BARLESTONE, LEICESTERSHIRE
(APPLICATION REFERENCE 21/00096/OUT)

TRANSPORT STATEMENT ADDENDUM

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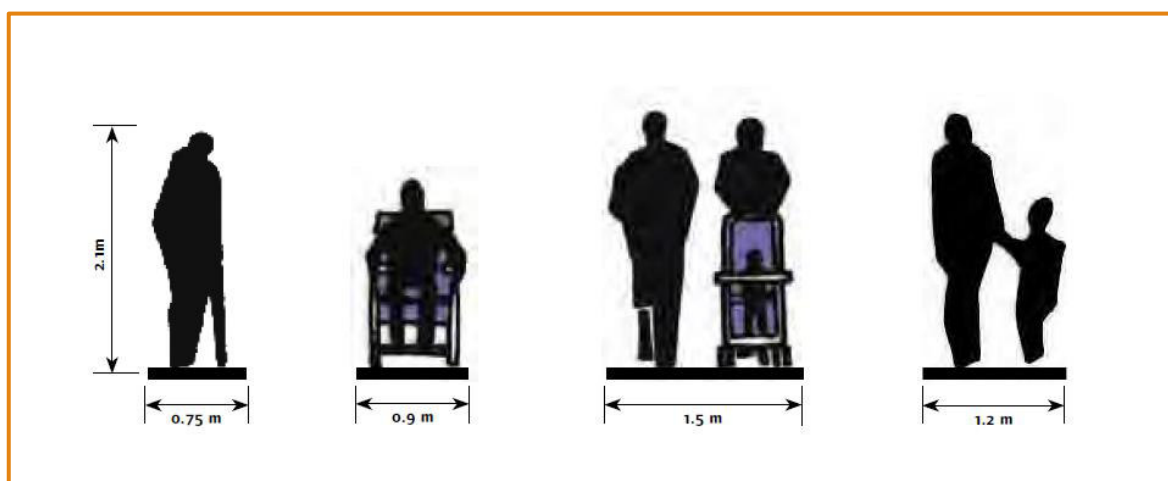
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1.0 INTRODUCTION

- 1.1 Leicestershire County Council (LCC) have submitted an outline planning application for up to 55 dwellings on land north of Barton Road, in Barlestone (application reference 21/00096/OUT),
- 1.2 ADC Infrastructure Ltd sought pre-application advice from LCC Highways, as the local highway authority, and subsequently prepared a Transport Statement (document reference ADC1996-RP-A v3) to support the application.
- 1.3 Comments on the Transport Statement were received from Ben Dutton of LCC Highways in the consultation response dated 25 March 2021 (**Appendix A**). This noted that additional information is required to allow LCC to fully assess the highway impact of the proposed development.
- 1.4 This Transport Statement Addendum has therefore been prepared to provide further information and address the comments made. A revised masterplan is contained in **Appendix B**.

2.0 PROPOSED SITE ACCESS, SPEED LIMIT CHANGE AND FOOTWAY PROVISION

- 2.1 The Transport Statement presented the proposed access arrangement, including the junction layout and off-site pedestrian facilities. This included proposed 2m wide footways along the northern side of Barton Road connecting to the existing footway provision to the east and to the west, as requested by LCC in the pre-application correspondence.
- 2.2 However, concerns have since been raised in LCC Highways consultation response, and by the local planning authority, about the impact of the proposed footways on the hedgerow and trees along the site frontage.
- 2.3 Therefore, the revised proposals are shown in **Drawing ADC1996-DR-001 P4**. As shown, to accommodate the footway to the east of the site, it is proposed to remove the existing hedgerow, but this will be replaced within the site. However, it is proposed to retain the mature Oak tree (Tree T11 in the Arboricultural Report) by narrowing the footway to a minimum of 1.5m adjacent to the trunk of that tree. This should be acceptable given that Table DG9 of the LCC Highway Design Guide states that the minimum width of a footway past an obstacle is 1.2m. Furthermore, Figure 6.8 of Manual for Streets suggests that a 1.5m footway is sufficiently wide for two people to walk side by side, as shown in the extract below:



Extract of Manual for Streets – Figure 6.8

- 2.4 It is proposed that the footway would narrow down to 1.5m over a distance of 6m, in accordance with Table DG9 of the LCC Highway Design Guide, which states that 6m is the maximum length of an obstacle. This will help to reduce the impact on the tree and the roots, whilst still satisfactorily accommodating safe pedestrian movements.
- 2.5 Also, as shown in **Drawing ADC1996-DR-001 P4**, it is no longer proposed to provide the footway to the west of the site access junction. It is considered that whilst the footway would provide a continuous link along the northern side of Barton Road (cited as a reason for its request by LCC in the pre-application advice), the benefit of the footway does not appear to outweigh the loss of the hedgerow and trees. This is because the footway connection to the west is not needed. As detailed in Section 3.12 of the original Transport Statement, *“there is no strong desire line between the site and areas to the west. Whilst Nailstone is within walking distance, there are no facilities within Nailstone that would attract additional pedestrian trips in that direction. Furthermore, should there be any demand for trips in that direction, these could be accommodated on the existing footway on the southern side of Barlestone Road.”* Furthermore, as detailed in Section 3.13 of the original Transport Statement, the nearest bus stops are to the east of the site, and bus users are most likely to alight at those stops than at the bus stops that are further away to the west. The bus stop to the east of the site is a walking distance of approximately 110 metres compared with a walking distance of 240 metres to the bus stops to the west of the site, as noted in the original Transport Statement. By removing the provision of the footway to the west of the site access, the hedgerow and trees to the west of the site access can be retained (except those in the visibility splay), and the view from the road will not change on the approach into the village.
- 2.6 This, in turn, means that it is no longer proposed to relocate the speed limit and extend the 30mph stretch as far as the A447 crossroads junction. Instead, it is proposed to relocate the speed limit to the edge of the built up area, as shown in **Drawing ADC1996-DR-002 P2**. As shown, the speed limit change will be enhanced with new gateway features including signage, roundels, red surfacing and white lining to help reduce vehicle speeds.
- 2.7 LCC Highways have since stated that they would *“not support a reduction in the 40mph speed limit without the implementation of a system of traffic calming measures”*. However, the speed limit change has now been relocated closer to the edge of the built up area. Hence, the 30mph limit has been extended for a shorter distance and now only includes the urban area, which will change driver behaviour, and therefore this concern should now be addressed. Nevertheless, it is proposed to also provide vehicle activated signs in both directions to further reduce speeds and help enforce the 30mph speed limit.
- 2.8 If the proposed speed limit change is accepted by LCC, the shorter visibility splays of 2.4x43m will be appropriate at the proposed site access junction, and hence the impact on the hedgerow and trees to the west of the access will be reduced when compared with the provision of 2.4x65m visibility splays.
- 2.9 Finally, LCC Highways have requested *“an additional uncontrolled crossing point between the site access and the Curtis Way junction, as well as a link over the existing verge so that a surfaced pedestrian route is available to the nearby convenience store, which could be used by residents”*. This is now proposed, as shown in **Drawing ADC1996-DR-001 P4**.

3.0 IMPACT AT THE A447/BARTON ROAD/LOUNT ROAD CROSSROADS JUNCTION

- 3.1 The Transport Statement assessed the impact of the proposed development at the A447/Barton Road/Lount Road crossroads. It used observed turning flow data from a count in 2019, and growthed this to 2025 (five years from submission of the planning application which was intended to be December 2020 but was delayed to January 2021). The junction was modelled using ‘2019 observed’, ‘2025 without development’ and ‘2025 with development’

- traffic flow scenarios. It was concluded that the development would not have a severe impact on the operation of the junction and that no mitigation is required.
- 3.2 However, LCC Highways have requested that the junction is modelled using 2021 baseline, and 2026 without and 2026 with development traffic flows. The observed 2019 flows were therefore growthed to 2021 and 2026 using TEMPRO growth rates (**Appendix C**). The agreed development traffic flows (agreed trip generation and agreed distribution) were added to the 2026 flows, as shown in the revised traffic flow diagrams (**Diagrams 1 to 11 in Appendix D**).
- 3.3 In addition, LCC Highways have requested a cumulative assessment of the impact of the development with the proposed development in place, and two nearby proposed developments included – 176 dwellings at Cunnery Close (application 20/00102/OUT) and 99 dwellings at Garden Farm on Bagworth Road (application 20/00470/FUL). This request is *“to provide a consistent assessment approach with the nearby recent applications”* despite the fact that both of those applications are currently undecided, with the Cunnery Close application currently at appeal, and the Garden Farm application deferred.
- 3.4 Nevertheless, as requested, the traffic flows for those developments were extracted from their respective Transport Assessments (extracts in **Appendix E and F**) and included in the traffic flow diagrams to provide 2026 background sensitivity flows (2026 with Cunnery Close and Garden Farm but without the proposed development at Barton Road), and 2026 with development sensitivity flows (2026 with all three developments in place) (**Diagrams 12 to 19 in Appendix D**).
- 3.5 It is highlighted that both the Cunnery Close development and the Garden Farm development would add more traffic through the junction than the proposed development at Barton Road. The Cunnery Close application would add 55 movements through the junction in the morning peak hour and 56 in the evening peak hour. The Garden Farm development would add 33 and 34 movements through the junction in the morning and evening respectively. In comparison, the proposed development would add 29 movements through the junction in both peak hours.
- 3.6 The modelling outputs are summarised in the table below and the PICADY output is contained in **Appendix G**. The minor arms were modelled as one lane plus flare, as this approach was adopted in the Garden Farm Transport Assessment and LCC noted that *“the LHA does not have concerns with the inclusion of a flare”*.
- 3.7 As shown, the junction operates well below the 85% ratio of flow to capacity (RFC), with minimal queuing and delay, on all arms in both the morning and evening peak hours in 2021. The junction continues to operate satisfactorily in both peak hours with the background traffic growth to 2026. The addition of the proposed development traffic has a limited impact on the operation of the junction. On the worst operating arm, Barton Road in the morning peak hour, the RFC increases from 37% to 41%, whilst the queue increases by 0.1 vehicles and the delay increases by 1.7 seconds as a result of the addition of the proposed development traffic. In all respects, this is not a severe impact, and no mitigation is required as part of the development proposals.
- 3.8 Furthermore, the junction continues to operate satisfactorily with the addition of the traffic associated with the Cunnery Close development and the Garden Farm development. In 2026, with those developments in place but without the proposed development, the junction operates well below the 85% RFC with minimal queueing and delay. This conclusion does not change with the addition of the proposed development traffic so that all three developments are included. On the worst operating arm, Barton Road in the morning peak hour, the RFC would increase from 49% to 55% RFC, the queue would increase by 0.25 vehicles and the delay would increase by 4.1 seconds. Again, in all respects, this is not a severe impact, and no mitigation is required as part of the development proposals

	peak		Lount Road left and ahead B-CD	Lount Road ahead and right B-AD	A447 (S) A	Barton Road left and ahead D-AB	Barton Road ahead and right D-BC	A447 (N) C
2019 observed	AM	RFC	11%	11%	3%	30%	33%	1%
		max queue (veh)	0.13	0.13	0.03	0.42	0.49	0.01
		max delay (secs)	8.94	11.69	7.39	12.01	17.30	6.76
	PM	RFC	9%	9%	18%	16%	38%	1%
		max queue (veh)	0.09	0.09	0.18	0.16	0.38	0.01
		max delay (secs)	8.87	10.54	7.77	9.19	13.87	7.06
2021 baseline	AM	RFC	12%	12%	3%	31%	34%	1%
		max queue (veh)	0.13	0.13	0.03	0.44	0.51	0.01
		max delay (secs)	9.07	11.88	7.44	12.40	17.88	6.79
	PM	RFC	8%	8%	16%	15%	29%	1%
		max queue (veh)	0.09	0.09	0.19	0.17	0.40	0.01
		max delay (secs)	9.01	10.70	7.85	9.38	14.26	7.10
2026 background	AM	RFC	13%	13%	4%	34%	37%	1%
		max queue (veh)	0.14	0.14	0.04	0.50	0.59	0.01
		max delay (secs)	9.37	12.41	7.57	13.45	19.57	6.85
	PM	RFC	9%	9%	17%	15%	31%	1%
		max queue (veh)	0.10	0.09	0.20	0.18	0.44	0.01
		max delay (secs)	9.23	11.03	7.99	9.75	15.03	7.18
2026 with development	AM	RFC	13%	13%	4%	38%	41%	1%
		max queue (veh)	0.15	0.15	0.04	0.61	0.69	0.01
		max delay (secs)	9.42	12.50	7.62	14.76	21.28	6.86
	PM	RFC	10%	9%	19%	17%	32%	1%
		max queue (veh)	0.11	0.10	0.23	0.20	0.47	0.01
		max delay (secs)	9.43	11.22	8.22	9.96	15.66	7.23

	peak		Lount Road left and ahead B-CD	Lount Road ahead and right B-AD	A447 (S) A	Barton Road left and ahead D-AB	Barton Road ahead and right D-BC	A447 (N) C
<i>2026 background SENSITIVITY (with Cunnery Close and Garden Farm)</i>	AM	RFC	13%	13%	7%	49%	49%	1%
		max queue (veh)	0.15	0.15	0.07	0.93	0.92	0.01
		max delay (secs)	9.54	12.85	7.85	18.32	25.84	6.92
	PM	RFC	10%	10%	25%	21%	36%	1%
		max queue (veh)	0.11	0.10	0.33	0.26	0.55	0.01
		max delay (secs)	9.66	11.55	8.86	10.40	17.25	7.37
<i>2026 with development SENSITIVITY (with Cunnery Close and Garden Farm)</i>	AM	RFC	13%	13%	7%	55%	54%	1%
		max queue (veh)	0.15	0.15	0.08	1.18	1.14	0.01
		max delay (secs)	9.58	12.95	7.91	21.64	29.97	6.92
	PM	RFC	10%	10%	27%	22%	37%	1%
		max queue (veh)	0.12	0.11	0.36	0.29	0.59	0.01
		max delay (secs)	9.87	11.76	9.06	10.73	18.01	7.42

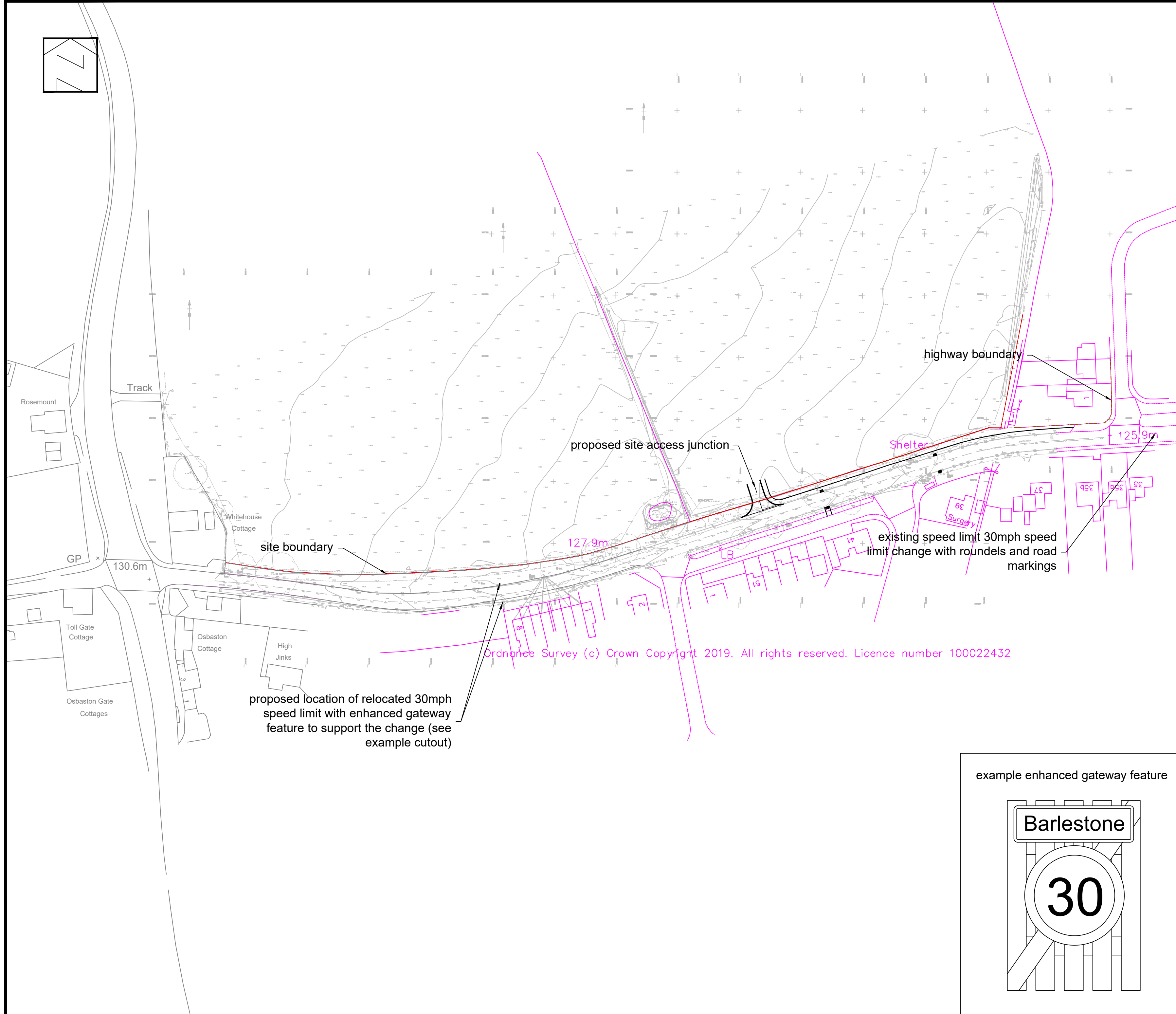
4.0 SITE ACCESS MODELLING

- 4.1 As requested, the proposed site access junction has also been remodelled using 2026 with development traffic flows, both without and with the Cunnery Close and Garden Farm developments in place. The traffic flow diagrams are in **Diagrams 1 to 4 in Appendix H**. As with the original Transport Statement, the proposed development traffic has been distributed based on the observed tidal flow and based on 2011 Census distribution (sensitivity).
- 4.2 The modelling outputs are summarised in the table below and the PICADY output is contained in **Appendix I**. As shown, the junction is forecast to operate well below the 85% RFC with minimal queuing and delay in all scenarios.

	peak		site access (B-AC)	Barton Road (E) (C-AB)
2026 with development (tidal flow distribution)	AM	RFC	7%	1%
		max queue (veh)	0.1	0.0
		max delay (secs)	7.67	6.22
	PM	RFC	3%	2%
		max queue (veh)	0.0	0.0
		max delay (secs)	7.72	6.59
2026 with development (census distribution)	AM	RFC	7%	0%
		max queue (veh)	0.1	0.0
		max delay (secs)	8.09	6.22
	PM	RFC	3%	1%
		max queue (veh)	0.0	0.0
		max delay (secs)	7.91	6.56
2026 with development (tidal flow distribution) - including Cunnery Close and Garden Farm	AM	RFC	7%	1%
		max queue (veh)	0.1	0.0
		max delay (secs)	7.94	6.29
	PM	RFC	3%	2%
		max queue (veh)	0.0	0.0
		max delay (secs)	8.09	6.78
2026 with development (census distribution) - including Cunnery Close and Garden Farm	AM	RFC	7%	0%
		max queue (veh)	0.1	0.0
		max delay (secs)	8.41	6.29
	PM	RFC	3%	1%
		max queue (veh)	0.0	0.0
		max delay (secs)	8.31	6.76

5.0 SUMMARY AND CONCLUSIONS

- 5.1 This Transport Statement Addendum has been prepared to address comments raised by the local highway authority on the original Transport Statement.
- 5.2 Overall, the conclusion remains that the proposed development would accord with the aims of the NPPF. Safe and suitable access can be achieved by all modes of travel, and the proposed development would not result in a severe impact on the operation of the highway network, or cause an unacceptable impact to road safety. Therefore, it would be unreasonable to prevent the development on transport grounds.



P2	Updated limit change location	31/03/21
Rev	Description	Date
Client:		
Project:		
Proposed Residential Development, Barton Road, Barlestone		
Title:		
Proposed Speed Limit Relocation		
		
Drg Size: A2	Scale: 1:1000	Date: 08/12/2020
Drg No: ADC1996-DR-002		Rev: P2

APPENDIX A

LCC HIGHWAYS CONSULTATION RESPONSE

Substantive response of the Local Highway Authority to a planning consultation received under The Development Management Order.



Response provided under the delegated authority of the Director of Environment & Transport.

APPLICATION DETAILS:

Planning Application Number: 21/00096/OUT

Highway Reference Number: 2021/0096/04/H/R1

Application Address: Land North Barton Road Barlestone Leicestershire

Application Type: Outline (with access)

Description of Application:

Further observations. Residential development for up to 55 dwellings (Outline- access only)

GENERAL DETAILS

Planning Case Officer: Rhiannon Hill

Applicant: Leicestershire County Council

County Councillor: Cllr Ivan Ould

Parish: Osbaston

Road Classification: Class C

Substantive Response provided in accordance with article 22(5) of The Town and Country Planning (Development Management Procedure) (England) Order 2015:

The Local Highway Authority does not consider that the application as submitted fully assesses the highway impact of the proposed development and further information is required as set out in this response. Without this information the Local Highway Authority is unable to provide final highway advice on this application. Under the current Covid-19 situation we would ask that any such work is carried out in accordance with the latest Government guidance.

Advice to Local Planning Authority

Background

The Local Highway Authority (LHA) are in receipt of an outline application for the construction of up to 55 dwellings on land north of Barton Road, Barlestone. All matters other than access are reserved at this stage.

The Applicant has submitted a Transport Statement (TS) dated 1 December 2020 in support of the proposals. It should be noted that the TS assesses the impact of a development of up to 64 dwellings, however the submitted application is for up to 55 dwellings.

Site Access

Access to the site is proposed off Barton Road, a C classified road subject to a 40mph speed limit.

Details of the site access arrangements are shown on ADC drawing number ADC1996-DR-001 Rev P2. The Applicant is proposing an access in the form of a simple priority junction, with a 5.5 metre wide carriageway, 6 metre kerbed radii and a 2m wide footway either side. This is designed in accordance with Part 3, Tables DG1 and DG5 of the Leicestershire Highway Design Guide ([LHDG, available at <https://resources.leicestershire.gov.uk/lhdg>).

In order to ascertain what visibility splays would be required at the site access, an Automatic Traffic Count (ATC) was undertaken at the location of the proposed site access junction between Monday 2 - Monday 9 September 2019. This indicated 85th percentile vehicle speeds of 38.8mph in an eastbound direction and 38.7mph in a westbound direction. The Applicant has highlighted that HGVs and buses make up just over 5% of the overall traffic flow on Barton Road and therefore as per Part 3, Table DG4 of the LHDG, visibility splays of 2.4 x 73 metres should be provided in each direction. The Applicant has however highlighted that the LHDG also states that LCC will accept calculated visibility splays for actual 85th percentile speeds.

Therefore, drawing number ADC1996-DR-001 P2 shows visibility splays of 2.4 x 69 metres to the east and west, in line with the calculated stopping sight distance based on the recorded speeds, and taking into account the proportion of HGVs. Visibility splays of 2.4 x 43 metres are also shown on the drawing as the Applicant is proposing to relocate the existing 30mph speed limit, however these would not be considered acceptable due to the relocation of the speed limit currently not being considered acceptable as outlined below.

The LHA advise the Local Planning Authority (LPA) that provision of the visibility splays is likely to require a substantial section of the roadside hedge to be removed, which has been acknowledged by the Applicant.

The Applicant has submitted an independent Stage 1 Road Safety Audit (RSA) of the site access arrangements along with a Designer's Response. This raises two problems as follows:

Problem 1

Problem 1 refers to the existing 40mph speed limit and states that whilst perhaps suitable for the current frontage development, it may not be as suitable for the proposed arrangements, in particular the likely increase in non motorised users using the footway and carriageway travelling between the development and the main village to access shops, schools and other community facilities.

The RSA recommends that a reduced speed limit of 30mph is introduced along the length of Barton Road between the A447 Hinckley Road and the existing 30/40mph interface near Gregory Road. This has been accepted by the Applicant.

Problem 2

Problem 2 refers to the kerb type currently used along the north side of Barton Road which would not be appropriate where a footway is present.

The RSA recommends that the 45 degree splay kerbs are replaced with half batter kerbs along the full extent of the new footway provision. This is accepted by the Applicant.

After consideration of the proposal to relocate the 30mph speed limit, the LHA advise that currently the existing speed readings support the 40mph limit and it is unlikely that a relocation of the speed limit alone would reduce speeds along Barton Road to 30mph. The LHA would therefore not support a reduction in the 40mph speed limit without the implementation of a system of traffic calming measures. The LHA requests the Applicant to give further consideration to Problem 1 of the RSA in respect of the above. The Applicants response to Problem 2 is accepted by the LHA.

The Applicant has submitted vehicle tracking of a refuse collection vehicle entering and exiting the site which is considered to be acceptable.

Highway Safety

The Applicant has given consideration to the Personal Injury Collision (PIC) data along Barton Road and at its junction with Hinckley Road (A447)/ Lount Road crossroads for between 1 January 2016 and 26 July 2019. The information was obtained from Leicestershire County Council.

Three PICs have been identified by the Applicant during this time, all classed as slight. Two of the PICs occurred in the vicinity of the Barton Road/ Gregory Road junction. The first involved a collision between a car and a stationary bus (2016), while the second collision involved two cars at the junction (2018). The third PIC occurred at the junction of the A447/ Burton Road/ Lount Road crossroads in 2018 and was a rear end shunt.

The Applicant has not assessed the most recent PIC data for the area, given that their assessment only goes up to July 2019. Nevertheless, the LHA has studied the most recent data available and can confirm that no additional PICs have been recorded within the vicinity of the site since 2019.

On the basis of the above, the LHA accepts the Applicant's conclusion that there are no trends in the location or type of PICs recorded and that the proposed development is unlikely to exacerbate an existing road safety concern.

Trip Generation

The Applicant has calculated the level of vehicular trips the site is likely to generate using TRICS. The proposed vehicular trip rates for the development (64 dwellings) are outlined in Table 1 below.

		arrive	depart	two-way
trip rates (per dwelling)	AM peak hour	0.127	0.473	0.600
	PM peak hour	0.425	0.175	0.600
vehicle trips (64 dwellings)	AM peak hour	8	30	38
	PM peak hour	27	11	38

Table 1: Residential Trip Generation (Vehicular Trips per Dwelling).

The LHA considers that the trip rates are low in comparison to the most recent application for dwellings in the area (20/00470/FUL - 99 dwellings, Garden Farm, Bagworth Road, Barlestone). Nevertheless, given the applicant has assessed the impact of 64 dwellings as opposed to 55 and

when considering the trip rates accepted by the LHA as part of application reference 20/00470/FUL for 55 dwellings, the proposed development would generate approximately 36 two-way trips in the AM peak and 35 two way trips in the PM peak. As a result, given an assessment has been made for 38 two way trips in both the AM and PM peaks by the Applicant, the LHA do not consider it necessary for the Applicant to update the proposed trip generation figures.

After establishing the trip rates, the Applicant considered trip distribution for the development. Initially, the Applicant considered that residents within the development would likely display similar travel patterns to existing residents within Barlestone, and thus follow the existing tidal flow on Barton Road. This would generate 60% of traffic travelling westbound in the AM peak hour and returning eastbound in the PM peak hour. The Applicant has also used 2011 Census data to derive the modal split for the Hinckley & Bosworth 004 Super Output Area as a comparison. This indicated 77% of traffic travelling to the west and 23% to the east. This approach is considered acceptable to the LHA and the proposed trip distribution is acceptable.

Junction Capacity Assessments

The Applicant has undertaken a detailed assessment of the following junctions in order to establish the likely impact of the development:

- Site access/ Barton Road priority junction
- A447/Barton Road/Lount Rd crossroad junction

The Applicant used the September 2019 ATC in order to establish the baseline survey data for the site access. For the A447/Barton Road/Lount Rd crossroad junction, the Applicant used the same survey undertaken as part of the nearby Cunners Close application (19/01011/OUT & 20/00102/OUT - 176 dwellings) and also used within the Garden Farm application, which was undertaken on 3 April 2019. This is accepted by the LHA and is consistent with recent applications in the area.

TEMPO traffic growth factors have been applied to the baseline counts to create forecast baseline traffic flows at the opening year of 2025. The LHA usually requires a future year of 5 years following the year of submission of the application to be assessed. As such the LHA requests that the Applicant assesses the future year of 2026 and updates TEMPO traffic growth factors as appropriate. The LHA also requests that the base year traffic surveys are factored up to 2021, in order to assess the capacity on the network in the current year.

The Applicant has considered the level of traffic generated by both the Cunners Close and Garden Farm proposed developments within the capacity assessments. The LHA is aware that an appeal has been lodged for the most recent of the two applications at the Cunners Close site (20/00102/OUT), while the Garden Farm application is still to be determined by the LPA.

The LHA therefore welcomes the consideration of both developments within the capacity assessments. It is noted that the Applicant has stated that the Garden Farm development did not assess traffic flows along Barton Road and therefore these can be covered by TEMPO traffic growth factors. The LHA did require the Applicant of the Garden Farm development to consider the

impact of the development at the A447/Barton Road/Lount Rd crossroad junction, therefore the LHA request that the actual traffic calculations provided by the Applicant for that development are included within the capacity assessments for both the site access and A447/Barton Road/Lount Rd crossroad junction capacity assessments.

Finally, the LHA request the Applicant to provide 2026 scenarios whereby the capacity of both junctions are assessed with the proposed development in place without the garden farm/ Cunnery Close developments and then also a scenario whereby both developments are in place. This will provide a consistent assessment approach with the nearby recent applications. Following this, the LHA will give further consideration to the capacity assessments.

Off-Site Implications

The Applicant is proposing a 2m wide footway alongside Barton Road to tie in with existing footway provision to both the west and east of the site, as detailed on ADC drawing number ADC1996-DR-001 P2. This is welcomed by the LHA. In addition an uncontrolled pedestrian crossing point is proposed to facilitate pedestrian trips between the site and the westbound bus stop on the southern side of the carriageway, and to provide a connection to the existing footway on the southern side of Barton Road leading to and from the facilities within the village.

The LHA advise the LPA that provision of a 2m wide footway is likely to require removal of a substantial section of the roadside hedge and non highway trees, particularly in the direction of Barlestone, given the proximity of the existing vegetation from the edge of the carriageway.

Notwithstanding the above provisions, the LHA requests the Applicant gives consideration to an additional uncontrolled crossing point between the site access and the Curtis Way junction, as well as a link over the existing verge so that a surfaced pedestrian route is available to the nearby convenience store, which could be used by residents.

Internal Layout

The internal layout of the development is not for consideration at this stage and therefore the LHA has not been considered this in detail.

Transport Sustainability

The site is located in close walking distances to bus stops with services between Coalville – Hinckley and Leicester – Market Bosworth which both operate on a near hourly basis. Barlestone Primary School is within an approximate 600 metre walk from the extents of the site and the centre of the village is an approximate 900 metre walk.

Should the LHA be mindful to advise approval of the application in the future, it would require 2 x six month bus passes and 1 x travel pack per dwelling as part of a Section 106 agreement.

Summary

Based on the above, the LHA requires the following information to be submitted to the LPA for consideration by the LHA:

- Further consideration to Problem 1 identified within the RSA, given that to reduce the speed limit to 30mph will require a system of traffic calming;
- Consideration of an additional uncontrolled pedestrian crossing point/ footway to improve access to the nearby convenience store for residents
- Amendments to the capacity assessments as outlined above to include the Garden Farm traffic and allow for consistency between recent applications in the area.

Date Received
17 March 2021

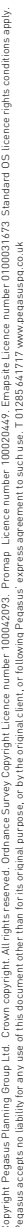
Case Officer
Ben Dutton

Reviewer
DH

Date issued
25 March 2021

APPENDIX B

REVISED MASTERPLAN



APPENDIX C

TEMPRO GROWTH RATES

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2019
Future Year:	2021
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
Growth Factor	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
1.0110	1.0192
Future Year - Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
30	46
Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,752	2,396
Future Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,782	2,442
ALL ROADS	
Level	Area
E02005380	Hinckley and Bosworth 004
Local Growth Figure	
1.018600757	

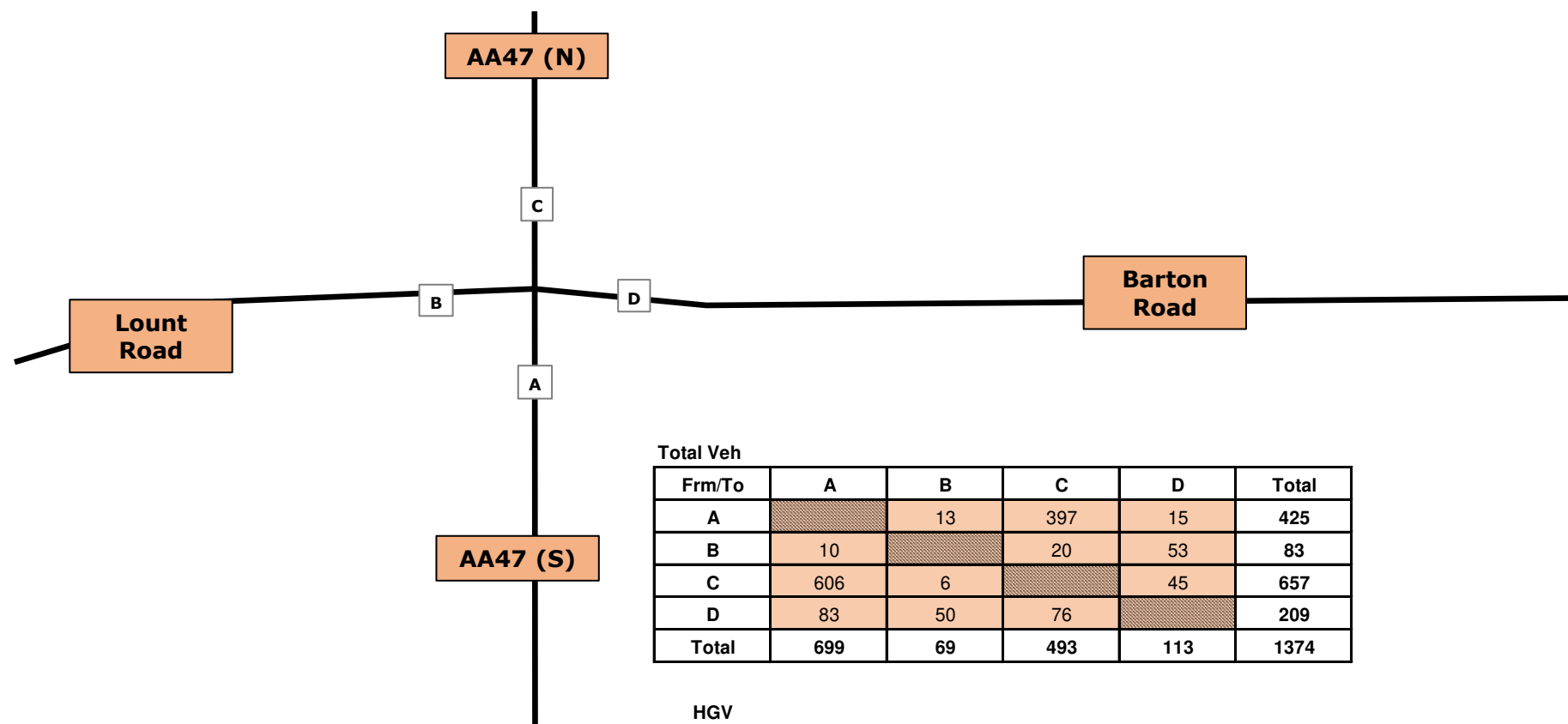
Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2019
Future Year:	2026
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
Growth Factor	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
1.0403	1.0563
Future Year - Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
111	135
Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,752	2,396
Future Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,863	2,531
ALL ROADS	
Level	Area
E02005380	Hinckley and Bosworth 004
Local Growth Figure	
1.061429595	

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2019
Future Year:	2021
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
Growth Factor	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
1.0181	1.0134
Future Year - Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
52	42
Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,848	3,122
Future Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,900	3,163
ALL ROADS	
Level	Area
E02005380	Hinckley and Bosworth 004
Local Growth Figure	
1.019252998	

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2019
Future Year:	2026
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
Growth Factor	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
1.0548	1.0453
Future Year - Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
156	141
Base Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
2,848	3,122
Future Year	
Area Description	
Level	Name
E02005380	Hinckley and Bosworth 004
All purposes	
Origin	Destination
3,005	3,263
ALL ROADS	
Level	Area
E02005380	Hinckley and Bosworth 004
Local Growth Figure	
1.063201513	

APPENDIX D

A447 JUNCTION TRAFFIC FLOW DIAGRAMS



Total Veh

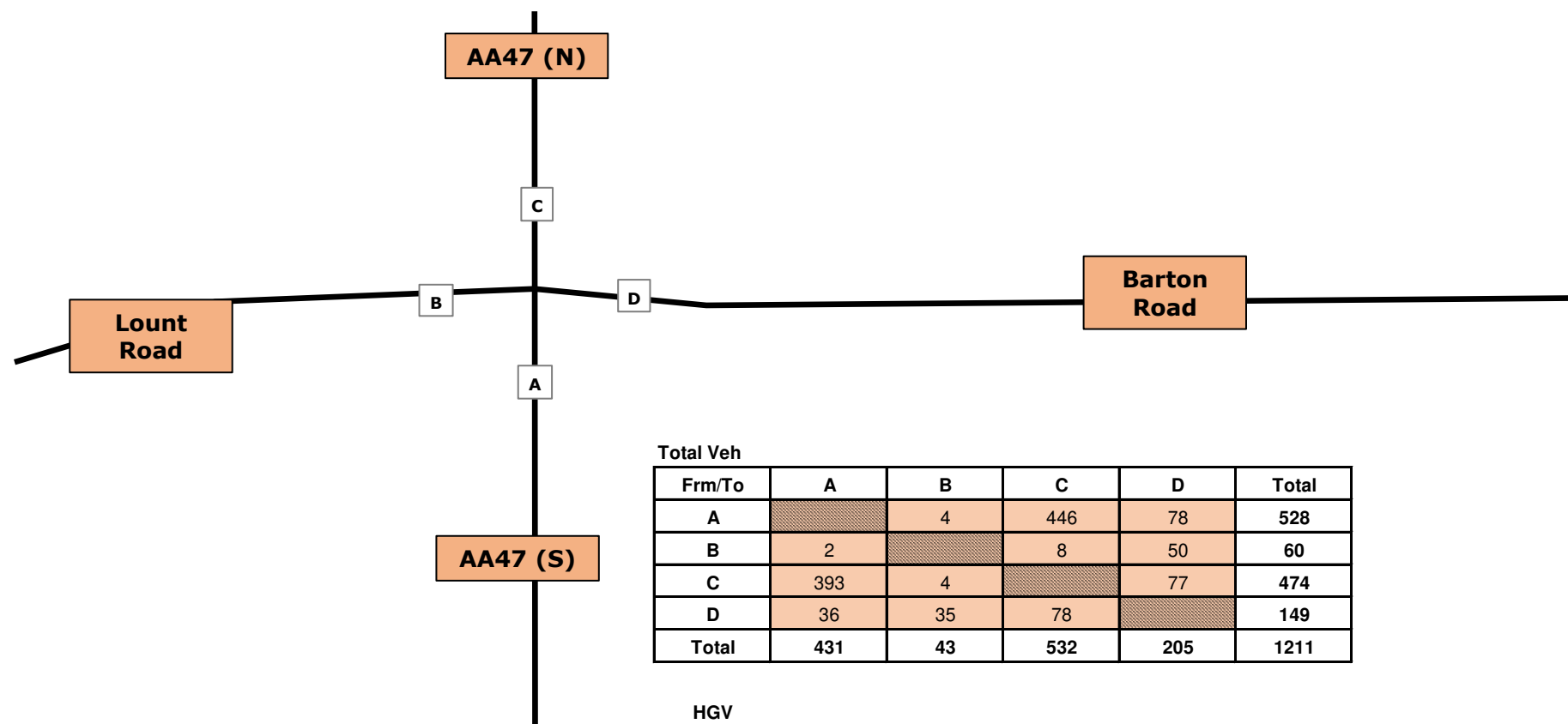
Frm/To	A	B	C	D	Total
A		13	397	15	425
B	10		20	53	83
C	606	6		45	657
D	83	50	76		209
Total	699	69	493	113	1374

HGV

Frm/To	A	B	C	D	Total
A		0	32	0	32
B	0		1	0	1
C	32	0		6	32
D	2	0	3		5
Total	34	0	36	6	

%HGV

Frm/To	A	B	C	D	
A		0.0%	8.1%	0.0%	
B	0.0%		5.0%	0.0%	
C	5.3%	0.0%		13.3%	
D	2.4%	0.0%	3.9%		



Total Veh

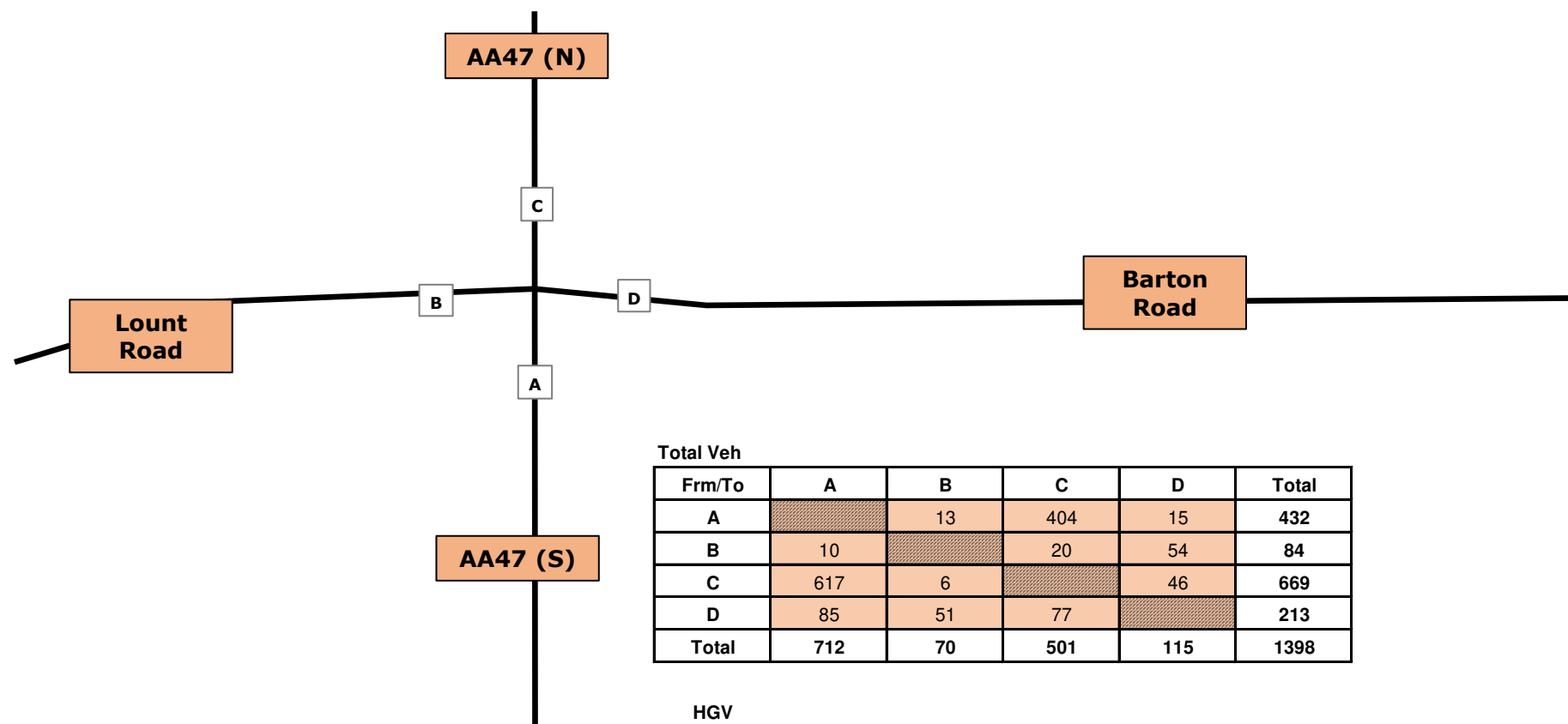
Frm/To	A	B	C	D	Total
A		4	446	78	528
B	2		8	50	60
C	393	4		77	474
D	36	35	78		149
Total	431	43	532	205	1211

HGV

Frm/To	A	B	C	D	Total
A		0	3	1	3
B	0		0	0	0
C	10	0		1	10
D	1	0	2		3
Total	11	0	5	2	

%HGV

Frm/To	A	B	C	D	
A		0.0%	0.7%	1.3%	
B	0.0%		0.0%	0.0%	
C	2.5%	0.0%		1.3%	
D	2.8%	0.0%	2.6%		



Total Veh

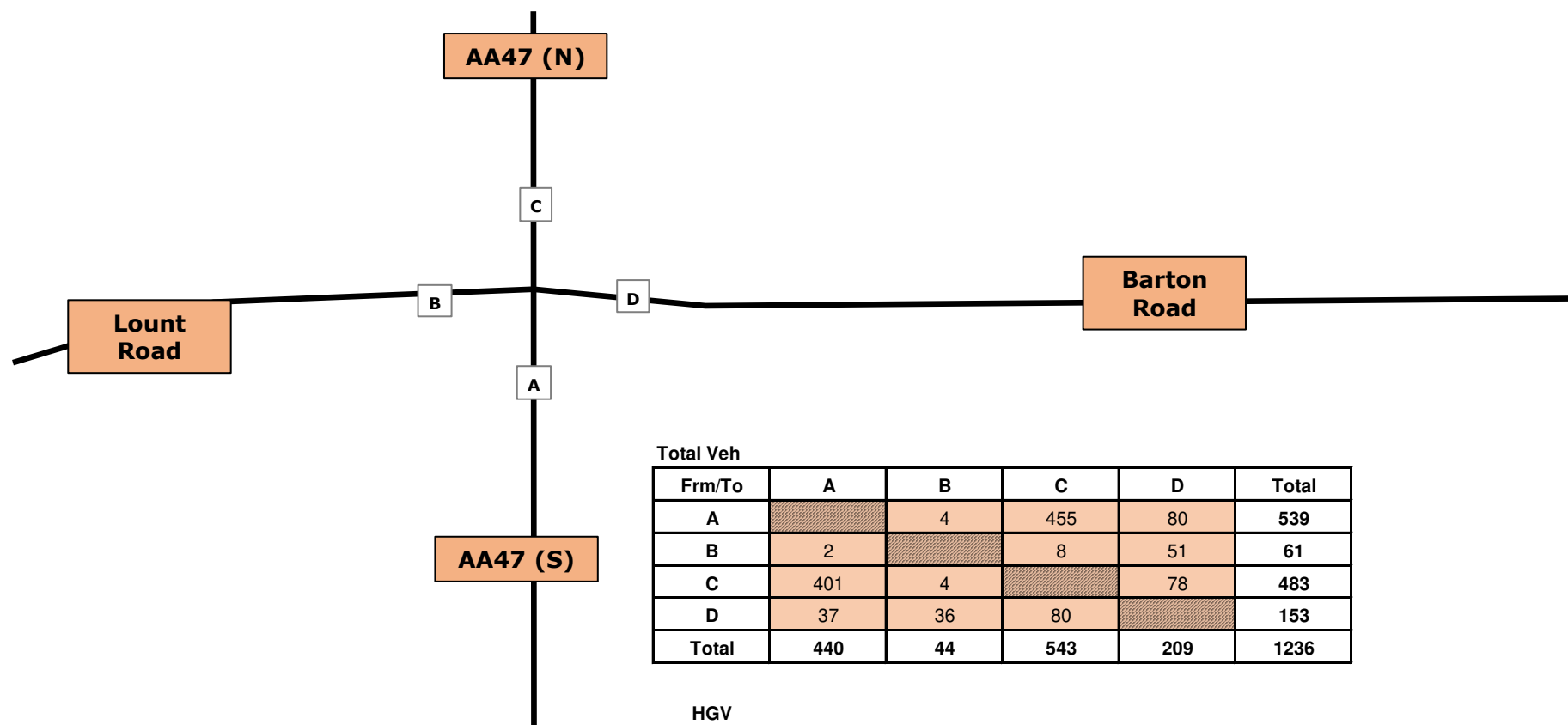
Frm/To	A	B	C	D	Total
A		13	404	15	432
B	10		20	54	84
C	617	6		46	669
D	85	51	77		213
Total	712	70	501	115	1398

HGV

Frm/To	A	B	C	D	Total
A		0	33	0	33
B	0		1	0	1
C	33	0		6	33
D	2	0	3		5
Total	35	0	37	6	

%HGV

Frm/To	A	B	C	D	
A		0.0%	8.2%	0.0%	
B	0.0%		5.0%	0.0%	
C	5.3%	0.0%		13.0%	
D	2.4%	0.0%	3.9%		



Total Veh

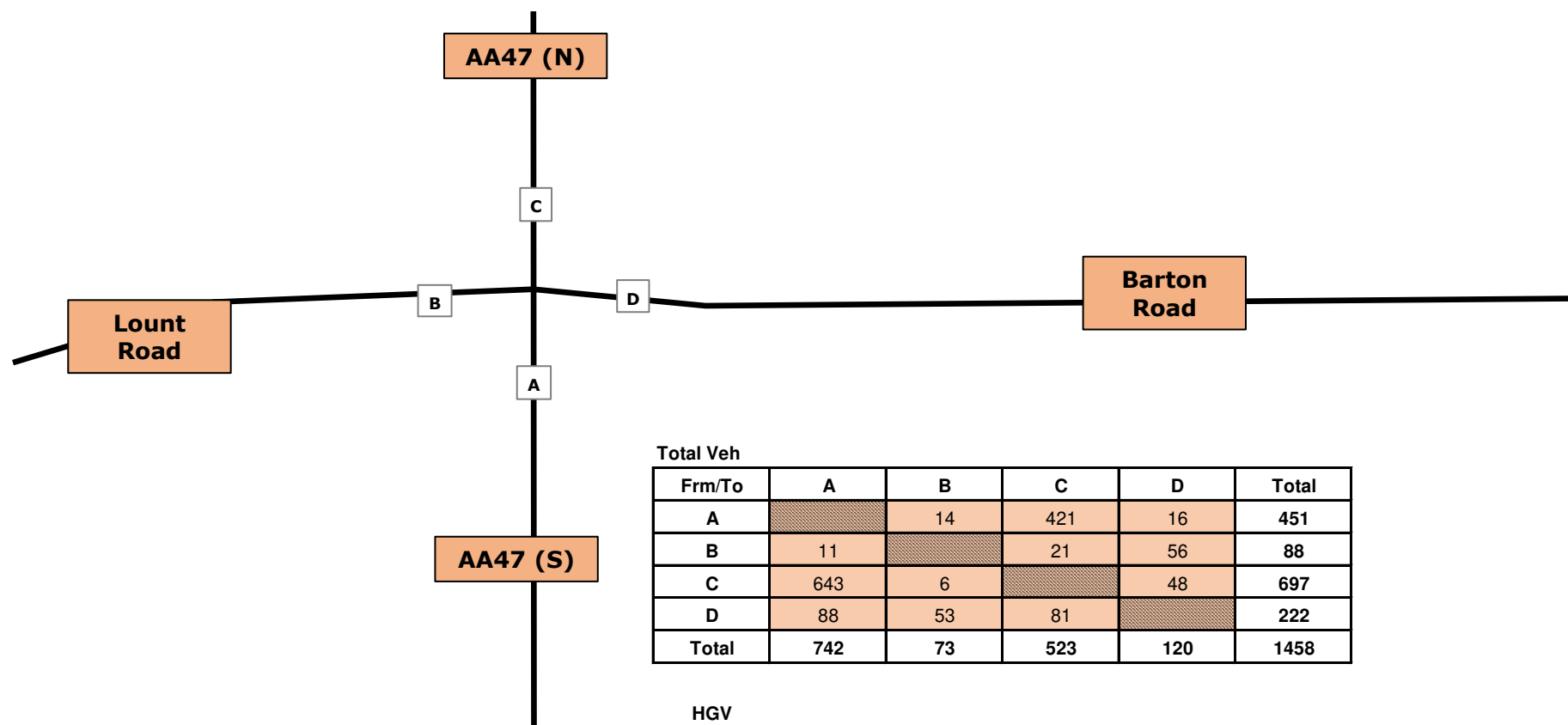
Frm/To	A	B	C	D	Total
A		4	455	80	539
B	2		8	51	61
C	401	4		78	483
D	37	36	80		153
Total	440	44	543	209	1236

HGV

Frm/To	A	B	C	D	Total
A		0	3	1	3
B	0		0	0	0
C	10	0		1	10
D	1	0	2		3
Total	11	0	5	2	

%HGV

Frm/To	A	B	C	D	
A		0.0%	0.7%	1.3%	
B	0.0%		0.0%	0.0%	
C	2.5%	0.0%		1.3%	
D	2.7%	0.0%	2.5%		



Total Veh

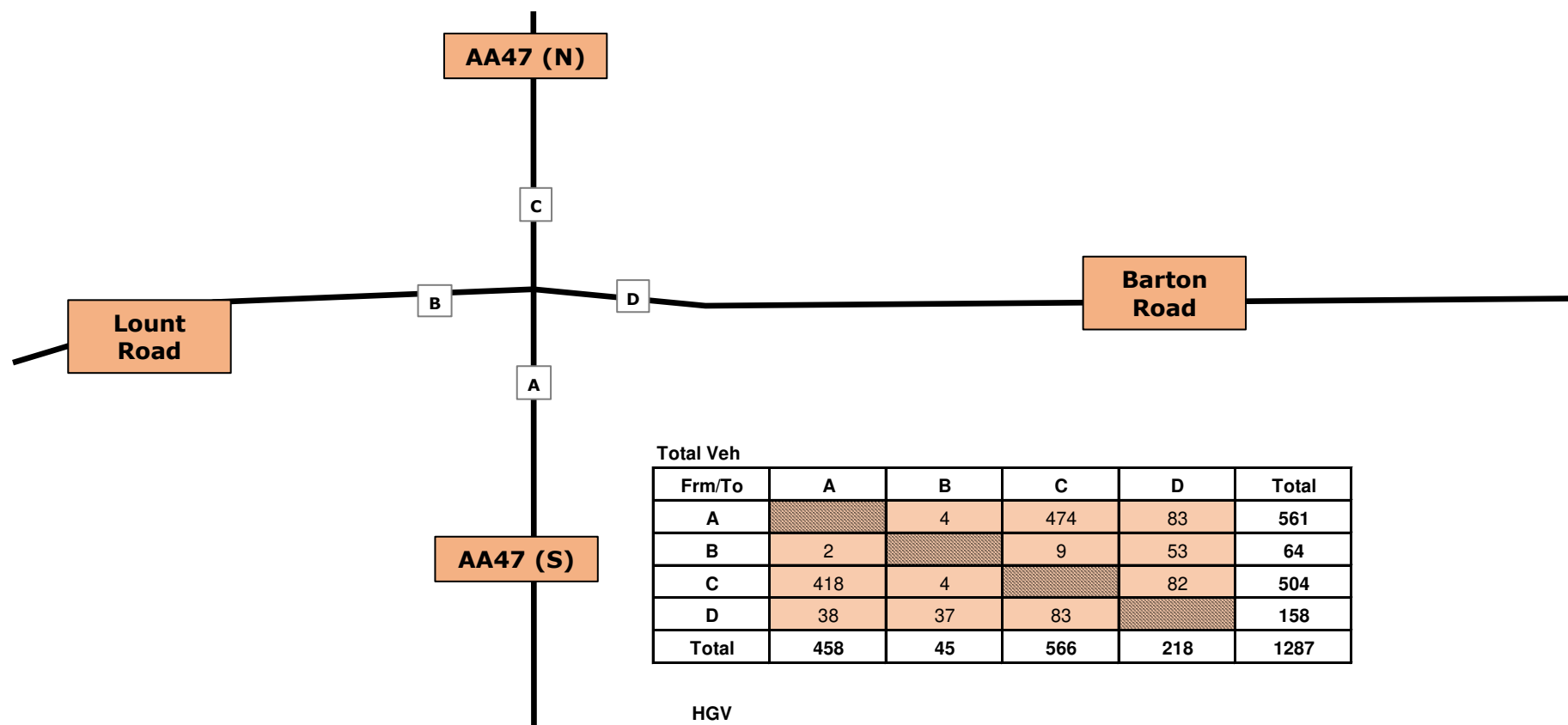
Frm/To	A	B	C	D	Total
A		14	421	16	451
B	11		21	56	88
C	643	6		48	697
D	88	53	81		222
Total	742	73	523	120	1458

HGV

Frm/To	A	B	C	D	Total
A		0	34	0	34
B	0		1	0	1
C	34	0		6	34
D	2	0	3		5
Total	36	0	38	6	

%HGV

Frm/To	A	B	C	D	
A		0.0%	8.1%	0.0%	
B	0.0%		4.8%	0.0%	
C	5.3%	0.0%		12.5%	
D	2.3%	0.0%	3.7%		



Total Veh

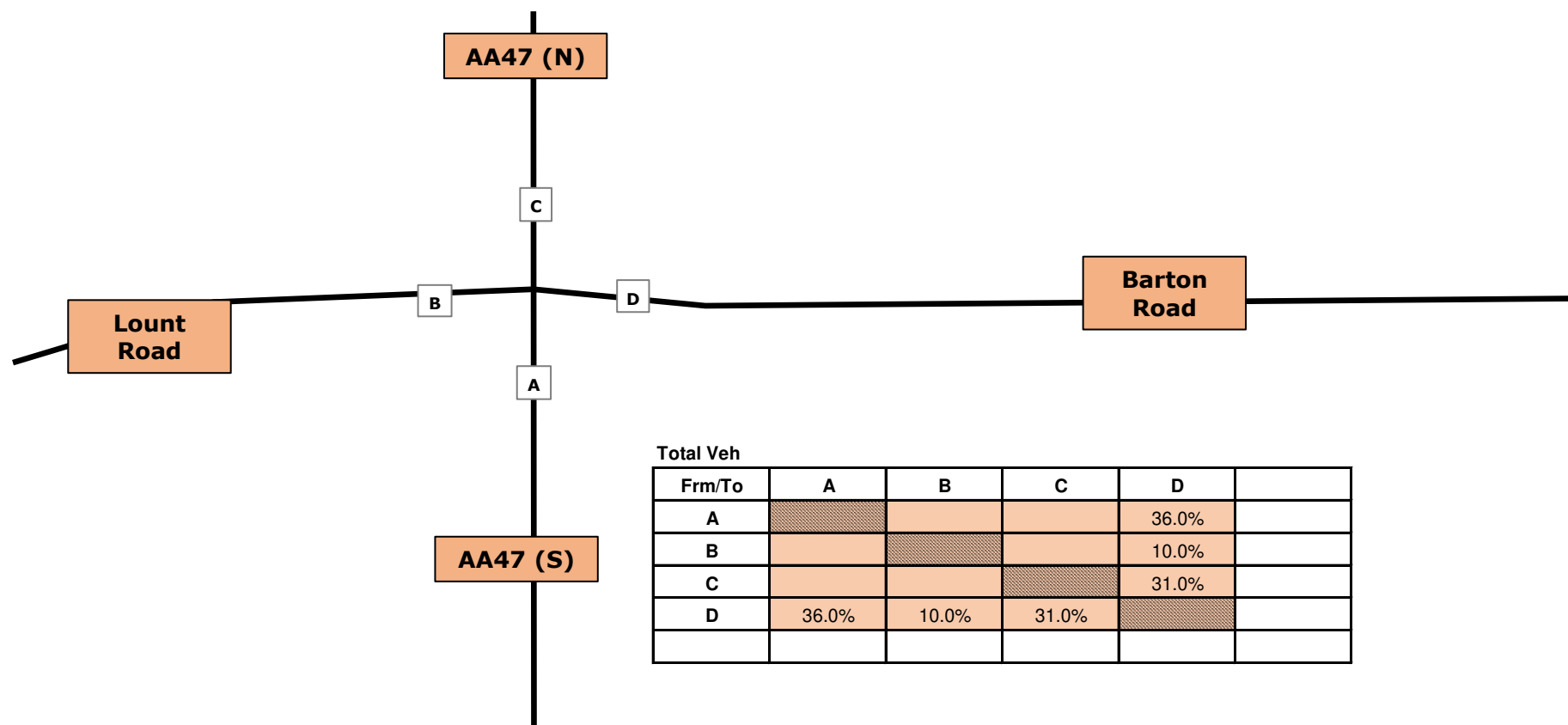
Frm/To	A	B	C	D	Total
A		4	474	83	561
B	2		9	53	64
C	418	4		82	504
D	38	37	83		158
Total	458	45	566	218	1287

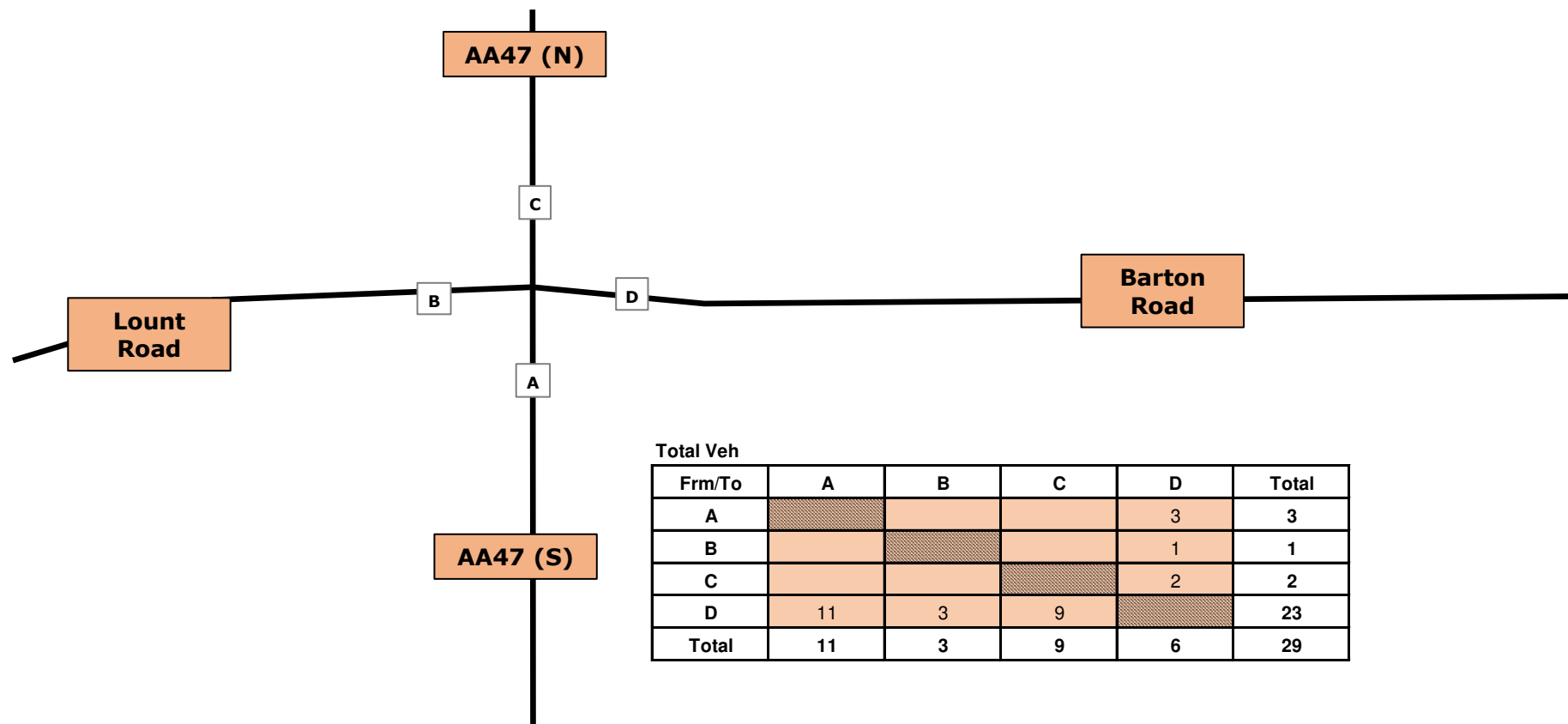
HGV

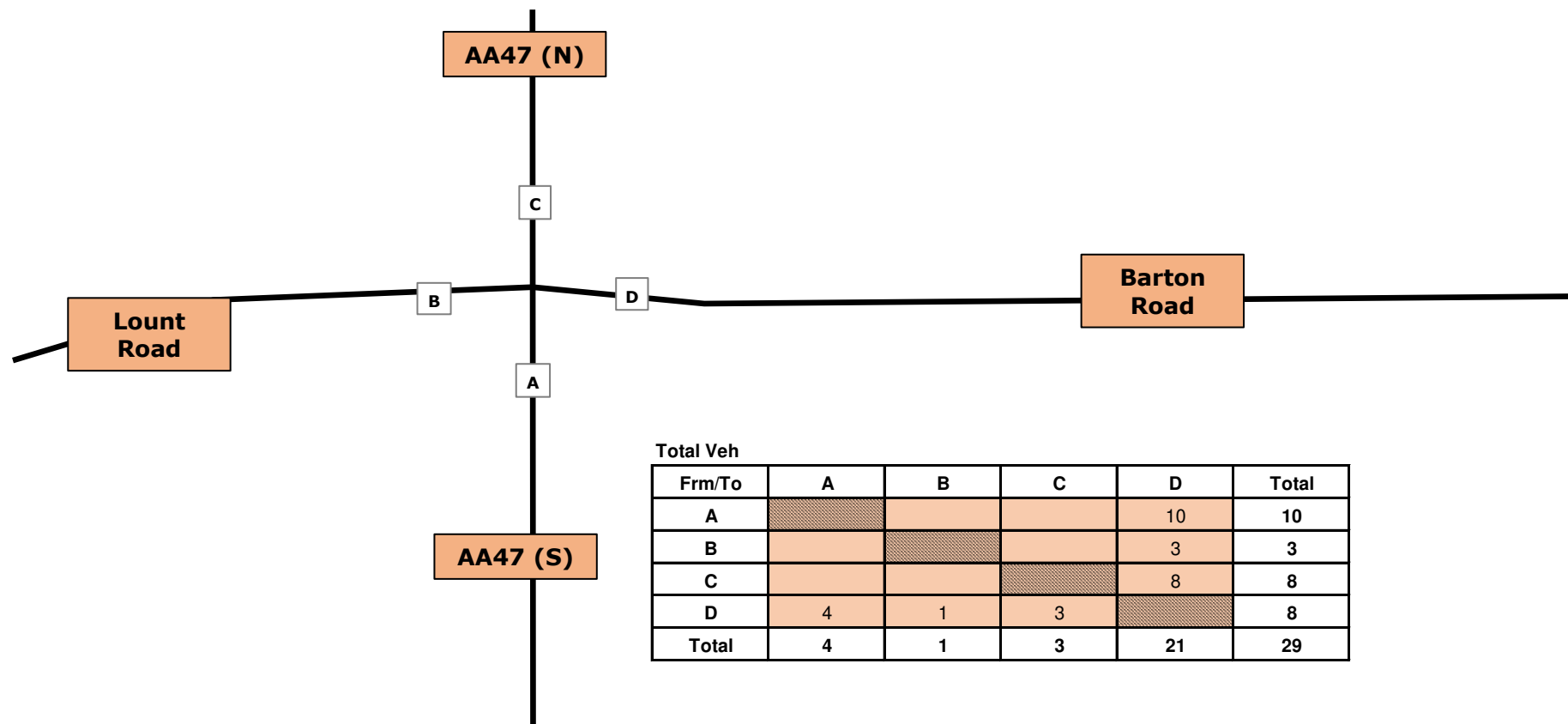
Frm/To	A	B	C	D	Total
A		0	3	1	3
B	0		0	0	0
C	11	0		1	11
D	1	0	2		3
Total	12	0	5	2	

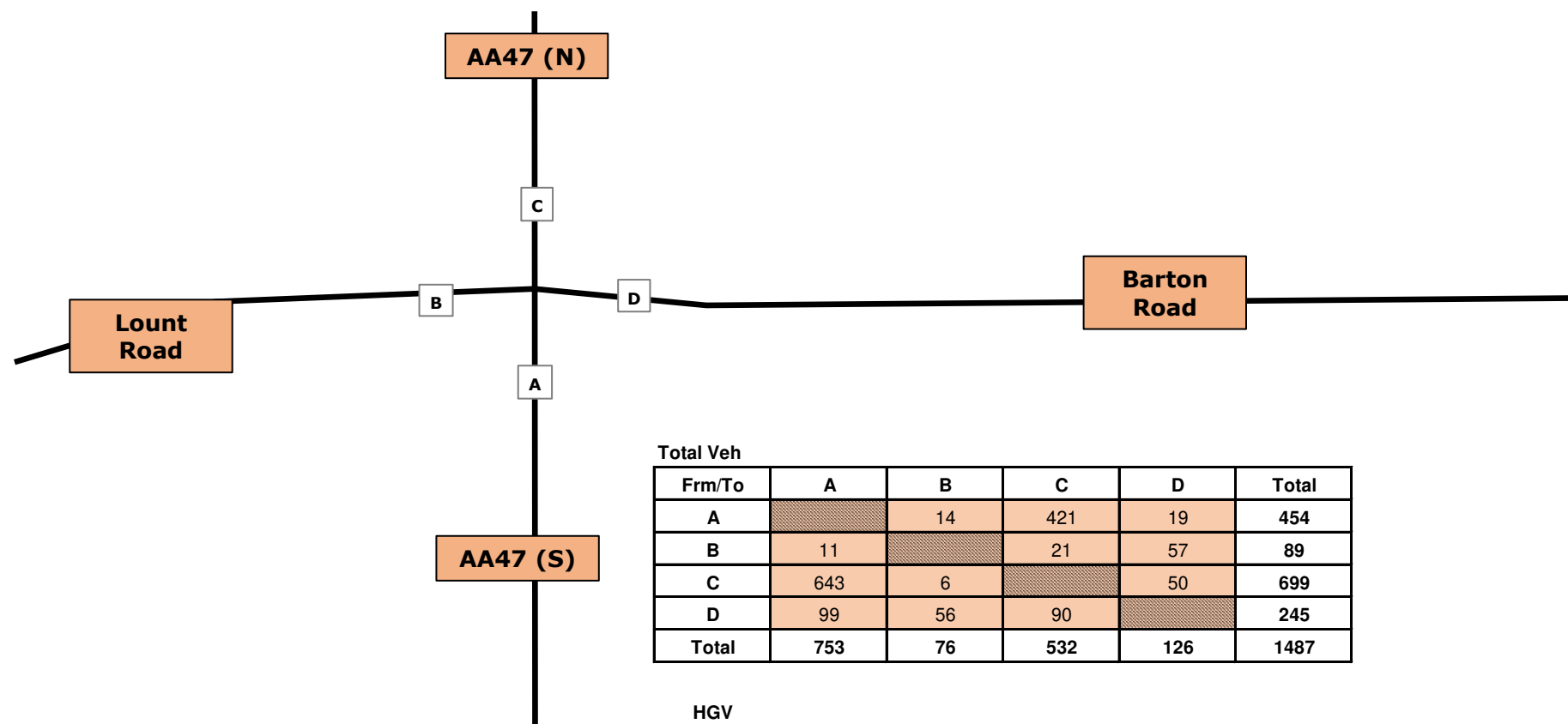
%HGV

Frm/To	A	B	C	D	
A		0.0%	0.6%	1.2%	
B	0.0%		0.0%	0.0%	
C	2.6%	0.0%		1.2%	
D	2.6%	0.0%	2.4%		









Total Veh

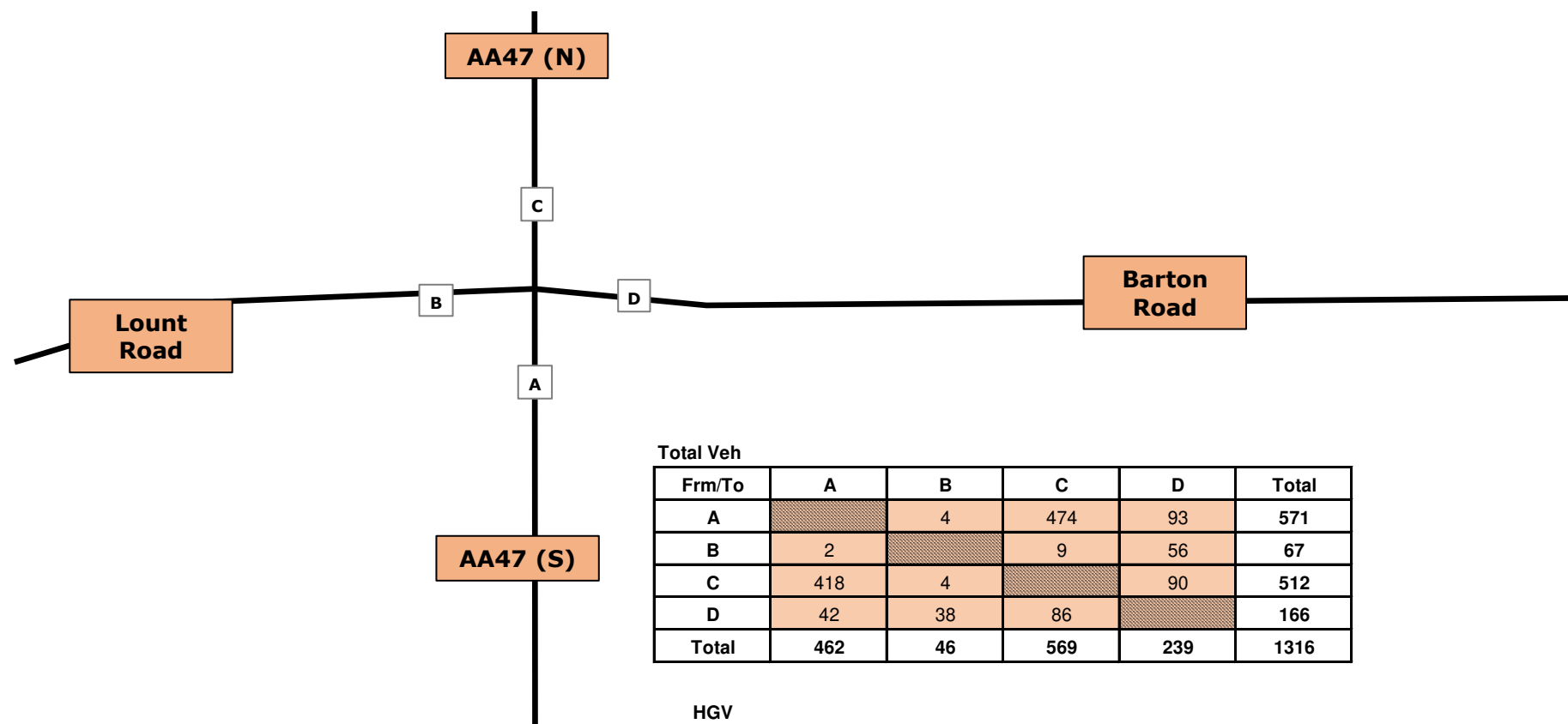
Frm/To	A	B	C	D	Total
A		14	421	19	454
B	11		21	57	89
C	643	6		50	699
D	99	56	90		245
Total	753	76	532	126	1487

HGV

Frm/To	A	B	C	D	Total
A		0	32	0	32
B	0		1	0	1
C	32	0		6	32
D	2	0	3		5
Total	34	0	36	6	

%HGV

Frm/To	A	B	C	D	
A		0.0%	7.6%	0.0%	
B	0.0%		4.8%	0.0%	
C	5.0%	0.0%		12.0%	
D	2.0%	0.0%	3.3%		



Total Veh

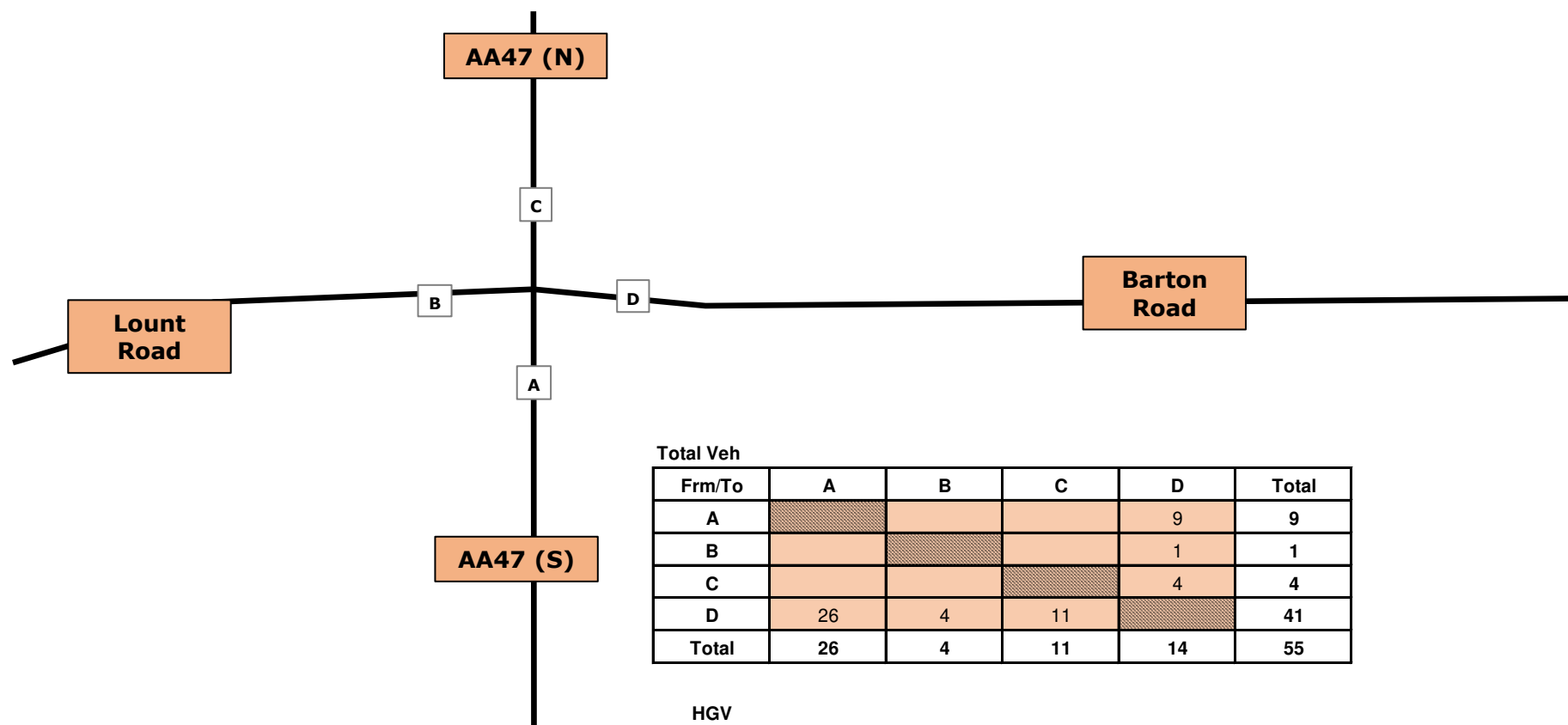
Frm/To	A	B	C	D	Total
A		4	474	93	571
B	2		9	56	67
C	418	4		90	512
D	42	38	86		166
Total	462	46	569	239	1316

HGV

Frm/To	A	B	C	D	Total
A		0	3	1	3
B	0		0	0	0
C	11	0		1	11
D	1	0	2		3
Total	12	0	5	2	

%HGV

Frm/To	A	B	C	D	
A		0.0%	0.6%	1.1%	
B	0.0%		0.0%	0.0%	
C	2.6%	0.0%		1.1%	
D	2.4%	0.0%	2.3%		



Total Veh

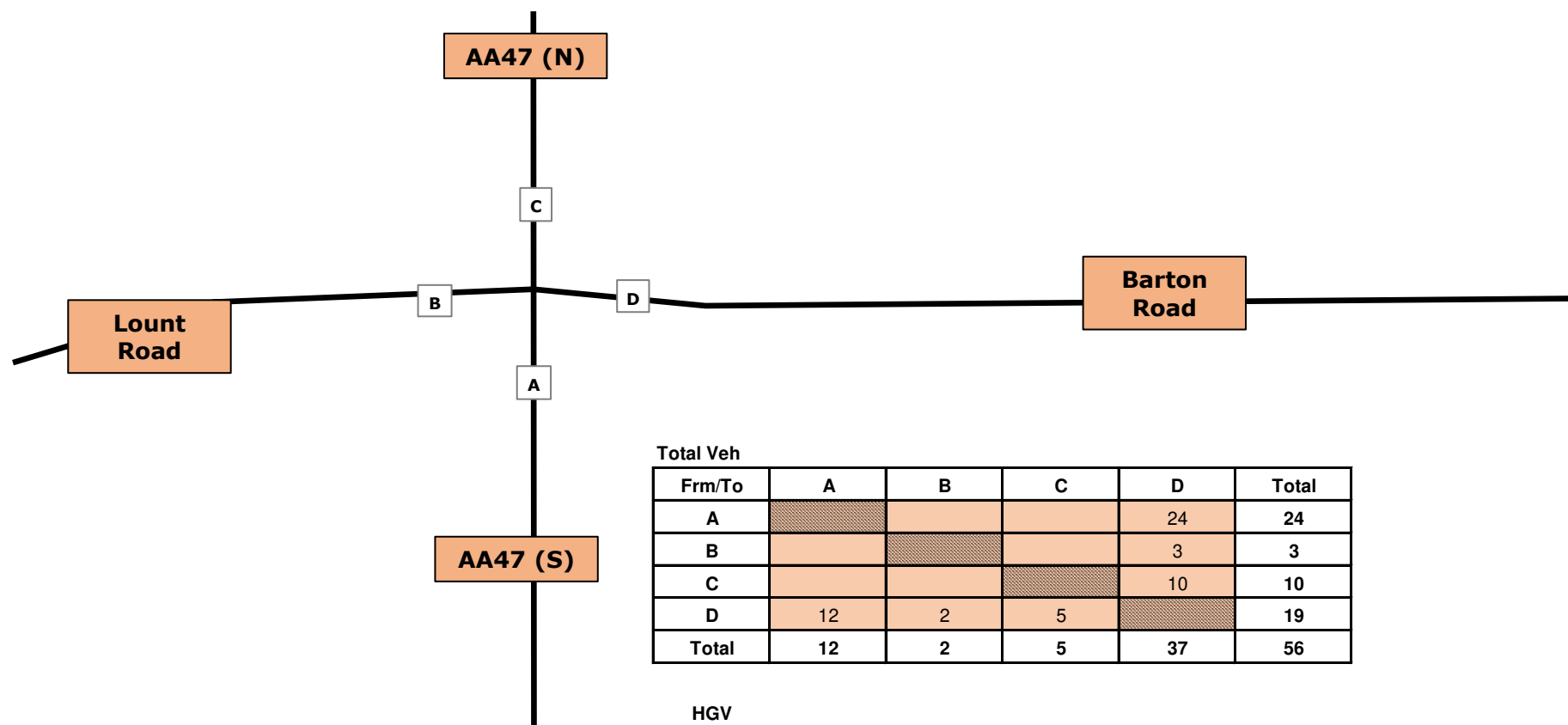
Frm/To	A	B	C	D	Total
A				9	9
B				1	1
C				4	4
D	26	4	11		41
Total	26	4	11	14	55

HGV

Frm/To	A	B	C	D	Total
A					0
B					0
C					0
D					0
Total	0	0	0	0	

%HGV

Frm/To	A	B	C	D	
A					
B					
C					
D					



Total Veh

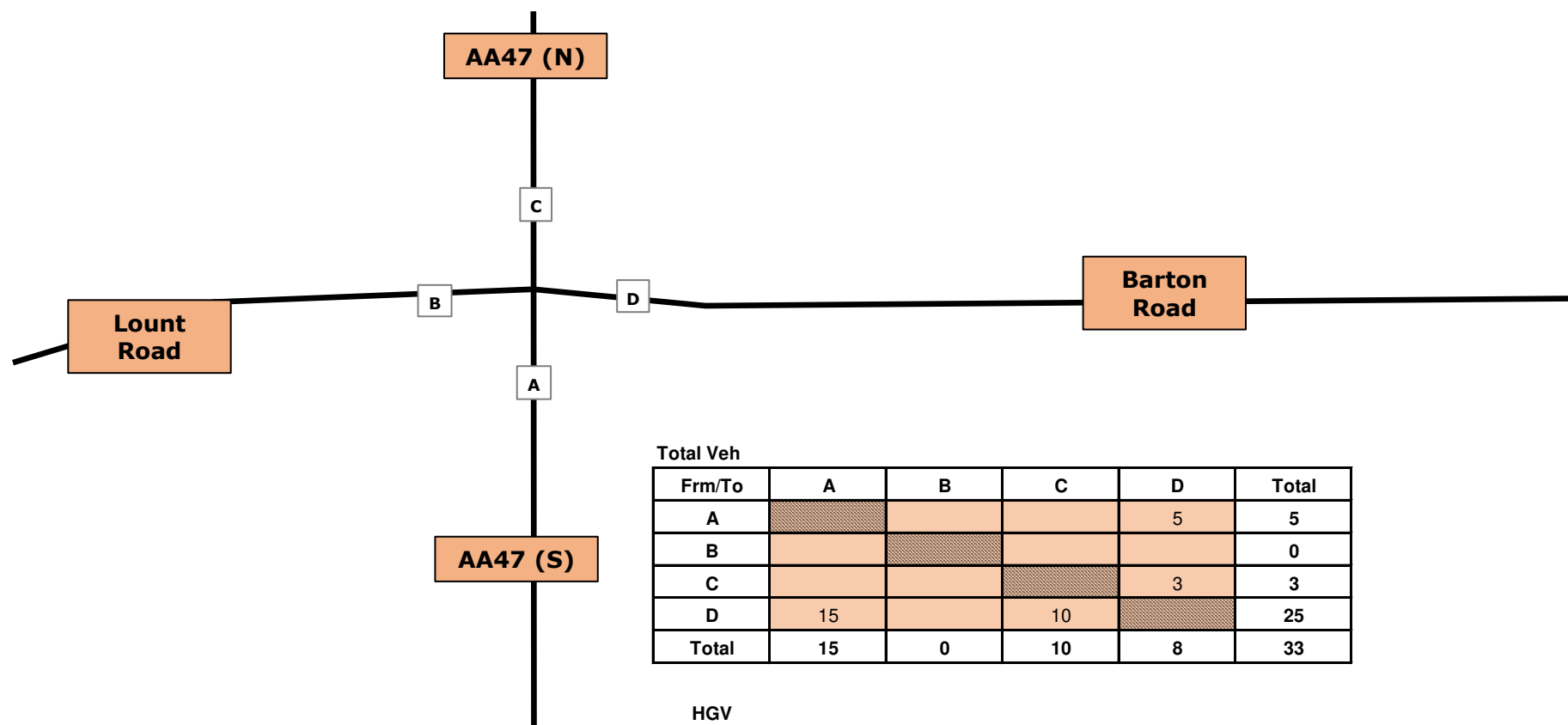
Frm/To	A	B	C	D	Total
A				24	24
B				3	3
C				10	10
D	12	2	5		19
Total	12	2	5	37	56

HGV

Frm/To	A	B	C	D	Total
A					0
B					0
C					0
D					0
Total	0	0	0	0	

%HGV

Frm/To	A	B	C	D	
A					
B					
C					
D					



Total Veh

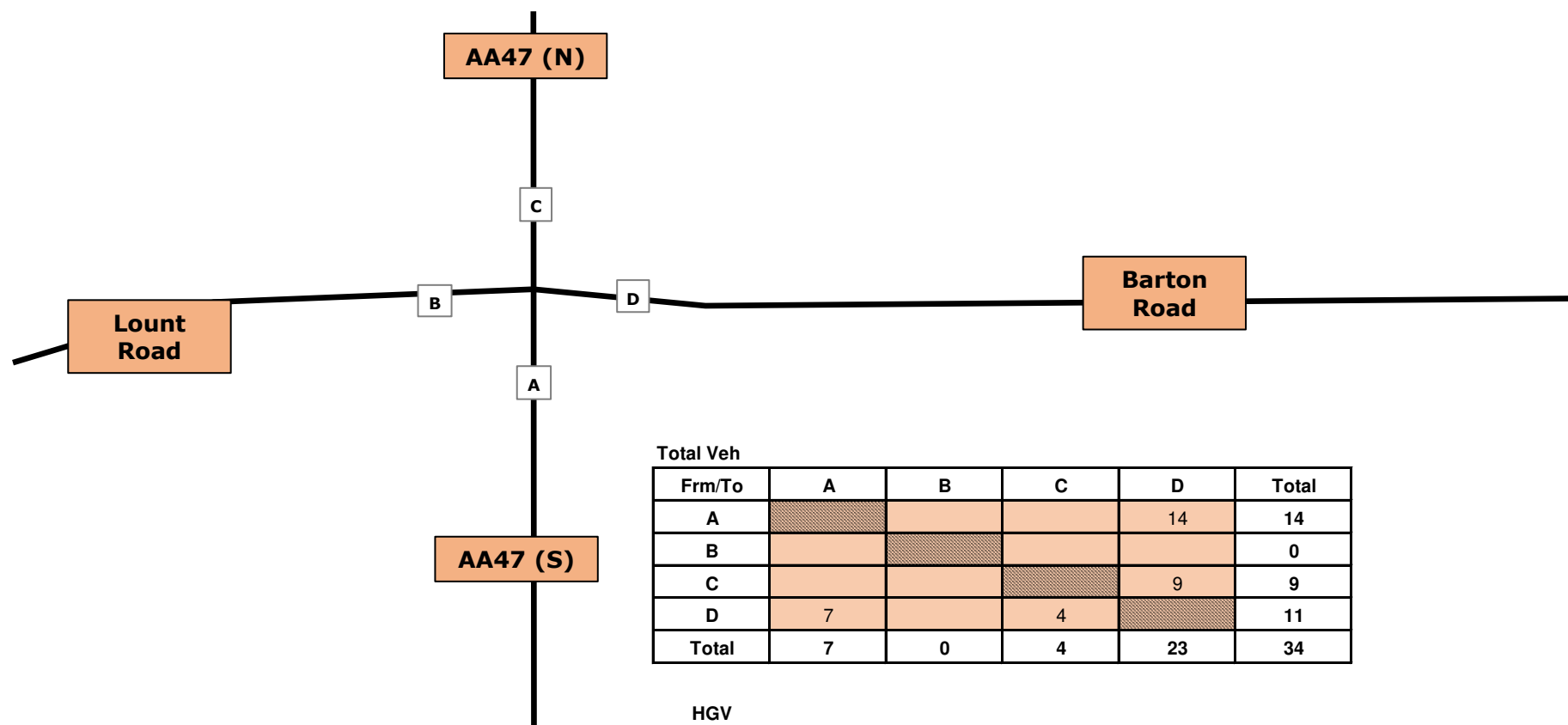
Frm/To	A	B	C	D	Total
A				5	5
B					0
C				3	3
D	15		10		25
Total	15	0	10	8	33

HGV

Frm/To	A	B	C	D	Total
A					0
B					0
C					0
D					0
Total	0	0	0	0	

%HGV

Frm/To	A	B	C	D	
A					
B					
C					
D					



Total Veh

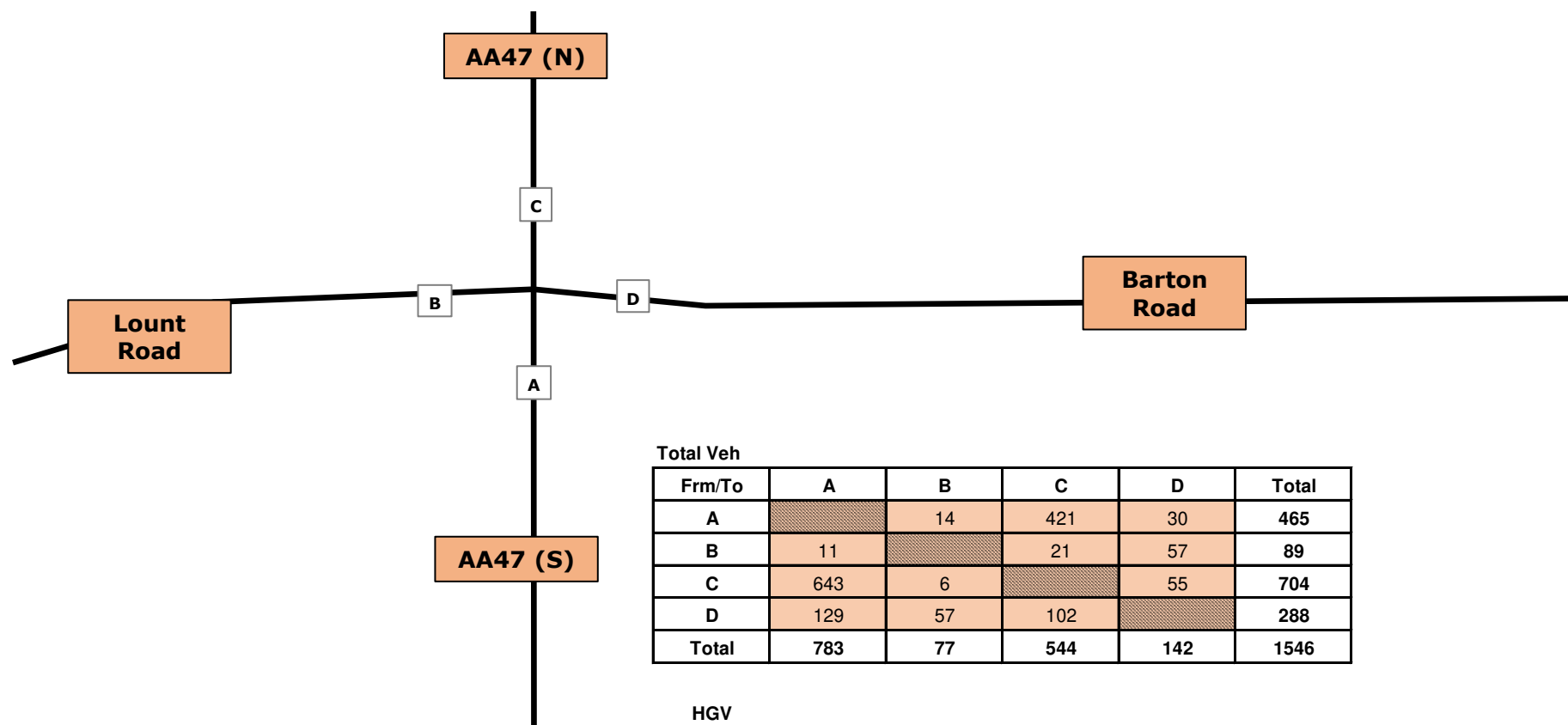
Frm/To	A	B	C	D	Total
A				14	14
B					0
C				9	9
D	7		4		11
Total	7	0	4	23	34

HGV

Frm/To	A	B	C	D	Total
A					0
B					0
C					0
D					0
Total	0	0	0	0	

%HGV

Frm/To	A	B	C	D	
A					
B					
C					
D					



Total Veh

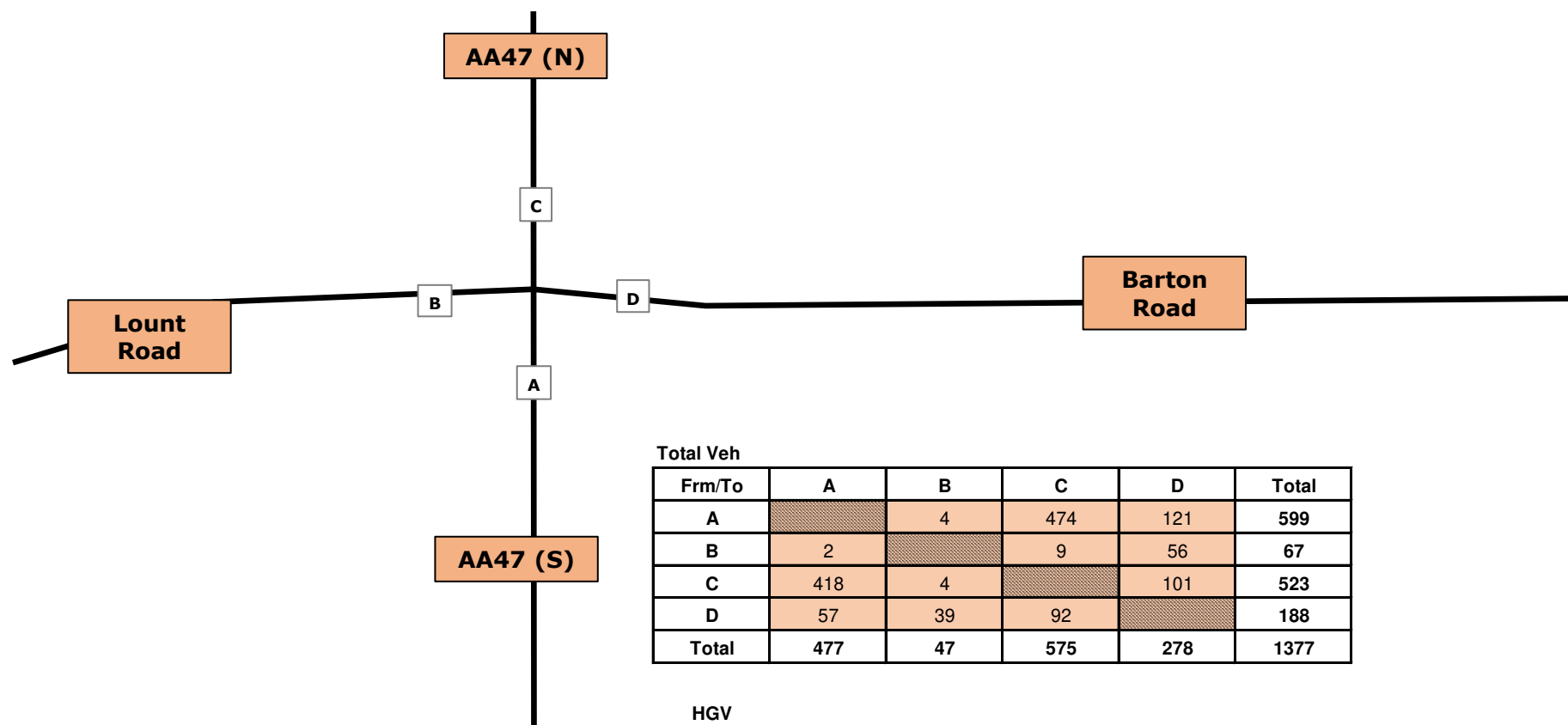
Frm/To	A	B	C	D	Total
A		14	421	30	465
B	11		21	57	89
C	643	6		55	704
D	129	57	102		288
Total	783	77	544	142	1546

HGV

Frm/To	A	B	C	D	Total
A		0	34	0	34
B	0		1	0	1
C	34	0		6	34
D	2	0	3		5
Total	36	0	38	6	

%HGV

Frm/To	A	B	C	D	
A		0.0%	8.1%	0.0%	
B	0.0%		4.8%	0.0%	
C	5.3%	0.0%		10.9%	
D	1.6%	0.0%	2.9%		



Total Veh

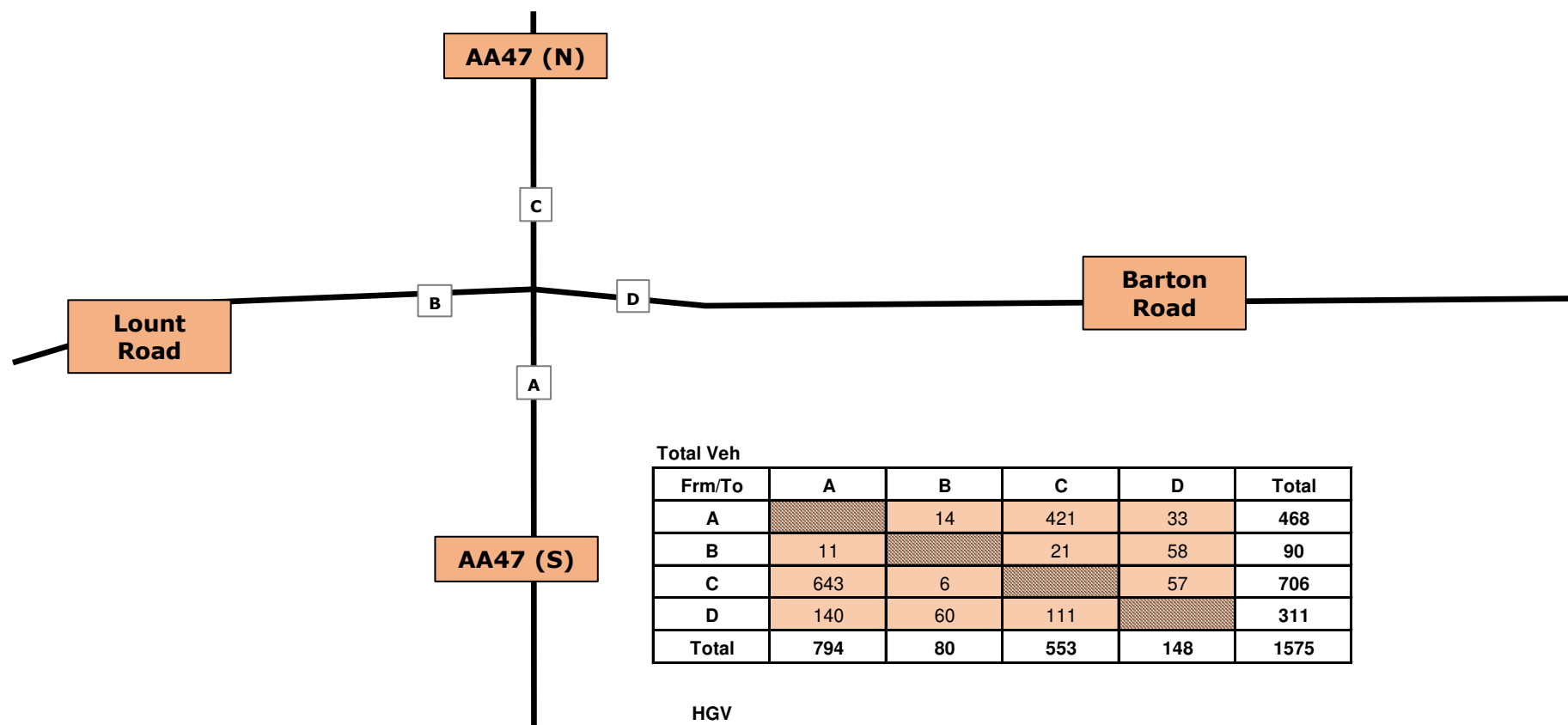
Frm/To	A	B	C	D	Total
A		4	474	121	599
B	2		9	56	67
C	418	4		101	523
D	57	39	92		188
Total	477	47	575	278	1377

HGV

Frm/To	A	B	C	D	Total
A		0	3	1	3
B	0		0	0	0
C	11	0		1	11
D	1	0	2		3
Total	12	0	5	2	

%HGV

Frm/To	A	B	C	D	
A		0.0%	0.6%	0.8%	
B	0.0%		0.0%	0.0%	
C	2.6%	0.0%		1.0%	
D	1.8%	0.0%	2.2%		



Total Veh

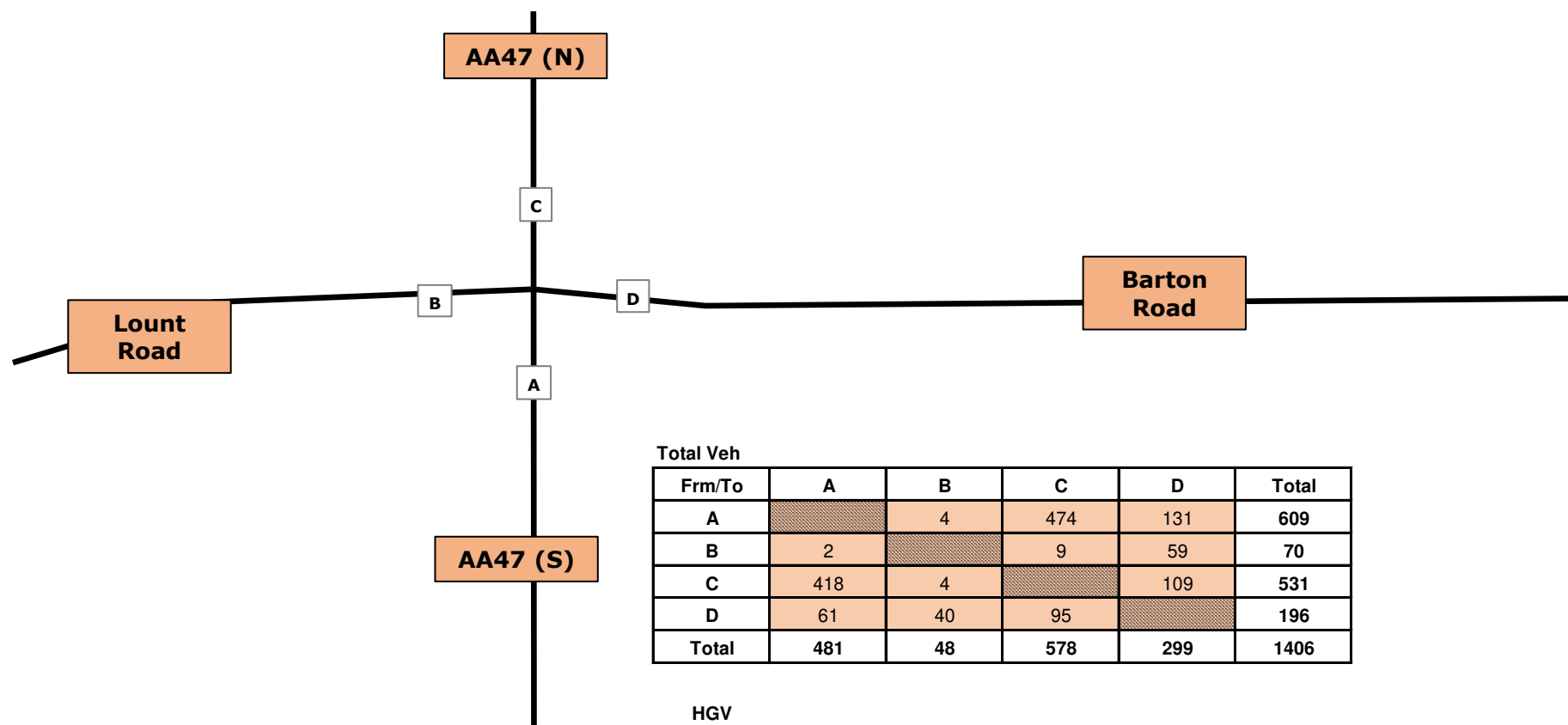
Frm/To	A	B	C	D	Total
A		14	421	33	468
B	11		21	58	90
C	643	6		57	706
D	140	60	111		311
Total	794	80	553	148	1575

HGV

Frm/To	A	B	C	D	Total
A		0	32	0	32
B	0		1	0	1
C	32	0		6	32
D	2	0	3		5
Total	34	0	36	6	

%HGV

Frm/To	A	B	C	D	
A		0.0%	7.6%	0.0%	
B	0.0%		4.8%	0.0%	
C	5.0%	0.0%		10.5%	
D	1.4%	0.0%	2.7%		



Total Veh

Frm/To	A	B	C	D	Total
A		4	474	131	609
B	2		9	59	70
C	418	4		109	531
D	61	40	95		196
Total	481	48	578	299	1406

HGV

Frm/To	A	B	C	D	Total
A		0	3	1	3
B	0		0	0	0
C	11	0		1	11
D	1	0	2		3
Total	12	0	5	2	

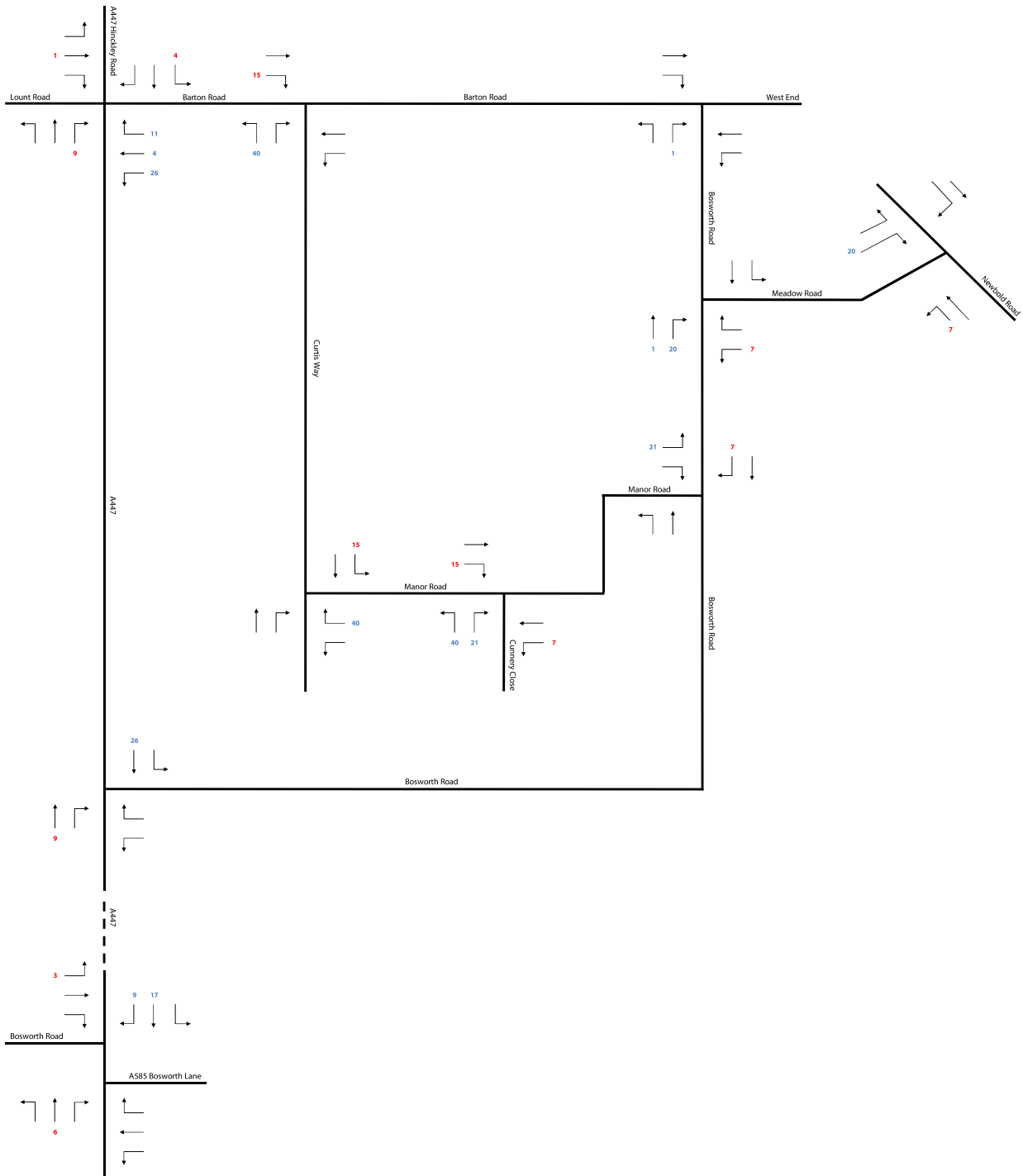
%HGV

Frm/To	A	B	C	D	
A		0.0%	0.6%	0.8%	
B	0.0%		0.0%	0.0%	
C	2.6%	0.0%		0.9%	
D	1.6%	0.0%	2.1%		

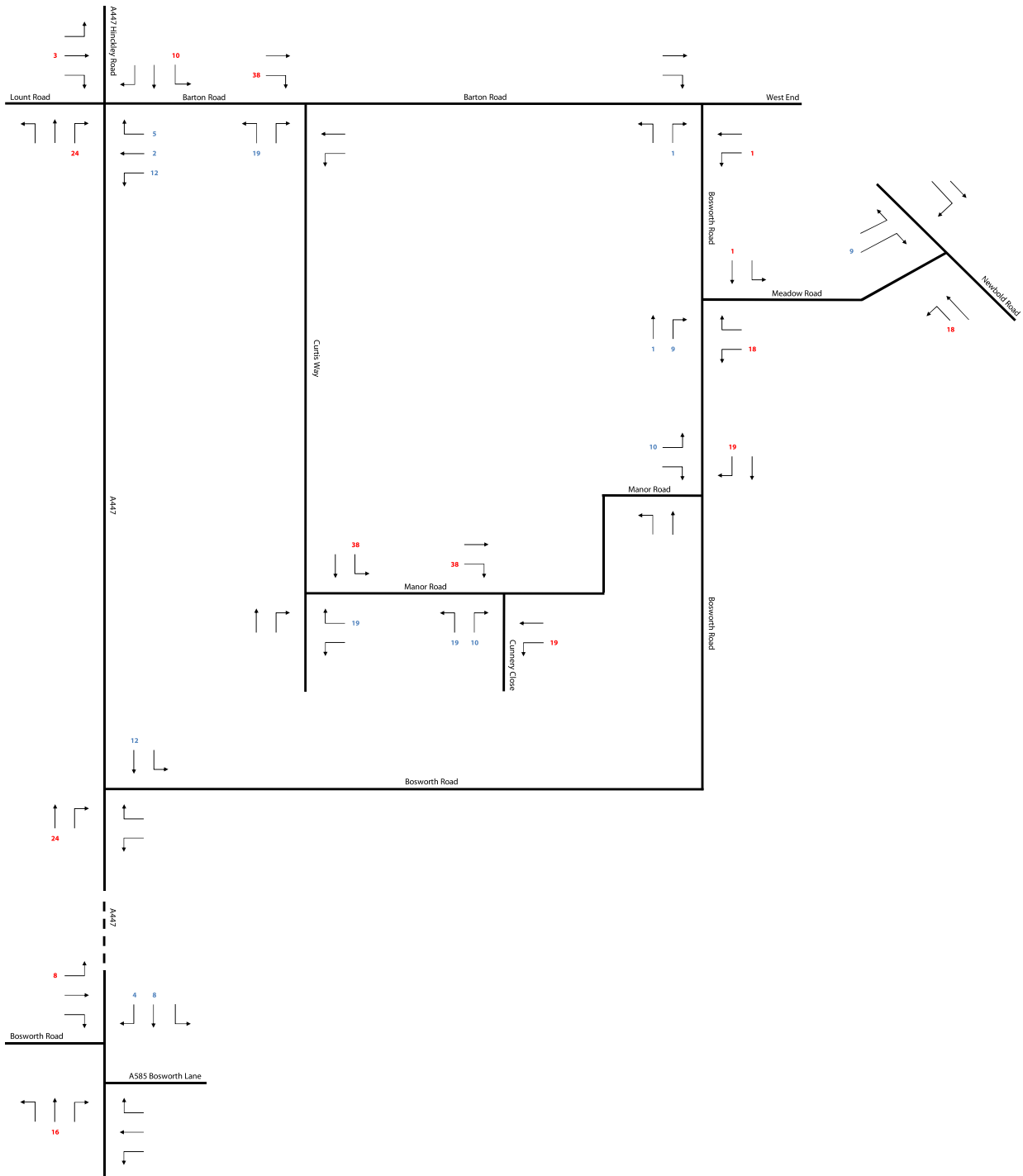
APPENDIX E

EXTRACT OF CUNNERY CLOSE TRANSPORT ASSESSMENT

Project: Land off Cunneery Close, Barlestone
Scenario: Traffic Flow Diagram 14 - Development Traffic Flows
Peak: AM
Notes: Arrivals 22
Departures 61



Project: Land off Cunneery Close, Barlestone
Scenario: Traffic Flow Diagram 15 - Development Traffic Flows
Peak: PM
Notes: Arrivals 57
Departures 29



APPENDIX F

EXTRACT OF GARDEN FARM TRANSPORT ASSESSMENT



AM

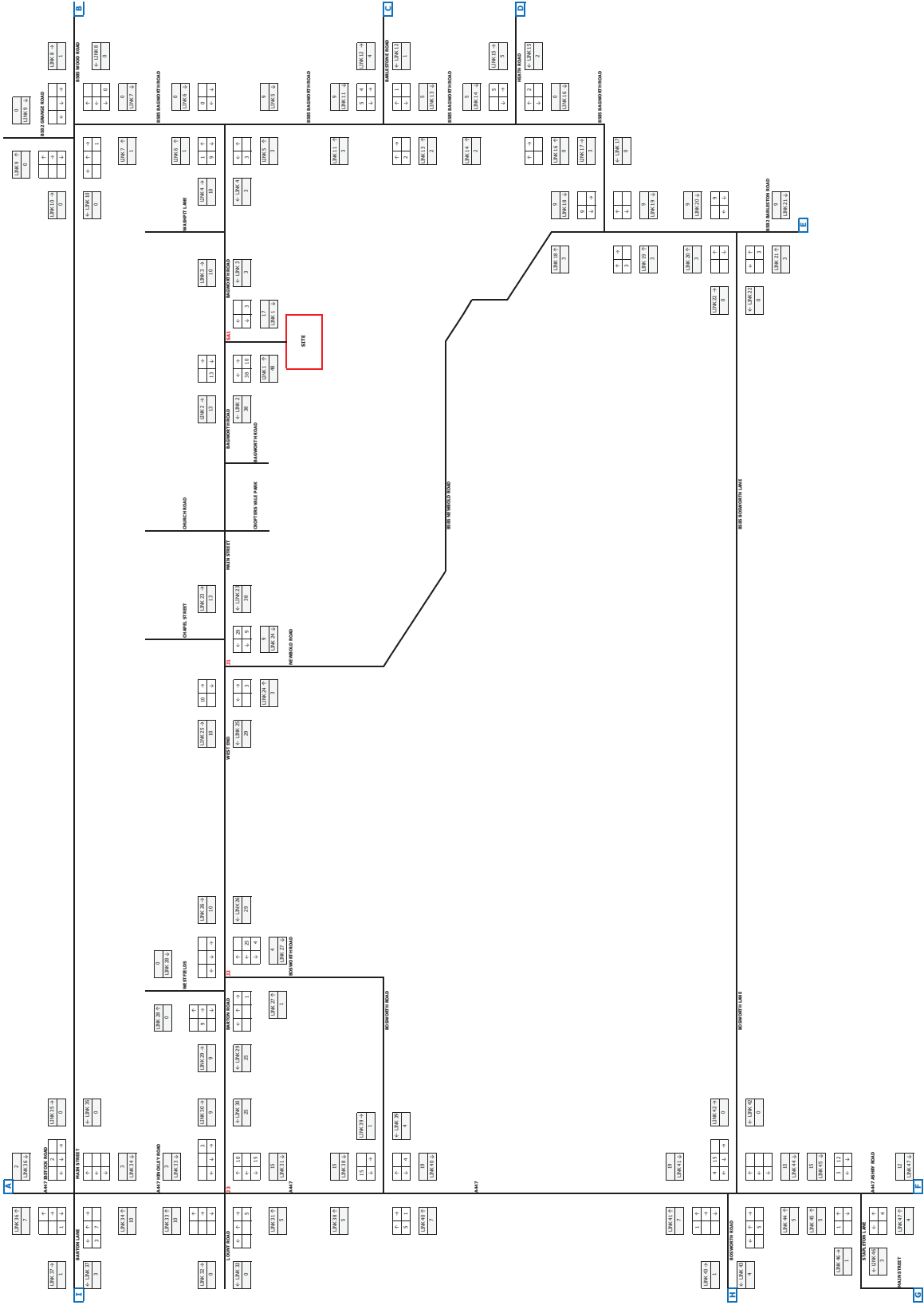
DEVELOPMENT TRIPS

Activity	Trips per Day	Trips per Week	Trips per Year
Work	10	70	2520
Education	5	35	1260
Health	2	14	504
Shopping	1	7	252
Leisure	1	7	252
Other	1	7	252
Total	20	140	5040

Activity	Trips per Day	Trips per Week	Trips per Year
Work	10	70	2520
Education	5	35	1260
Health	2	14	504
Shopping	1	7	252
Leisure	1	7	252
Other	1	7	252
Total	20	140	5040

Percentage split is 12.5% to 87.5%

Source: Transport Research Board





PM

DEVELOPMENT TRIPS

Activity	Arrivals	Departures	TOTAL
10.00 - 10.30	1	1	2
10.30 - 11.00	1	1	2
11.00 - 11.30	1	1	2
11.30 - 12.00	1	1	2
12.00 - 12.30	1	1	2
12.30 - 13.00	1	1	2
13.00 - 13.30	1	1	2
13.30 - 14.00	1	1	2
14.00 - 14.30	1	1	2
14.30 - 15.00	1	1	2
15.00 - 15.30	1	1	2
15.30 - 16.00	1	1	2
16.00 - 16.30	1	1	2
16.30 - 17.00	1	1	2
17.00 - 17.30	1	1	2
17.30 - 18.00	1	1	2
18.00 - 18.30	1	1	2
18.30 - 19.00	1	1	2
19.00 - 19.30	1	1	2
19.30 - 20.00	1	1	2
20.00 - 20.30	1	1	2
20.30 - 21.00	1	1	2
21.00 - 21.30	1	1	2
21.30 - 22.00	1	1	2
22.00 - 22.30	1	1	2
22.30 - 23.00	1	1	2
23.00 - 23.30	1	1	2
23.30 - 24.00	1	1	2
24.00 - 24.30	1	1	2
24.30 - 25.00	1	1	2
25.00 - 25.30	1	1	2
25.30 - 26.00	1	1	2
26.00 - 26.30	1	1	2
26.30 - 27.00	1	1	2
27.00 - 27.30	1	1	2
27.30 - 28.00	1	1	2
28.00 - 28.30	1	1	2
28.30 - 29.00	1	1	2
29.00 - 29.30	1	1	2
29.30 - 30.00	1	1	2
30.00 - 30.30	1	1	2
30.30 - 31.00	1	1	2
31.00 - 31.30	1	1	2
31.30 - 32.00	1	1	2
32.00 - 32.30	1	1	2
32.30 - 33.00	1	1	2
33.00 - 33.30	1	1	2
33.30 - 34.00	1	1	2
34.00 - 34.30	1	1	2
34.30 - 35.00	1	1	2
35.00 - 35.30	1	1	2
35.30 - 36.00	1	1	2
36.00 - 36.30	1	1	2
36.30 - 37.00	1	1	2
37.00 - 37.30	1	1	2
37.30 - 38.00	1	1	2
38.00 - 38.30	1	1	2
38.30 - 39.00	1	1	2
39.00 - 39.30	1	1	2
39.30 - 40.00	1	1	2
40.00 - 40.30	1	1	2
40.30 - 41.00	1	1	2
41.00 - 41.30	1	1	2
41.30 - 42.00	1	1	2
42.00 - 42.30	1	1	2
42.30 - 43.00	1	1	2
43.00 - 43.30	1	1	2
43.30 - 44.00	1	1	2
44.00 - 44.30	1	1	2
44.30 - 45.00	1	1	2
45.00 - 45.30	1	1	2
45.30 - 46.00	1	1	2
46.00 - 46.30	1	1	2
46.30 - 47.00	1	1	2
47.00 - 47.30	1	1	2
47.30 - 48.00	1	1	2
48.00 - 48.30	1	1	2
48.30 - 49.00	1	1	2
49.00 - 49.30	1	1	2
49.30 - 50.00	1	1	2
50.00 - 50.30	1	1	2
50.30 - 51.00	1	1	2
51.00 - 51.30	1	1	2
51.30 - 52.00	1	1	2
52.00 - 52.30	1	1	2
52.30 - 53.00	1	1	2
53.00 - 53.30	1	1	2
53.30 - 54.00	1	1	2
54.00 - 54.30	1	1	2
54.30 - 55.00	1	1	2
55.00 - 55.30	1	1	2
55.30 - 56.00	1	1	2
56.00 - 56.30	1	1	2
56.30 - 57.00	1	1	2
57.00 - 57.30	1	1	2
57.30 - 58.00	1	1	2
58.00 - 58.30	1	1	2
58.30 - 59.00	1	1	2
59.00 - 59.30	1	1	2
59.30 - 60.00	1	1	2
60.00 - 60.30	1	1	2
60.30 - 61.00	1	1	2
61.00 - 61.30	1	1	2
61.30 - 62.00	1	1	2
62.00 - 62.30	1	1	2
62.30 - 63.00	1	1	2
63.00 - 63.30	1	1	2
63.30 - 64.00	1	1	2
64.00 - 64.30	1	1	2
64.30 - 65.00	1	1	2
65.00 - 65.30	1	1	2
65.30 - 66.00	1	1	2
66.00 - 66.30	1	1	2
66.30 - 67.00	1	1	2
67.00 - 67.30	1	1	2
67.30 - 68.00	1	1	2
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68.30 - 69.00	1	1	2
69.00 - 69.30	1	1	2
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70.00 - 70.30	1	1	2
70.30 - 71.00	1	1	2
71.00 - 71.30	1	1	2
71.30 - 72.00	1	1	2
72.00 - 72.30	1	1	2
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73.00 - 73.30	1	1	2
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74.00 - 74.30	1	1	2
74.30 - 75.00	1	1	2
75.00 - 75.30	1	1	2
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77.00 - 77.30	1	1	2
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78.30 - 79.00	1	1	2
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80.00 - 80.30	1	1	2
80.30 - 81.00	1	1	2
81.00 - 81.30	1	1	2
81.30 - 82.00	1	1	2
82.00 - 82.30	1	1	2
82.30 - 83.00	1	1	2
83.00 - 83.30	1	1	2
83.30 - 84.00	1	1	2
84.00 - 84.30	1	1	2
84.30 - 85.00	1	1	2
85.00 - 85.30	1	1	2
85.30 - 86.00	1	1	2
86.00 - 86.30	1	1	2
86.30 - 87.00	1	1	2
87.00 - 87.30	1	1	2
87.30 - 88.00	1	1	2
88.00 - 88.30	1	1	2
88.30 - 89.00	1	1	2
89.00 - 89.30	1	1	2
89.30 - 90.00	1	1	2
90.00 - 90.30	1	1	2
90.30 - 91.00	1	1	2
91.00 - 91.30	1	1	2
91.30 - 92.00	1	1	2
92.00 - 92.30	1	1	2
92.30 - 93.00	1	1	2
93.00 - 93.30	1	1	2
93.30 - 94.00	1	1	2
94.00 - 94.30	1	1	2
94.30 - 95.00	1	1	2
95.00 - 95.30	1	1	2
95.30 - 96.00	1	1	2
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97.30 - 98.00	1	1	2
98.00 - 98.30	1	1	2
98.30 - 99.00	1	1	2
99.00 - 99.30	1	1	2
99.30 - 100.00	1	1	2
100.00 - 100.30	1	1	2
100.30 - 101.00	1	1	2
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101.30 - 102.00	1	1	2
102.00 - 102.30	1	1	2
102.30 - 103.00	1	1	2
103.00 - 103.30	1	1	2
103.30 - 104.00	1	1	2
104.00 - 104.30	1	1	2
104.30 - 105.00	1	1	2
105.00 - 105.30	1	1	2
105.30 - 106.00	1	1	2
106.00 - 106.30	1	1	2
106.30 - 107.00	1	1	2
107.00 - 107.30	1	1	2
107.30 - 108.00	1	1	2
108.00 - 108.30	1	1	2
108.30 - 109.00	1	1	2
109.00 - 109.30	1	1	2
109.30 - 110.00	1	1	2
110.00 - 110.30	1	1	2
110.30 - 111.00	1	1	2
111.00 - 111.30	1	1	2
111.30 - 112.00	1	1	2
112.00 - 112.30	1	1	2
112.30 - 113.00	1	1	2
113.00 - 113.30	1	1	2
113.30 - 114.00	1	1	2
114.00 - 114.30	1	1	2
114.30 - 115.00	1	1	2
115.00 - 115.30	1	1	2
115.30 - 116.00	1	1	2
116.00 - 116.30	1	1	2
116.30 - 117.00	1	1	2
117.00 - 117.30	1	1	2
117.30 - 118.00	1	1	2
118.00 - 118.30	1	1	2
118.30 - 119.00	1	1	2
119.00 - 119.30	1	1	2
119.30 - 120.00	1	1	2
120.00 - 120.30	1	1	2
120.30 - 121.00	1	1	2
121.00 - 121.30	1	1	2
121.30 - 122.00	1	1	2
122.00 - 122.30	1	1	2
122.30 - 123.00	1	1	2
123.00 - 123.30	1	1	2
123.30 - 124.00	1	1	2
124.00 - 124.30	1	1	2
124.30 - 125.00	1	1	2
125.00 - 125.30	1	1	2
125.30 - 126.00	1	1	2
126.00 - 126.30	1	1	2
126.30 - 127.00	1	1	2
127.00 - 127.30	1	1	2
127.30 - 128.00	1	1	2
128.00 - 128.30	1	1	2
128.30 - 129.00	1	1	2
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129.30 - 130.00	1	1	2
130.00 - 130.30	1	1	2
130.30 - 131.00	1	1	2
131.00 - 131.30	1	1	2
131.30 - 132.00	1	1	2
132.00 - 132.30	1	1	2
132.30 - 133.00	1	1	2
133.00 - 133.30	1	1	2
133.30 - 134.00	1	1	2
134.00 - 134.30	1	1	2
134.30 - 135.00	1	1	2
135.00 - 135.30	1	1	2
135.30 - 136.00	1	1	2
136.00 - 136.30	1	1	2
136.30 - 137.00	1	1	2
137.00 - 137.30	1	1	2
137.30 - 138.00	1	1	2
138.00 - 138.30	1	1	2
138.30 - 139.00	1	1	2
139.00 - 139.30	1	1	2
139.30 - 140.00	1	1	2
140.00 - 140.30	1	1	2
140.30 - 141.00	1	1	2
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141.30 - 142.00	1	1	2
142.00 - 142.30	1	1	2
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143.00 - 143.30	1	1	2
143.30 - 144.00	1	1	2
144.00 - 144.30	1	1	2
144.30 - 145.00	1	1	2
145.00 - 145.30	1	1	2
145.30 - 146.00	1	1	2
146.00 - 146.30	1	1	2
146.30 - 147.00	1	1	2
147.00 - 147.30	1	1	2
147.30 - 148.00	1	1	2
148.00 - 148.30	1	1	2
148.30 - 149.00	1	1	2
149.00 - 149.30	1	1	2
149.30 - 150.00	1	1	2
150.00 - 150.30	1	1	2
150.30 - 151.00	1	1	2
151.00 - 151.30	1	1	2
151.30 - 152.00	1	1	2
152.00 - 152.30	1	1	2
152.30 - 153.00	1	1	2
153.00 - 153.30	1	1	2
153.30 - 154.00	1	1	2
154.00 - 154.30	1	1	2
154.30 - 155.00	1	1	2
155.00 - 155.30	1	1	2
155.30 - 156.00	1	1	2
156.00 - 156.30	1	1	2
156.30 - 157.00	1	1	2
157.00 - 157.30	1	1	2
157.30 - 158.00	1	1	2
158.00 - 158.30	1	1	2
158.30 - 159.00	1	1	2
159.00 - 159.30	1	1	2
159.30 - 160.00	1	1	2
160.00 - 160.30	1	1	2
160.30 - 161.00	1	1	2
161.00 - 161.30	1	1	2
161.30 - 162.00	1	1	2
162.00 - 162.30	1	1	2
162.30 - 163.00</			

APPENDIX G

A447 JUNCTION PICADY OUTPUT

Junctions 8		
PICADY 8 - Priority Intersection Module		
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2021		
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk		
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution		

Filename: Crossroads v2.arc8

Path: C:\Users\Holly Curran\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1996 Land at Barton Road, Barlestone\Calculations\Crossroads

Report generation date: 31/03/2021 11:03:15

- » (Default Analysis Set) - 2019, AM
- » (Default Analysis Set) - 2019, PM
- » (Default Analysis Set) - 2021, AM
- » (Default Analysis Set) - 2021, PM
- » (Default Analysis Set) - 2026 Background excluding committed dev, AM
- » (Default Analysis Set) - 2026 Background excluding committed dev, PM
- » (Default Analysis Set) - 2026 With dev excluding committed dev, AM
- » (Default Analysis Set) - 2026 With dev excluding committed dev, PM
- » (Default Analysis Set) - 2026 Background including committed dev, AM
- » (Default Analysis Set) - 2026 Background including committed dev, PM
- » (Default Analysis Set) - 2026 With dev including committed dev, AM
- » (Default Analysis Set) - 2026 With dev including committed dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
A1 - 2019						
Stream B-CD	0.13	8.94	0.11	0.09	8.87	0.08
Stream B-AD	0.13	11.69	0.11	0.09	10.54	0.08
Stream A-B	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-
Stream A-D	0.03	7.39	0.03	0.18	7.77	0.16
Stream D-AB	0.42	12.01	0.30	0.16	9.19	0.14
Stream D-BC	0.49	17.30	0.33	0.38	13.87	0.28
Stream C-D	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-
Stream C-B	0.01	6.76	0.01	0.01	7.06	0.01
A1 - 2021						
Stream B-CD	0.13	9.07	0.12	0.09	9.01	0.08
Stream B-AD	0.13	11.88	0.12	0.09	10.70	0.08
Stream A-B	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-
Stream A-D	0.03	7.44	0.03	0.19	7.85	0.16
Stream D-AB	0.44	12.40	0.31	0.17	9.38	0.15
Stream D-BC	0.51	17.88	0.34	0.40	14.26	0.29
Stream C-D	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-
Stream C-B	0.01	6.79	0.01	0.01	7.10	0.01

A1 - 2026 Background excluding committed dev						
Stream B-CD	0.14	9.37	0.13			
Stream B-AD	0.14	12.41	0.13			
Stream A-B	-	-	-			
Stream A-C	-	-	-			
Stream A-D	0.04	7.57	0.04			
Stream D-AB	0.50	13.45	0.34			
Stream D-BC	0.59	19.57	0.37			
Stream C-D	-	-	-			
Stream C-A	-	-	-			
Stream C-B	0.01	6.85	0.01			
A1 - 2026 Background excluding committed dev						
Stream B-CD				0.10	9.23	0.09
Stream B-AD				0.09	11.03	0.09
Stream A-B				-	-	-
Stream A-C				-	-	-
Stream A-D				0.20	7.99	0.17
Stream D-AB				0.18	9.75	0.15
Stream D-BC				0.44	15.03	0.31
Stream C-D				-	-	-
Stream C-A				-	-	-
Stream C-B				0.01	7.18	0.01
A1 - 2026 Background including committed dev						
Stream B-CD	0.15	9.54	0.13	0.11	9.66	0.10
Stream B-AD	0.15	12.85	0.13	0.10	11.55	0.10
Stream A-B	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-
Stream A-D	0.07	7.85	0.07	0.33	8.86	0.25
Stream D-AB	0.93	18.32	0.49	0.26	10.40	0.21
Stream D-BC	0.92	25.84	0.49	0.55	17.25	0.36
Stream C-D	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-
Stream C-B	0.01	6.92	0.01	0.01	7.37	0.01
A1 - 2026 With dev excluding committed dev						
Stream B-CD	0.15	9.42	0.13	0.11	9.43	0.10
Stream B-AD	0.15	12.50	0.13	0.10	11.22	0.09
Stream A-B	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-
Stream A-D	0.04	7.62	0.04	0.23	8.22	0.19
Stream D-AB	0.61	14.76	0.38	0.20	9.96	0.17
Stream D-BC	0.69	21.28	0.41	0.47	15.66	0.32
Stream C-D	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-
Stream C-B	0.01	6.86	0.01	0.01	7.23	0.01
A1 - 2026 With dev including committed dev						
Stream B-CD	0.15	9.58	0.13	0.12	9.87	0.10
Stream B-AD	0.15	12.95	0.13	0.11	11.76	0.10
Stream A-B	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-
Stream A-D	0.08	7.91	0.07	0.36	9.06	0.27
Stream D-AB	1.18	21.64	0.55	0.29	10.73	0.22
Stream D-BC	1.14	29.97	0.54	0.59	18.01	0.37
Stream C-D	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-

Stream C-B	0.01	6.92	0.01	0.01	7.42	0.01
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Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2019, AM " model duration: 07:45 - 09:15
 "D2 - 2019, PM" model duration: 16:30 - 18:00
 "D3 - 2021, AM" model duration: 07:45 - 09:15
 "D4 - 2021, PM" model duration: 16:30 - 18:00
 "D5 - 2026 Background excluding committed dev, AM" model duration: 07:45 - 09:15
 "D6 - 2026 Background excluding committed dev, PM" model duration: 16:30 - 18:00
 "D7 - 2026 With dev excluding committed dev, AM" model duration: 07:45 - 09:15
 "D8 - 2026 With dev excluding committed dev, PM" model duration: 16:30 - 18:00
 "D9 - 2026 Background including committed dev, AM" model duration: 07:45 - 09:15
 "D10 - 2026 Background including committed dev, PM" model duration: 16:30 - 18:00
 "D11 - 2026 With dev including committed dev, AM" model duration: 07:45 - 09:15
 "D12 - 2026 With dev including committed dev, PM" model duration: 16:30 - 18:00

Run using Junctions 8.0.6.541 at 31/03/2021 11:02:48

File summary

Title	(untitled)
Location	
Site Number	
Date	11/11/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Holly Curran
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin

(Default Analysis Set) - 2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019, AM	2019	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	12.83	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	425.00	100.000
B	ONE HOUR	✓	83.00	100.000
C	ONE HOUR	✓	657.00	100.000
D	ONE HOUR	✓	209.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	13.000	397.000	15.000
	B	10.000	0.000	20.000	53.000
	C	606.000	6.000	0.000	45.000
	D	83.000	50.000	76.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.03	0.93	0.04
	B	0.12	0.00	0.24	0.64
	C	0.92	0.01	0.00	0.07
	D	0.40	0.24	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.081	1.000
	B	1.000	1.000	1.050	1.000
	C	1.053	1.000	1.000	1.133
	D	1.024	1.000	1.039	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	8.1	0.0
	B	0.0	0.0	5.0	0.0
	C	5.3	0.0	0.0	13.3
	D	2.4	0.0	3.9	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.11	8.94	0.13	A
B-AD	0.11	11.69	0.13	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.03	7.39	0.03	A
D-AB	0.30	12.01	0.42	B
D-BC	0.33	17.30	0.49	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	6.76	0.01	A

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	35.38	35.10	0.00	532.86	0.066	0.07	7.229	A
B-AD	27.11	26.84	0.00	423.85	0.064	0.07	9.062	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	298.88	298.88	0.00	-	-	-	-	-
A-D	11.29	11.21	0.00	558.44	0.020	0.02	6.578	A
D-AB	84.01	83.27	0.00	529.76	0.159	0.19	8.050	A
D-BC	73.33	72.46	0.00	402.22	0.182	0.22	10.889	B
C-D	33.88	33.88	0.00	-	-	-	-	-
C-A	456.23	456.23	0.00	-	-	-	-	-
C-B	4.52	4.49	0.00	573.68	0.008	0.01	6.324	A

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	42.38	42.30	0.00	500.81	0.085	0.09	7.852	A
B-AD	32.23	32.15	0.00	391.72	0.082	0.09	10.009	B
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	356.89	356.89	0.00	-	-	-	-	-
A-D	13.48	13.46	0.00	535.41	0.025	0.03	6.896	A
D-AB	101.35	101.07	0.00	489.18	0.207	0.26	9.270	A
D-BC	86.53	86.19	0.00	365.45	0.237	0.30	12.873	B
C-D	40.45	40.45	0.00	-	-	-	-	-
C-A	544.78	544.78	0.00	-	-	-	-	-
C-B	5.39	5.39	0.00	558.98	0.010	0.01	6.502	A

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	52.20	52.06	0.00	455.12	0.115	0.13	8.929	A
B-AD	39.18	39.03	0.00	347.12	0.113	0.13	11.681	B
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	437.11	437.11	0.00	-	-	-	-	-
A-D	16.52	16.48	0.00	503.58	0.033	0.03	7.390	A
D-AB	126.29	125.67	0.00	426.65	0.296	0.41	11.937	B
D-BC	103.83	103.11	0.00	312.02	0.333	0.49	17.164	C
C-D	49.55	49.55	0.00	-	-	-	-	-
C-A	667.22	667.22	0.00	-	-	-	-	-
C-B	6.61	6.60	0.00	538.69	0.012	0.01	6.764	A

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	52.21	52.21	0.00	455.04	0.115	0.13	8.936	A
B-AD	39.18	39.17	0.00	347.02	0.113	0.13	11.693	B
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	437.11	437.11	0.00	-	-	-	-	-
A-D	16.52	16.51	0.00	503.58	0.033	0.03	7.390	A
D-AB	126.34	126.32	0.00	425.97	0.297	0.42	12.011	B
D-BC	103.77	103.75	0.00	311.77	0.333	0.49	17.299	C
C-D	49.55	49.55	0.00	-	-	-	-	-
C-A	667.22	667.22	0.00	-	-	-	-	-
C-B	6.61	6.61	0.00	538.68	0.012	0.01	6.765	A

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	42.39	42.53	0.00	500.69	0.085	0.09	7.860	A
B-AD	32.23	32.37	0.00	391.58	0.082	0.09	10.025	B
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	356.89	356.89	0.00	-	-	-	-	-
A-D	13.48	13.52	0.00	535.41	0.025	0.03	6.897	A
D-AB	101.41	102.02	0.00	488.39	0.208	0.27	9.331	A
D-BC	86.48	87.18	0.00	365.18	0.237	0.32	12.989	B
C-D	40.45	40.45	0.00	-	-	-	-	-
C-A	544.78	544.78	0.00	-	-	-	-	-
C-B	5.39	5.40	0.00	558.97	0.010	0.01	6.502	A

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	35.38	35.47	0.00	532.69	0.066	0.07	7.243	A
B-AD	27.10	27.19	0.00	423.68	0.064	0.07	9.083	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	298.88	298.88	0.00	-	-	-	-	-
A-D	11.29	11.31	0.00	558.43	0.020	0.02	6.579	A
D-AB	84.06	84.36	0.00	529.02	0.159	0.19	8.101	A
D-BC	73.29	73.65	0.00	401.94	0.182	0.23	10.979	B
C-D	33.88	33.88	0.00	-	-	-	-	-
C-A	456.23	456.23	0.00	-	-	-	-	-
C-B	4.52	4.52	0.00	573.64	0.008	0.01	6.324	A

(Default Analysis Set) - 2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019, PM	2019	PM		ONE HOUR	16:30	18:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	10.36	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	761.842	-	-	-	-	-	-	0.254	-	0.101	-	-	-
1	D-B, nearside lane	594.625	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
1	D-B, offside lane	602.759	0.150	0.150	0.341	-	-	-	0.239	0.239	0.094	-	-	-
1	D-C	602.759	-	0.150	0.341	0.119	0.239	0.239	0.239	0.239	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	528.00	100.000
B	ONE HOUR	✓	60.00	100.000
C	ONE HOUR	✓	474.00	100.000
D	ONE HOUR	✓	149.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

		To			
From		A	B	C	D
	A	0.000	4.000	446.000	78.000
	B	2.000	0.000	8.000	50.000
	C	393.000	4.000	0.000	77.000
	D	36.000	35.000	78.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.01	0.84	0.15
	B	0.03	0.00	0.13	0.83
	C	0.83	0.01	0.00	0.16
	D	0.24	0.23	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.007	1.013
	B	1.000	1.000	1.000	1.000
	C	1.025	1.000	1.000	1.013
	D	1.028	1.000	1.026	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.7	1.3
	B	0.0	0.0	0.0	0.0
	C	2.5	0.0	0.0	1.3
	D	2.8	0.0	2.6	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.08	8.87	0.09	A
B-AD	0.08	10.54	0.09	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.16	7.77	0.18	A
D-AB	0.14	9.19	0.16	A
D-BC	0.28	13.87	0.38	B
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	7.06	0.01	A

Main Results for each time segment

Main results: (16:30-16:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	24.91	24.71	0.00	518.35	0.048	0.05	7.289	A
B-AD	20.26	20.07	0.00	439.71	0.046	0.05	8.575	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	335.77	335.77	0.00	-	-	-	-	-
A-D	58.72	58.28	0.00	586.71	0.100	0.11	6.806	A
D-AB	42.07	41.74	0.00	539.27	0.078	0.08	7.231	A
D-BC	70.10	69.34	0.00	434.05	0.162	0.19	9.850	A
C-D	57.97	57.97	0.00	-	-	-	-	-
C-A	295.87	295.87	0.00	-	-	-	-	-
C-B	3.01	2.99	0.00	556.98	0.005	0.01	6.497	A

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	29.77	29.71	0.00	486.62	0.061	0.06	7.878	A
B-AD	24.17	24.11	0.00	410.86	0.059	0.06	9.307	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	400.94	400.94	0.00	-	-	-	-	-
A-D	70.12	70.01	0.00	570.85	0.123	0.14	7.185	A
D-AB	50.87	50.77	0.00	505.90	0.101	0.11	7.909	A
D-BC	83.07	82.81	0.00	403.15	0.206	0.26	11.228	B
C-D	69.22	69.22	0.00	-	-	-	-	-
C-A	353.30	353.30	0.00	-	-	-	-	-
C-B	3.60	3.59	0.00	538.93	0.007	0.01	6.723	A

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	36.51	36.41	0.00	442.37	0.083	0.09	8.866	A
B-AD	29.56	29.46	0.00	371.04	0.080	0.09	10.537	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	491.06	491.06	0.00	-	-	-	-	-
A-D	85.88	85.70	0.00	548.94	0.156	0.18	7.765	A
D-AB	63.57	63.37	0.00	455.89	0.139	0.16	9.168	A
D-BC	100.49	99.99	0.00	360.09	0.279	0.38	13.812	B
C-D	84.78	84.78	0.00	-	-	-	-	-
C-A	432.70	432.70	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	514.14	0.009	0.01	7.061	A

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	36.51	36.50	0.00	442.29	0.083	0.09	8.871	A
B-AD	29.56	29.55	0.00	370.99	0.080	0.09	10.543	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	491.06	491.06	0.00	-	-	-	-	-
A-D	85.88	85.88	0.00	548.94	0.156	0.18	7.774	A
D-AB	63.59	63.59	0.00	455.42	0.140	0.16	9.187	A
D-BC	100.46	100.45	0.00	360.00	0.279	0.38	13.867	B
C-D	84.78	84.78	0.00	-	-	-	-	-
C-A	432.70	432.70	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	514.08	0.009	0.01	7.062	A

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	29.77	29.86	0.00	486.50	0.061	0.07	7.886	A
B-AD	24.17	24.26	0.00	410.77	0.059	0.06	9.317	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	400.94	400.94	0.00	-	-	-	-	-
A-D	70.12	70.29	0.00	570.85	0.123	0.14	7.196	A
D-AB	50.90	51.09	0.00	505.25	0.101	0.11	7.929	A
D-BC	83.05	83.52	0.00	403.04	0.206	0.26	11.285	B
C-D	69.22	69.22	0.00	-	-	-	-	-
C-A	353.30	353.30	0.00	-	-	-	-	-
C-B	3.60	3.60	0.00	538.84	0.007	0.01	6.725	A

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	24.91	24.97	0.00	518.13	0.048	0.05	7.299	A
B-AD	20.26	20.32	0.00	439.55	0.046	0.05	8.588	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	335.77	335.77	0.00	-	-	-	-	-
A-D	58.72	58.84	0.00	586.70	0.100	0.11	6.823	A
D-AB	42.10	42.21	0.00	538.48	0.078	0.09	7.256	A
D-BC	70.07	70.35	0.00	433.83	0.162	0.20	9.912	A
C-D	57.97	57.97	0.00	-	-	-	-	-
C-A	295.87	295.87	0.00	-	-	-	-	-
C-B	3.01	3.02	0.00	556.80	0.005	0.01	6.502	A

(Default Analysis Set) - 2021, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2021, AM	2021	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	13.20	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	432.00	100.000
B	ONE HOUR	✓	84.00	100.000
C	ONE HOUR	✓	669.00	100.000
D	ONE HOUR	✓	213.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	13.000	404.000	15.000
	B	10.000	0.000	20.000	54.000
	C	617.000	6.000	0.000	46.000
	D	85.000	51.000	77.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.03	0.94	0.03
	B	0.12	0.00	0.24	0.64
	C	0.92	0.01	0.00	0.07
	D	0.40	0.24	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.082	1.000
	B	1.000	1.000	1.050	1.000
	C	1.053	1.000	1.000	1.130
	D	1.024	1.000	1.039	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	8.2	0.0
	B	0.0	0.0	5.0	0.0
	C	5.3	0.0	0.0	13.0
	D	2.4	0.0	3.9	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.12	9.07	0.13	A
B-AD	0.12	11.88	0.13	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.03	7.44	0.03	A
D-AB	0.31	12.40	0.44	B
D-BC	0.34	17.88	0.51	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	6.79	0.01	A

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	35.76	35.48	0.00	529.21	0.068	0.07	7.289	A
B-AD	27.48	27.20	0.00	421.00	0.065	0.07	9.135	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	304.15	304.15	0.00	-	-	-	-	-
A-D	11.29	11.21	0.00	556.30	0.020	0.02	6.604	A
D-AB	86.01	85.23	0.00	526.50	0.163	0.19	8.145	A
D-BC	74.35	73.45	0.00	398.99	0.186	0.23	11.030	B
C-D	34.63	34.63	0.00	-	-	-	-	-
C-A	464.51	464.51	0.00	-	-	-	-	-
C-B	4.52	4.49	0.00	572.38	0.008	0.01	6.338	A

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	42.85	42.76	0.00	496.46	0.086	0.09	7.932	A
B-AD	32.66	32.58	0.00	388.30	0.084	0.09	10.118	B
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	363.19	363.19	0.00	-	-	-	-	-
A-D	13.48	13.46	0.00	532.86	0.025	0.03	6.930	A
D-AB	103.79	103.49	0.00	484.91	0.214	0.27	9.431	A
D-BC	87.69	87.34	0.00	361.43	0.243	0.31	13.114	B
C-D	41.35	41.35	0.00	-	-	-	-	-
C-A	554.67	554.67	0.00	-	-	-	-	-
C-B	5.39	5.39	0.00	557.43	0.010	0.01	6.520	A

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	52.79	52.64	0.00	449.74	0.117	0.13	9.066	A
B-AD	39.70	39.54	0.00	342.89	0.116	0.13	11.861	B
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	444.81	444.81	0.00	-	-	-	-	-
A-D	16.52	16.48	0.00	500.45	0.033	0.03	7.438	A
D-AB	129.40	128.73	0.00	420.46	0.308	0.44	12.314	B
D-BC	105.12	104.35	0.00	306.63	0.343	0.51	17.721	C
C-D	50.65	50.65	0.00	-	-	-	-	-
C-A	679.33	679.33	0.00	-	-	-	-	-
C-B	6.61	6.60	0.00	536.79	0.012	0.01	6.789	A

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	52.79	52.79	0.00	449.66	0.117	0.13	9.070	A
B-AD	39.69	39.69	0.00	342.78	0.116	0.13	11.876	B
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	444.81	444.81	0.00	-	-	-	-	-
A-D	16.52	16.51	0.00	500.45	0.033	0.03	7.438	A
D-AB	129.46	129.44	0.00	419.72	0.308	0.44	12.399	B
D-BC	105.06	105.03	0.00	306.34	0.343	0.51	17.875	C
C-D	50.65	50.65	0.00	-	-	-	-	-
C-A	679.33	679.33	0.00	-	-	-	-	-
C-B	6.61	6.61	0.00	536.78	0.012	0.01	6.789	A

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	42.86	43.00	0.00	496.34	0.086	0.10	7.944	A
B-AD	32.66	32.81	0.00	388.15	0.084	0.09	10.136	B
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	363.19	363.19	0.00	-	-	-	-	-
A-D	13.48	13.52	0.00	532.85	0.025	0.03	6.934	A
D-AB	103.85	104.51	0.00	484.06	0.215	0.28	9.500	A
D-BC	87.63	88.38	0.00	361.15	0.243	0.33	13.239	B
C-D	41.35	41.35	0.00	-	-	-	-	-
C-A	554.67	554.67	0.00	-	-	-	-	-
C-B	5.39	5.40	0.00	557.41	0.010	0.01	6.520	A

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	35.77	35.86	0.00	529.03	0.068	0.07	7.302	A
B-AD	27.47	27.56	0.00	420.82	0.065	0.07	9.157	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	304.15	304.15	0.00	-	-	-	-	-
A-D	11.29	11.31	0.00	556.29	0.020	0.02	6.605	A
D-AB	86.06	86.37	0.00	525.73	0.164	0.20	8.198	A
D-BC	74.30	74.68	0.00	398.70	0.186	0.23	11.125	B
C-D	34.63	34.63	0.00	-	-	-	-	-
C-A	464.51	464.51	0.00	-	-	-	-	-
C-B	4.52	4.52	0.00	572.34	0.008	0.01	6.339	A

(Default Analysis Set) - 2021, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2021, PM	2021	PM		ONE HOUR	16:30	18:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	10.57	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	761.987	-	-	-	-	-	-	0.254	-	0.101	-	-	-
1	D-B, nearside lane	594.738	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
1	D-B, offside lane	602.647	0.150	0.150	0.341	-	-	-	0.239	0.239	0.094	-	-	-
1	D-C	602.647	-	0.150	0.341	0.119	0.239	0.239	0.239	0.239	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	539.00	100.000
B	ONE HOUR	✓	61.00	100.000
C	ONE HOUR	✓	483.00	100.000
D	ONE HOUR	✓	153.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	4.000	455.000	80.000
	B	2.000	0.000	8.000	51.000
	C	401.000	4.000	0.000	78.000
	D	37.000	36.000	80.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.01	0.84	0.15
	B	0.03	0.00	0.13	0.84
	C	0.83	0.01	0.00	0.16
	D	0.24	0.24	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.007	1.013
	B	1.000	1.000	1.000	1.000
	C	1.025	1.000	1.000	1.013
	D	1.027	1.000	1.025	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.7	1.3
	B	0.0	0.0	0.0	0.0
	C	2.5	0.0	0.0	1.3
	D	2.7	0.0	2.5	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.08	9.01	0.09	A
B-AD	0.08	10.70	0.09	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.16	7.85	0.19	A
D-AB	0.15	9.38	0.17	A
D-BC	0.29	14.26	0.40	B
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	7.10	0.01	A

Main Results for each time segment

Main results: (16:30-16:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	25.29	25.08	0.00	514.49	0.049	0.05	7.352	A
B-AD	20.64	20.44	0.00	436.73	0.047	0.05	8.644	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	342.55	342.55	0.00	-	-	-	-	-
A-D	60.23	59.77	0.00	585.16	0.103	0.11	6.846	A
D-AB	43.31	42.96	0.00	536.11	0.081	0.09	7.295	A
D-BC	71.87	71.08	0.00	431.11	0.167	0.20	9.977	A
C-D	58.72	58.72	0.00	-	-	-	-	-
C-A	301.89	301.89	0.00	-	-	-	-	-
C-B	3.01	2.99	0.00	555.03	0.005	0.01	6.520	A

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	30.22	30.16	0.00	482.06	0.063	0.07	7.965	A
B-AD	24.62	24.56	0.00	407.29	0.060	0.06	9.405	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	409.04	409.04	0.00	-	-	-	-	-
A-D	71.92	71.80	0.00	569.01	0.126	0.14	7.238	A
D-AB	52.40	52.29	0.00	501.68	0.104	0.12	8.010	A
D-BC	85.14	84.86	0.00	399.51	0.213	0.27	11.429	B
C-D	70.12	70.12	0.00	-	-	-	-	-
C-A	360.49	360.49	0.00	-	-	-	-	-
C-B	3.60	3.59	0.00	536.60	0.007	0.01	6.753	A

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.06	36.96	0.00	436.83	0.085	0.09	9.001	A
B-AD	30.10	30.00	0.00	366.67	0.082	0.09	10.689	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	500.96	500.96	0.00	-	-	-	-	-
A-D	88.08	87.89	0.00	546.68	0.161	0.19	7.843	A
D-AB	65.54	65.32	0.00	449.81	0.146	0.17	9.360	A
D-BC	102.92	102.39	0.00	355.44	0.290	0.40	14.194	B
C-D	85.88	85.88	0.00	-	-	-	-	-
C-A	441.51	441.51	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	511.28	0.009	0.01	7.101	A

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.06	37.06	0.00	436.75	0.085	0.09	9.006	A
B-AD	30.10	30.10	0.00	366.61	0.082	0.09	10.697	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	500.96	500.96	0.00	-	-	-	-	-
A-D	88.08	88.08	0.00	546.68	0.161	0.19	7.849	A
D-AB	65.56	65.56	0.00	449.31	0.146	0.17	9.380	A
D-BC	102.89	102.88	0.00	355.34	0.290	0.40	14.256	B
C-D	85.88	85.88	0.00	-	-	-	-	-
C-A	441.51	441.51	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	511.22	0.009	0.01	7.102	A

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	30.22	30.32	0.00	481.93	0.063	0.07	7.972	A
B-AD	24.62	24.71	0.00	407.20	0.060	0.07	9.415	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	409.04	409.04	0.00	-	-	-	-	-
A-D	71.92	72.10	0.00	569.00	0.126	0.15	7.246	A
D-AB	52.43	52.64	0.00	500.98	0.105	0.12	8.033	A
D-BC	85.11	85.62	0.00	399.39	0.213	0.28	11.493	B
C-D	70.12	70.12	0.00	-	-	-	-	-
C-A	360.49	360.49	0.00	-	-	-	-	-
C-B	3.60	3.60	0.00	536.50	0.007	0.01	6.757	A

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	25.29	25.35	0.00	514.26	0.049	0.05	7.363	A
B-AD	20.63	20.69	0.00	436.56	0.047	0.05	8.659	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	342.55	342.55	0.00	-	-	-	-	-
A-D	60.23	60.35	0.00	585.15	0.103	0.12	6.860	A
D-AB	43.34	43.46	0.00	535.28	0.081	0.09	7.322	A
D-BC	71.84	72.13	0.00	430.87	0.167	0.20	10.043	B
C-D	58.72	58.72	0.00	-	-	-	-	-
C-A	301.89	301.89	0.00	-	-	-	-	-
C-B	3.01	3.02	0.00	554.85	0.005	0.01	6.525	A

(Default Analysis Set) - 2026 Background excluding committed dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 Background excluding committed dev, AM	2026 Background excluding committed dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	14.21	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	451.00	100.000
B	ONE HOUR	✓	88.00	100.000
C	ONE HOUR	✓	697.00	100.000
D	ONE HOUR	✓	222.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	14.000	421.000	16.000
	B	11.000	0.000	21.000	56.000
	C	643.000	6.000	0.000	48.000
	D	88.000	53.000	81.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.03	0.93	0.04
	B	0.13	0.00	0.24	0.64
	C	0.92	0.01	0.00	0.07
	D	0.40	0.24	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.081	1.000
	B	1.000	1.000	1.048	1.000
	C	1.053	1.000	1.000	1.125
	D	1.023	1.000	1.037	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	8.1	0.0
	B	0.0	0.0	4.8	0.0
	C	5.3	0.0	0.0	12.5
	D	2.3	0.0	3.7	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.13	9.37	0.14	A
B-AD	0.13	12.41	0.14	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.04	7.57	0.04	A
D-AB	0.34	13.45	0.50	B
D-BC	0.37	19.57	0.59	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	6.85	0.01	A

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.33	37.03	0.00	522.98	0.071	0.08	7.403	A
B-AD	28.92	28.62	0.00	413.70	0.070	0.07	9.342	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	12.05	11.96	0.00	551.31	0.022	0.02	6.674	A
D-AB	89.33	88.51	0.00	517.82	0.173	0.21	8.370	A
D-BC	77.80	76.82	0.00	391.55	0.199	0.24	11.404	B
C-D	36.14	36.14	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.49	0.00	569.05	0.008	0.01	6.376	A

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	44.75	44.66	0.00	488.60	0.092	0.10	8.107	A
B-AD	34.36	34.26	0.00	379.51	0.091	0.10	10.425	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	14.38	14.36	0.00	526.89	0.027	0.03	7.023	A
D-AB	107.92	107.58	0.00	473.40	0.228	0.29	9.833	A
D-BC	91.65	91.25	0.00	352.01	0.260	0.35	13.780	B
C-D	43.15	43.15	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.39	0.00	553.46	0.010	0.01	6.567	A

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	55.18	55.01	0.00	439.38	0.126	0.14	9.362	A
B-AD	41.71	41.54	0.00	332.00	0.126	0.14	12.386	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	17.62	17.58	0.00	493.15	0.036	0.04	7.569	A
D-AB	134.82	134.02	0.00	403.40	0.334	0.49	13.327	B
D-BC	109.60	108.68	0.00	293.72	0.373	0.58	19.348	C
C-D	52.85	52.85	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.60	0.00	531.93	0.012	0.01	6.852	A

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	55.19	55.18	0.00	439.28	0.126	0.14	9.372	A
B-AD	41.70	41.70	0.00	331.87	0.126	0.14	12.405	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	17.62	17.62	0.00	493.14	0.036	0.04	7.569	A
D-AB	134.90	134.88	0.00	402.43	0.335	0.50	13.453	B
D-BC	109.52	109.48	0.00	293.34	0.373	0.59	19.568	C
C-D	52.85	52.85	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.61	0.00	531.92	0.012	0.01	6.852	A

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	44.76	44.92	0.00	488.46	0.092	0.10	8.120	A
B-AD	34.35	34.52	0.00	379.33	0.091	0.10	10.447	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	14.38	14.42	0.00	526.89	0.027	0.03	7.027	A
D-AB	108.00	108.79	0.00	472.34	0.229	0.30	9.921	A
D-BC	91.57	92.48	0.00	351.65	0.260	0.36	13.946	B
C-D	43.15	43.15	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.40	0.00	553.44	0.010	0.01	6.568	A

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.34	37.44	0.00	522.79	0.071	0.08	7.417	A
B-AD	28.91	29.01	0.00	413.50	0.070	0.08	9.365	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	12.05	12.07	0.00	551.29	0.022	0.02	6.675	A
D-AB	89.39	89.75	0.00	516.94	0.173	0.21	8.432	A
D-BC	77.74	78.17	0.00	391.22	0.199	0.25	11.517	B
C-D	36.14	36.14	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.52	0.00	569.02	0.008	0.01	6.379	A

(Default Analysis Set) - 2026 Background excluding committed dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 Background excluding committed dev, PM	2026 Background excluding committed dev	PM		ONE HOUR	16:30	18:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	10.98	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	761.528	-	-	-	-	-	-	0.254	-	0.100	-	-	-
1	D-B, nearside lane	594.380	0.148	0.148	0.336	-	-	-	0.236	0.236	0.093	-	-	-
1	D-B, offside lane	603.005	0.150	0.150	0.341	-	-	-	0.239	0.239	0.095	-	-	-
1	D-C	603.005	-	0.150	0.341	0.119	0.239	0.239	0.239	0.239	0.095	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	561.00	100.000
B	ONE HOUR	✓	64.00	100.000
C	ONE HOUR	✓	504.00	100.000
D	ONE HOUR	✓	158.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
From		A	B	C	D
	A	0.000	4.000	474.000	83.000
	B	2.000	0.000	9.000	53.000
	C	418.000	4.000	0.000	82.000
	D	38.000	37.000	83.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.01	0.84	0.15
	B	0.03	0.00	0.14	0.83
	C	0.83	0.01	0.00	0.16
	D	0.24	0.23	0.53	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.006	1.012
	B	1.000	1.000	1.000	1.000
	C	1.026	1.000	1.000	1.012
	D	1.026	1.000	1.024	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.6	1.2
	B	0.0	0.0	0.0	0.0
	C	2.6	0.0	0.0	1.2
	D	2.6	0.0	2.4	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.09	9.23	0.10	A
B-AD	0.09	11.03	0.09	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.17	7.99	0.20	A
D-AB	0.15	9.75	0.18	A
D-BC	0.31	15.03	0.44	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	7.18	0.01	A

Main Results for each time segment

Main results: (16:30-16:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	26.80	26.58	0.00	510.20	0.053	0.05	7.440	A
B-AD	21.38	21.18	0.00	430.55	0.050	0.05	8.789	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	62.49	62.01	0.00	582.08	0.107	0.12	6.916	A
D-AB	44.60	44.23	0.00	529.15	0.084	0.09	7.419	A
D-BC	74.35	73.52	0.00	424.93	0.175	0.21	10.213	B
C-D	61.73	61.73	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	2.99	0.00	551.30	0.005	0.01	6.565	A

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	32.03	31.96	0.00	476.45	0.067	0.07	8.098	A
B-AD	25.51	25.45	0.00	399.89	0.064	0.07	9.613	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	74.62	74.49	0.00	565.19	0.132	0.15	7.334	A
D-AB	54.01	53.88	0.00	492.74	0.110	0.12	8.202	A
D-BC	88.03	87.73	0.00	391.91	0.225	0.29	11.822	B
C-D	73.72	73.72	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.59	0.00	532.14	0.007	0.01	6.810	A

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	39.28	39.16	0.00	429.28	0.091	0.10	9.224	A
B-AD	31.19	31.08	0.00	357.57	0.087	0.09	11.023	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	91.38	91.18	0.00	541.86	0.169	0.20	7.985	A
D-AB	67.66	67.43	0.00	437.38	0.155	0.18	9.727	A
D-BC	106.30	105.70	0.00	345.75	0.307	0.43	14.957	B
C-D	90.28	90.28	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	505.82	0.009	0.01	7.178	A

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	39.28	39.27	0.00	429.19	0.092	0.10	9.232	A
B-AD	31.19	31.19	0.00	357.51	0.087	0.09	11.031	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	91.38	91.38	0.00	541.86	0.169	0.20	7.991	A
D-AB	67.69	67.69	0.00	436.78	0.155	0.18	9.753	A
D-BC	106.27	106.25	0.00	345.64	0.307	0.44	15.035	C
C-D	90.28	90.28	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	505.75	0.009	0.01	7.179	A

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	32.03	32.14	0.00	476.31	0.067	0.07	8.108	A
B-AD	25.51	25.61	0.00	399.79	0.064	0.07	9.623	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	74.62	74.81	0.00	565.19	0.132	0.15	7.346	A
D-AB	54.04	54.27	0.00	491.94	0.110	0.12	8.227	A
D-BC	88.00	88.57	0.00	391.77	0.225	0.29	11.897	B
C-D	73.72	73.72	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.60	0.00	532.04	0.007	0.01	6.814	A

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	26.80	26.87	0.00	509.97	0.053	0.06	7.454	A
B-AD	21.38	21.45	0.00	430.37	0.050	0.05	8.804	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	62.49	62.62	0.00	582.07	0.107	0.12	6.934	A
D-AB	44.63	44.76	0.00	528.26	0.084	0.09	7.448	A
D-BC	74.32	74.64	0.00	424.68	0.175	0.21	10.296	B
C-D	61.73	61.73	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	3.02	0.00	551.11	0.005	0.01	6.567	A

(Default Analysis Set) - 2026 With dev excluding committed dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 With dev excluding committed dev, AM	2026 With dev excluding committed dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	15.30	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	454.00	100.000
B	ONE HOUR	✓	89.00	100.000
C	ONE HOUR	✓	699.00	100.000
D	ONE HOUR	✓	245.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	14.000	421.000	19.000
	B	11.000	0.000	21.000	57.000
	C	643.000	6.000	0.000	50.000
	D	99.000	56.000	90.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.03	0.93	0.04
	B	0.12	0.00	0.24	0.64
	C	0.92	0.01	0.00	0.07
	D	0.40	0.23	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.076	1.000
	B	1.000	1.000	1.048	1.000
	C	1.050	1.000	1.000	1.120
	D	1.020	1.000	1.033	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	7.6	0.0
	B	0.0	0.0	4.8	0.0
	C	5.0	0.0	0.0	12.0
	D	2.0	0.0	3.3	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.13	9.42	0.15	A
B-AD	0.13	12.50	0.15	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.04	7.62	0.04	A
D-AB	0.38	14.76	0.61	B
D-BC	0.41	21.28	0.69	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	6.86	0.01	A

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.72	37.41	0.00	522.03	0.072	0.08	7.423	A
B-AD	29.28	28.98	0.00	412.69	0.071	0.08	9.382	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	14.30	14.20	0.00	551.30	0.026	0.03	6.700	A
D-AB	99.28	98.34	0.00	517.00	0.192	0.23	8.580	A
D-BC	85.17	84.07	0.00	391.14	0.218	0.27	11.684	B
C-D	37.64	37.64	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.49	0.00	568.69	0.008	0.01	6.380	A

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	45.22	45.13	0.00	487.51	0.093	0.10	8.136	A
B-AD	34.79	34.69	0.00	378.24	0.092	0.10	10.477	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	17.08	17.05	0.00	526.88	0.032	0.03	7.060	A
D-AB	120.01	119.60	0.00	470.32	0.255	0.34	10.253	B
D-BC	100.24	99.76	0.00	350.40	0.286	0.39	14.333	B
C-D	44.95	44.95	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.39	0.00	553.03	0.010	0.01	6.572	A

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	55.77	55.60	0.00	438.09	0.127	0.14	9.409	A
B-AD	42.22	42.04	0.00	330.33	0.128	0.14	12.479	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	20.92	20.88	0.00	493.13	0.042	0.04	7.622	A
D-AB	150.10	149.06	0.00	395.19	0.380	0.60	14.567	B
D-BC	119.65	118.50	0.00	289.03	0.414	0.68	20.956	C
C-D	55.05	55.05	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.60	0.00	531.40	0.012	0.01	6.858	A

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	55.78	55.78	0.00	437.98	0.127	0.15	9.418	A
B-AD	42.21	42.21	0.00	330.17	0.128	0.15	12.501	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	20.92	20.92	0.00	493.12	0.042	0.04	7.622	A
D-AB	150.21	150.17	0.00	393.87	0.381	0.61	14.764	B
D-BC	119.54	119.49	0.00	288.47	0.414	0.69	21.285	C
C-D	55.05	55.05	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.61	0.00	531.39	0.012	0.01	6.859	A

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	45.23	45.40	0.00	487.37	0.093	0.10	8.147	A
B-AD	34.78	34.95	0.00	378.02	0.092	0.10	10.500	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	17.08	17.12	0.00	526.87	0.032	0.03	7.062	A
D-AB	120.12	121.15	0.00	468.93	0.256	0.35	10.380	B
D-BC	100.13	101.27	0.00	349.92	0.286	0.41	14.551	B
C-D	44.95	44.95	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.40	0.00	553.01	0.010	0.01	6.576	A

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.73	37.83	0.00	521.83	0.072	0.08	7.438	A
B-AD	29.28	29.38	0.00	412.46	0.071	0.08	9.401	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	14.30	14.33	0.00	551.28	0.026	0.03	6.706	A
D-AB	99.35	99.79	0.00	515.94	0.193	0.24	8.660	A
D-BC	85.09	85.60	0.00	390.75	0.218	0.28	11.819	B
C-D	37.64	37.64	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.52	0.00	568.65	0.008	0.01	6.383	A

(Default Analysis Set) - 2026 With dev excluding committed dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 With dev excluding committed dev, FM	2026 With dev excluding committed dev	FM		ONE HOUR	16:30	18:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	11.24	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	762.979	-	-	-	-	-	-	0.254	-	0.101	-	-	-
1	D-B, nearside lane	595.512	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
1	D-B, offside lane	601.872	0.150	0.150	0.341	-	-	-	0.239	0.239	0.094	-	-	-
1	D-C	601.872	-	0.150	0.341	0.119	0.239	0.239	0.239	0.239	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	571.00	100.000
B	ONE HOUR	✓	67.00	100.000
C	ONE HOUR	✓	512.00	100.000
D	ONE HOUR	✓	166.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
From		A	B	C	D
	A	0.000	4.000	474.000	93.000
	B	2.000	0.000	9.000	56.000
	C	418.000	4.000	0.000	90.000
	D	42.000	38.000	86.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.01	0.83	0.16
	B	0.03	0.00	0.13	0.84
	C	0.82	0.01	0.00	0.18
	D	0.25	0.23	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.006	1.011
	B	1.000	1.000	1.000	1.000
	C	1.026	1.000	1.000	1.011
	D	1.024	1.000	1.023	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.6	1.1
	B	0.0	0.0	0.0	0.0
	C	2.6	0.0	0.0	1.1
	D	2.4	0.0	2.3	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.10	9.43	0.11	A
B-AD	0.09	11.22	0.10	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.19	8.22	0.23	A
D-AB	0.17	9.96	0.20	A
D-BC	0.32	15.66	0.47	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	7.23	0.01	A

Main Results for each time segment

Main results: (16:30-16:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	27.93	27.70	0.00	505.50	0.055	0.06	7.531	A
B-AD	22.51	22.29	0.00	427.92	0.053	0.05	8.870	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	70.02	69.47	0.00	581.31	0.120	0.14	7.026	A
D-AB	48.14	47.74	0.00	530.88	0.091	0.10	7.444	A
D-BC	76.84	75.95	0.00	420.81	0.183	0.22	10.414	B
C-D	67.76	67.76	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	2.99	0.00	548.97	0.005	0.01	6.593	A

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	33.38	33.31	0.00	471.03	0.071	0.08	8.223	A
B-AD	26.85	26.78	0.00	396.73	0.068	0.07	9.731	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	83.61	83.46	0.00	564.15	0.148	0.17	7.487	A
D-AB	58.30	58.17	0.00	493.21	0.118	0.13	8.273	A
D-BC	90.93	90.60	0.00	387.00	0.235	0.30	12.131	B
C-D	80.91	80.91	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.59	0.00	529.33	0.007	0.01	6.846	A

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	40.94	40.82	0.00	422.85	0.097	0.11	9.420	A
B-AD	32.83	32.71	0.00	353.67	0.093	0.10	11.213	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	102.39	102.16	0.00	540.43	0.189	0.23	8.210	A
D-AB	73.06	72.80	0.00	435.34	0.168	0.20	9.924	A
D-BC	109.71	109.05	0.00	339.62	0.323	0.47	15.564	C
C-D	99.09	99.09	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	502.37	0.009	0.01	7.228	A

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	40.94	40.94	0.00	422.75	0.097	0.11	9.428	A
B-AD	32.83	32.82	0.00	353.59	0.093	0.10	11.222	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	102.39	102.39	0.00	540.42	0.189	0.23	8.218	A
D-AB	73.10	73.10	0.00	434.66	0.168	0.20	9.956	A
D-BC	109.67	109.64	0.00	339.49	0.323	0.47	15.661	C
C-D	99.09	99.09	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	502.30	0.009	0.01	7.229	A

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	33.38	33.50	0.00	470.88	0.071	0.08	8.234	A
B-AD	26.85	26.96	0.00	396.61	0.068	0.07	9.741	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	83.61	83.83	0.00	564.14	0.148	0.18	7.500	A
D-AB	58.34	58.60	0.00	492.30	0.119	0.14	8.303	A
D-BC	90.89	91.52	0.00	386.84	0.235	0.31	12.218	B
C-D	80.91	80.91	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.60	0.00	529.21	0.007	0.01	6.851	A

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	27.93	28.00	0.00	505.24	0.055	0.06	7.546	A
B-AD	22.51	22.58	0.00	427.72	0.053	0.06	8.886	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	70.02	70.17	0.00	581.30	0.120	0.14	7.047	A
D-AB	48.18	48.32	0.00	529.89	0.091	0.10	7.478	A
D-BC	76.80	77.14	0.00	420.53	0.183	0.23	10.495	B
C-D	67.76	67.76	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	3.02	0.00	548.75	0.005	0.01	6.595	A

(Default Analysis Set) - 2026 Background including committed dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 Background including committed dev, AM	2026 Background including committed dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	18.07	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	465.00	100.000
B	ONE HOUR	✓	89.00	100.000
C	ONE HOUR	✓	704.00	100.000
D	ONE HOUR	✓	288.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	14.000	421.000	30.000
	B	11.000	0.000	21.000	57.000
	C	643.000	6.000	0.000	55.000
	D	129.000	57.000	102.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.03	0.91	0.06
	B	0.12	0.00	0.24	0.64
	C	0.91	0.01	0.00	0.08
	D	0.45	0.20	0.35	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.081	1.000
	B	1.000	1.000	1.048	1.000
	C	1.053	1.000	1.000	1.109
	D	1.016	1.000	1.029	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	8.1	0.0
	B	0.0	0.0	4.8	0.0
	C	5.3	0.0	0.0	10.9
	D	1.6	0.0	2.9	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.13	9.54	0.15	A
B-AD	0.13	12.85	0.15	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	7.85	0.07	A
D-AB	0.49	18.32	0.93	C
D-BC	0.49	25.84	0.92	D
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	6.92	0.01	A

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.73	37.42	0.00	519.27	0.073	0.08	7.466	A
B-AD	29.27	28.97	0.00	407.73	0.072	0.08	9.496	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	22.59	22.42	0.00	550.12	0.041	0.04	6.820	A
D-AB	122.83	121.61	0.00	520.06	0.236	0.31	9.009	A
D-BC	93.99	92.73	0.00	385.80	0.244	0.32	12.232	B
C-D	41.41	41.41	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.49	0.00	565.79	0.008	0.01	6.413	A

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	45.24	45.15	0.00	484.04	0.093	0.10	8.201	A
B-AD	34.76	34.66	0.00	372.18	0.093	0.10	10.662	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	26.97	26.92	0.00	525.47	0.051	0.05	7.220	A
D-AB	148.39	147.79	0.00	469.31	0.316	0.45	11.176	B
D-BC	110.52	109.91	0.00	341.58	0.324	0.47	15.494	C
C-D	49.44	49.44	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.39	0.00	549.54	0.010	0.01	6.615	A

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	55.83	55.66	0.00	433.48	0.129	0.15	9.525	A
B-AD	42.16	41.97	0.00	322.65	0.131	0.15	12.818	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	33.03	32.96	0.00	491.41	0.067	0.07	7.852	A
D-AB	185.44	183.66	0.00	384.07	0.483	0.90	17.808	C
D-BC	131.65	129.95	0.00	271.65	0.485	0.89	25.090	D
C-D	60.56	60.56	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.60	0.00	527.13	0.013	0.01	6.915	A

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	55.84	55.84	0.00	433.36	0.129	0.15	9.535	A
B-AD	42.15	42.14	0.00	322.38	0.131	0.15	12.845	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	33.03	33.03	0.00	491.40	0.067	0.07	7.853	A
D-AB	185.60	185.50	0.00	381.76	0.486	0.93	18.322	C
D-BC	131.49	131.39	0.00	270.44	0.486	0.92	25.843	D
C-D	60.56	60.56	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.61	0.00	527.11	0.013	0.01	6.915	A

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	45.25	45.42	0.00	483.87	0.094	0.10	8.213	A
B-AD	34.76	34.94	0.00	371.82	0.093	0.10	10.691	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	26.97	27.04	0.00	525.47	0.051	0.05	7.225	A
D-AB	148.55	150.35	0.00	467.06	0.318	0.47	11.427	B
D-BC	110.36	112.07	0.00	340.65	0.324	0.49	15.872	C
C-D	49.44	49.44	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.40	0.00	549.50	0.010	0.01	6.618	A

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	37.74	37.84	0.00	519.04	0.073	0.08	7.481	A
B-AD	29.27	29.37	0.00	407.43	0.072	0.08	9.526	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	22.59	22.63	0.00	550.11	0.041	0.04	6.824	A
D-AB	122.92	123.56	0.00	518.66	0.237	0.31	9.125	A
D-BC	93.90	94.55	0.00	385.23	0.244	0.33	12.417	B
C-D	41.41	41.41	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.52	0.00	565.72	0.008	0.01	6.414	A

(Default Analysis Set) - 2026 Background including committed dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 Background including committed dev, PM	2026 Background including committed dev	PM		ONE HOUR	16:30	18:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	11.84	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	599.00	100.000
B	ONE HOUR	✓	67.00	100.000
C	ONE HOUR	✓	523.00	100.000
D	ONE HOUR	✓	188.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
From		A	B	C	D
	A	0.000	4.000	474.000	121.000
	B	2.000	0.000	9.000	56.000
	C	418.000	4.000	0.000	101.000
	D	57.000	39.000	92.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.01	0.79	0.20
	B	0.03	0.00	0.13	0.84
	C	0.80	0.01	0.00	0.19
	D	0.30	0.21	0.49	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.006	1.008
	B	1.000	1.000	1.000	1.000
	C	1.026	1.000	1.000	1.000
	D	1.018	1.000	1.022	1.010

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.6	0.8
	B	0.0	0.0	0.0	0.0
	C	2.6	0.0	0.0	0.0
	D	1.8	0.0	2.2	1.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.10	9.66	0.11	A
B-AD	0.10	11.55	0.10	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.25	8.86	0.33	A
D-AB	0.21	10.40	0.26	B
D-BC	0.36	17.25	0.55	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	7.37	0.01	A

Main Results for each time segment

Main results: (16:30-16:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	27.93	27.70	0.00	499.59	0.056	0.06	7.625	A
B-AD	22.51	22.28	0.00	421.76	0.053	0.06	9.007	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	91.10	90.36	0.00	581.35	0.157	0.18	7.322	A
D-AB	60.08	59.59	0.00	542.17	0.111	0.12	7.451	A
D-BC	81.46	80.48	0.00	410.73	0.198	0.24	10.870	B
C-D	76.04	76.04	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	2.99	0.00	542.46	0.006	0.01	6.672	A

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	33.38	33.31	0.00	463.78	0.072	0.08	8.362	A
B-AD	26.85	26.78	0.00	389.32	0.069	0.07	9.926	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	108.78	108.57	0.00	563.81	0.193	0.24	7.905	A
D-AB	72.69	72.51	0.00	501.86	0.145	0.17	8.381	A
D-BC	96.32	95.94	0.00	375.08	0.257	0.34	12.877	B
C-D	90.80	90.80	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.59	0.00	521.50	0.007	0.01	6.950	A

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	40.95	40.82	0.00	413.70	0.099	0.11	9.651	A
B-AD	32.82	32.70	0.00	344.57	0.095	0.10	11.534	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	133.22	132.87	0.00	539.57	0.247	0.32	8.845	A
D-AB	90.97	90.60	0.00	437.97	0.208	0.26	10.355	B
D-BC	116.02	115.22	0.00	324.81	0.357	0.54	17.105	C
C-D	111.20	111.20	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	492.78	0.009	0.01	7.370	A

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	40.95	40.95	0.00	413.57	0.099	0.11	9.660	A
B-AD	32.82	32.82	0.00	344.46	0.095	0.10	11.551	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	133.22	133.22	0.00	539.56	0.247	0.33	8.859	A
D-AB	91.02	91.01	0.00	437.07	0.208	0.26	10.402	B
D-BC	115.97	115.94	0.00	324.55	0.357	0.55	17.251	C
C-D	111.20	111.20	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	492.67	0.009	0.01	7.372	A

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	33.39	33.51	0.00	463.58	0.072	0.08	8.372	A
B-AD	26.85	26.96	0.00	389.15	0.069	0.07	9.944	A
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	108.78	109.11	0.00	563.80	0.193	0.24	7.924	A
D-AB	72.74	73.10	0.00	500.80	0.145	0.17	8.422	A
D-BC	96.27	97.05	0.00	374.73	0.257	0.35	13.002	B
C-D	90.80	90.80	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.60	0.00	521.32	0.007	0.01	6.955	A

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	27.93	28.01	0.00	499.26	0.056	0.06	7.642	A
B-AD	22.51	22.58	0.00	421.49	0.053	0.06	9.027	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	91.10	91.31	0.00	581.34	0.157	0.19	7.351	A
D-AB	60.13	60.31	0.00	541.12	0.111	0.13	7.488	A
D-BC	81.41	81.81	0.00	410.23	0.198	0.25	10.976	B
C-D	76.04	76.04	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	3.02	0.00	542.16	0.006	0.01	6.679	A

(Default Analysis Set) - 2026 With dev including committed dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 With dev including committed dev, AM	2026 With dev including committed dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	20.77	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	468.00	100.000
B	ONE HOUR	✓	90.00	100.000
C	ONE HOUR	✓	706.00	100.000
D	ONE HOUR	✓	311.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.000	14.000	421.000	33.000
	B	11.000	0.000	21.000	58.000
	C	643.000	6.000	0.000	57.000
	D	140.000	60.000	111.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.03	0.90	0.07
	B	0.12	0.00	0.23	0.64
	C	0.91	0.01	0.00	0.08
	D	0.45	0.19	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.076	1.000
	B	1.000	1.000	1.048	1.000
	C	1.050	1.000	1.000	1.109
	D	1.014	1.000	1.027	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	7.6	0.0
	B	0.0	0.0	4.8	0.0
	C	5.0	0.0	0.0	10.9
	D	1.4	0.0	2.7	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.13	9.58	0.15	A
B-AD	0.13	12.95	0.15	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	7.91	0.08	A
D-AB	0.55	21.64	1.18	C
D-BC	0.54	29.97	1.14	D
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	6.92	0.01	A

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	38.12	37.80	0.00	518.29	0.074	0.08	7.487	A
B-AD	29.64	29.33	0.00	406.71	0.073	0.08	9.531	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	24.84	24.66	0.00	550.07	0.045	0.05	6.850	A
D-AB	132.86	131.49	0.00	516.77	0.257	0.34	9.312	A
D-BC	101.28	99.88	0.00	384.23	0.264	0.35	12.600	B
C-D	42.91	42.91	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.49	0.00	565.43	0.008	0.01	6.417	A

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	45.72	45.62	0.00	482.93	0.095	0.10	8.230	A
B-AD	35.19	35.09	0.00	370.88	0.095	0.10	10.717	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	29.67	29.62	0.00	525.41	0.056	0.06	7.260	A
D-AB	160.62	159.90	0.00	462.92	0.347	0.52	11.853	B
D-BC	118.96	118.25	0.00	338.07	0.352	0.53	16.318	C
C-D	51.24	51.24	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.39	0.00	549.11	0.010	0.01	6.620	A

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	56.43	56.25	0.00	432.14	0.131	0.15	9.574	A
B-AD	42.66	42.47	0.00	320.91	0.133	0.15	12.919	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	36.33	36.25	0.00	491.33	0.074	0.08	7.910	A
D-AB	200.97	198.53	0.00	370.34	0.543	1.13	20.669	C
D-BC	141.45	139.19	0.00	262.65	0.539	1.09	28.624	D
C-D	62.76	62.76	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.60	0.00	526.60	0.013	0.01	6.922	A

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	56.44	56.44	0.00	432.00	0.131	0.15	9.585	A
B-AD	42.65	42.65	0.00	320.55	0.133	0.15	12.953	B
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	463.53	463.53	0.00	-	-	-	-	-
A-D	36.33	36.33	0.00	491.33	0.074	0.08	7.911	A
D-AB	201.20	201.01	0.00	367.00	0.548	1.18	21.636	C
D-BC	141.22	141.04	0.00	260.74	0.542	1.14	29.965	D
C-D	62.76	62.76	0.00	-	-	-	-	-
C-A	707.96	707.96	0.00	-	-	-	-	-
C-B	6.61	6.61	0.00	526.58	0.013	0.01	6.922	A

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	45.73	45.90	0.00	482.74	0.095	0.11	8.244	A
B-AD	35.18	35.37	0.00	370.42	0.095	0.11	10.749	B
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	378.47	378.47	0.00	-	-	-	-	-
A-D	29.67	29.74	0.00	525.41	0.056	0.06	7.263	A
D-AB	160.84	163.35	0.00	459.79	0.350	0.55	12.240	B
D-BC	118.74	121.06	0.00	336.68	0.353	0.56	16.875	C
C-D	51.24	51.24	0.00	-	-	-	-	-
C-A	578.04	578.04	0.00	-	-	-	-	-
C-B	5.39	5.40	0.00	549.07	0.010	0.01	6.623	A

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	38.13	38.23	0.00	518.06	0.074	0.08	7.502	A
B-AD	29.63	29.74	0.00	406.37	0.073	0.08	9.560	A
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	316.95	316.95	0.00	-	-	-	-	-
A-D	24.84	24.89	0.00	550.06	0.045	0.05	6.854	A
D-AB	132.97	133.75	0.00	515.10	0.258	0.35	9.458	A
D-BC	101.17	101.95	0.00	383.53	0.264	0.37	12.822	B
C-D	42.91	42.91	0.00	-	-	-	-	-
C-A	484.08	484.08	0.00	-	-	-	-	-
C-B	4.52	4.52	0.00	565.36	0.008	0.01	6.420	A

(Default Analysis Set) - 2026 With dev including committed dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 With dev including committed dev, FM	2026 With dev including committed dev	FM		ONE HOUR	16:30	18:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	12.17	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A47 S		Major
B	B	Lount Road		Minor
C	C	A47 N		Major
D	D	Barton Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	9.20		0.00		2.20	178.00		
C	9.20		0.00		2.20	130.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.17	3.55	3.38	3.28	✓	1.00	119	48
D	One lane plus flare				10.00	5.61	3.10	2.83	2.83	✓	1.00	29	126

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	677.045	-	-	-	-	-	-	0.226	0.323	0.226	-	-	-
1	B-A	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	-	0.233	0.233	0.116
1	B-C	784.881	0.104	0.262	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	648.278	0.102	0.257	0.257	-	-	-	0.162	0.367	0.162	-	-	-
1	B-D, offside lane	587.464	0.092	0.233	0.233	-	-	-	0.146	0.333	0.146	-	-	-
1	C-B	649.248	0.217	0.217	0.309	-	-	-	-	-	-	-	-	-
1	D-A	767.053	-	-	-	-	-	-	0.256	-	0.101	-	-	-
1	D-B, nearside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-B, offside lane	598.692	0.149	0.149	0.339	-	-	-	0.237	0.237	0.094	-	-	-
1	D-C	598.692	-	0.149	0.339	0.119	0.237	0.237	0.237	0.237	0.094	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	609.00	100.000
B	ONE HOUR	✓	70.00	100.000
C	ONE HOUR	✓	531.00	100.000
D	ONE HOUR	✓	196.00	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 (for whole period)

	To				
From		A	B	C	D
	A	0.000	4.000	474.000	131.000
	B	2.000	0.000	9.000	59.000
	C	418.000	4.000	0.000	109.000
	D	61.000	40.000	95.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.01	0.78	0.22
	B	0.03	0.00	0.13	0.84
	C	0.79	0.01	0.00	0.21
	D	0.31	0.20	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.006	1.000
	B	1.000	1.000	1.000	1.000
	C	1.026	1.000	1.000	1.009
	D	1.016	1.000	1.021	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.6	0.0
	B	0.0	0.0	0.0	0.0
	C	2.6	0.0	0.0	0.9
	D	1.6	0.0	2.1	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-CD	0.10	9.87	0.12	A
B-AD	0.10	11.76	0.11	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.27	9.06	0.36	A
D-AB	0.22	10.73	0.29	B
D-BC	0.37	18.01	0.59	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.01	7.42	0.01	A

Main Results for each time segment

Main results: (16:30-16:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	29.07	28.82	0.00	495.02	0.059	0.06	7.718	A
B-AD	23.63	23.40	0.00	419.21	0.056	0.06	9.088	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	98.62	97.82	0.00	584.47	0.169	0.20	7.385	A
D-AB	63.63	63.11	0.00	541.46	0.118	0.13	7.518	A
D-BC	83.92	82.90	0.00	407.55	0.206	0.26	11.055	B
C-D	82.06	82.06	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	2.99	0.00	540.35	0.006	0.01	6.698	A

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	34.74	34.66	0.00	458.50	0.076	0.08	8.494	A
B-AD	28.19	28.11	0.00	386.25	0.073	0.08	10.049	B
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	117.77	117.53	0.00	566.50	0.208	0.26	8.014	A
D-AB	77.01	76.81	0.00	499.77	0.154	0.18	8.509	A
D-BC	99.19	98.78	0.00	371.02	0.267	0.36	13.202	B
C-D	97.99	97.99	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.59	0.00	518.97	0.007	0.01	6.984	A

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	42.61	42.48	0.00	407.41	0.105	0.12	9.865	A
B-AD	34.46	34.33	0.00	340.77	0.101	0.11	11.742	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	144.23	143.84	0.00	541.65	0.266	0.36	9.040	A
D-AB	96.43	96.02	0.00	432.89	0.223	0.28	10.675	B
D-BC	119.37	118.49	0.00	319.32	0.374	0.58	17.840	C
C-D	120.01	120.01	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	489.67	0.009	0.01	7.417	A

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	42.61	42.61	0.00	407.27	0.105	0.12	9.871	A
B-AD	34.46	34.45	0.00	340.66	0.101	0.11	11.756	B
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	521.88	521.88	0.00	-	-	-	-	-
A-D	144.23	144.22	0.00	541.65	0.266	0.36	9.058	A
D-AB	96.49	96.47	0.00	431.84	0.223	0.29	10.734	B
D-BC	119.31	119.28	0.00	319.02	0.374	0.59	18.013	C
C-D	120.01	120.01	0.00	-	-	-	-	-
C-A	460.23	460.23	0.00	-	-	-	-	-
C-B	4.40	4.40	0.00	489.55	0.009	0.01	7.419	A

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	34.74	34.87	0.00	458.27	0.076	0.08	8.506	A
B-AD	28.19	28.32	0.00	386.07	0.073	0.08	10.067	B
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	426.12	426.12	0.00	-	-	-	-	-
A-D	117.77	118.15	0.00	566.49	0.208	0.27	8.036	A
D-AB	77.07	77.47	0.00	498.56	0.155	0.18	8.555	A
D-BC	99.13	100.00	0.00	370.62	0.267	0.37	13.346	B
C-D	97.99	97.99	0.00	-	-	-	-	-
C-A	375.77	375.77	0.00	-	-	-	-	-
C-B	3.60	3.60	0.00	518.77	0.007	0.01	6.987	A

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
B-CD	29.07	29.15	0.00	494.66	0.059	0.06	7.736	A
B-AD	23.63	23.71	0.00	418.92	0.056	0.06	9.112	A
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	356.85	356.85	0.00	-	-	-	-	-
A-D	98.62	98.87	0.00	584.46	0.169	0.20	7.416	A
D-AB	63.69	63.89	0.00	540.32	0.118	0.13	7.560	A
D-BC	83.87	84.31	0.00	407.00	0.206	0.26	11.171	B
C-D	82.06	82.06	0.00	-	-	-	-	-
C-A	314.69	314.69	0.00	-	-	-	-	-
C-B	3.01	3.02	0.00	540.03	0.006	0.01	6.705	A

APPENDIX H

SITE ACCESS TRAFFIC FLOW DIAGRAMS

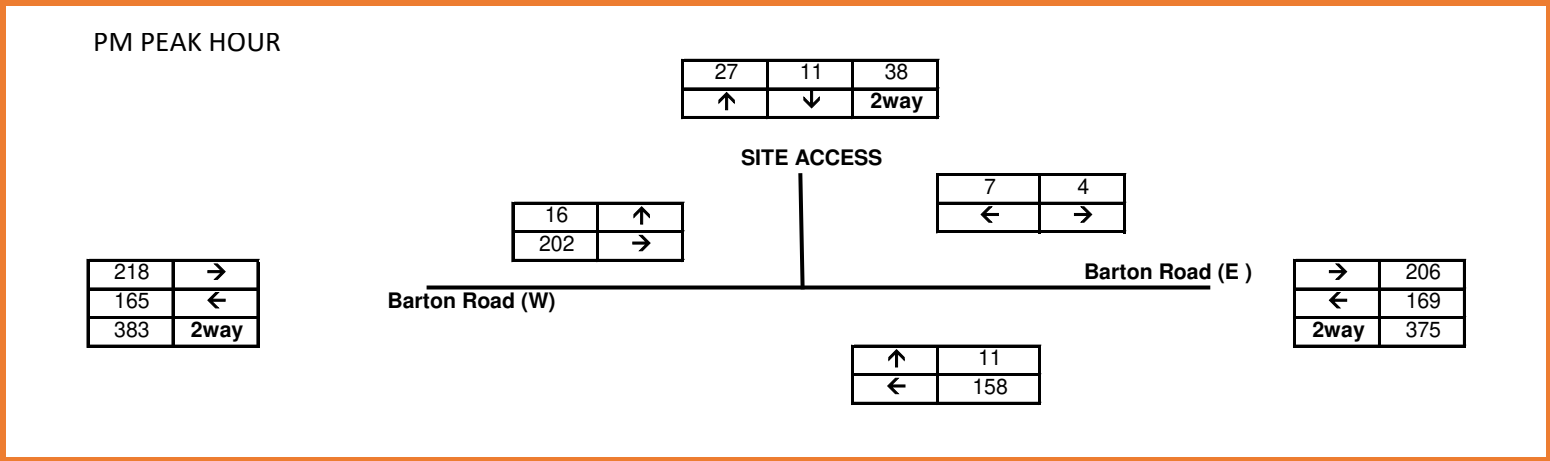
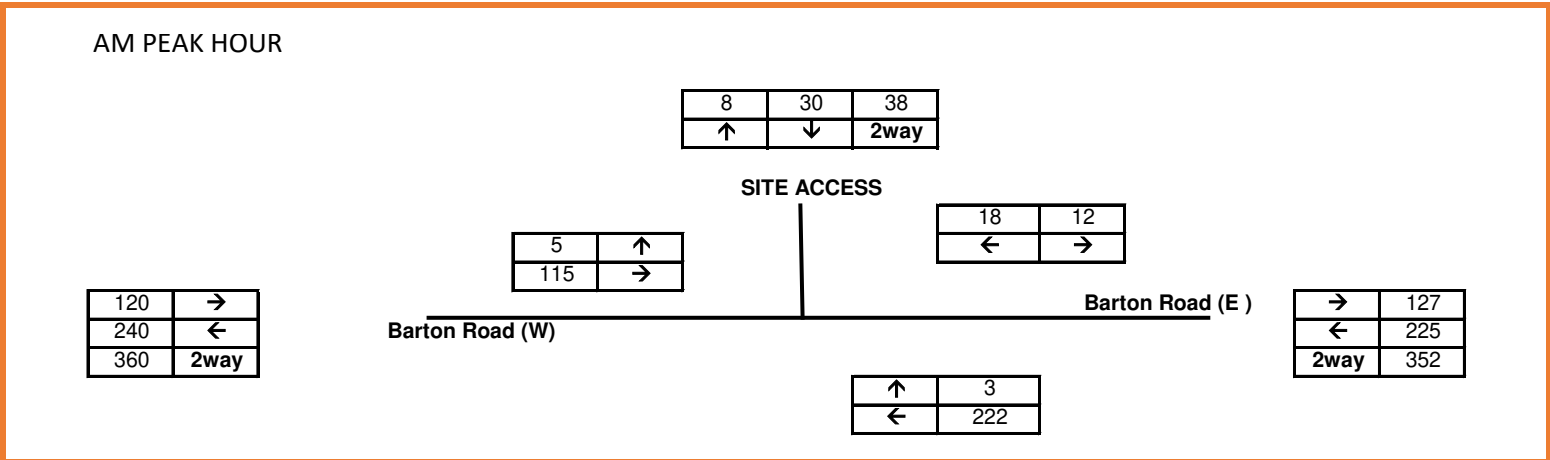
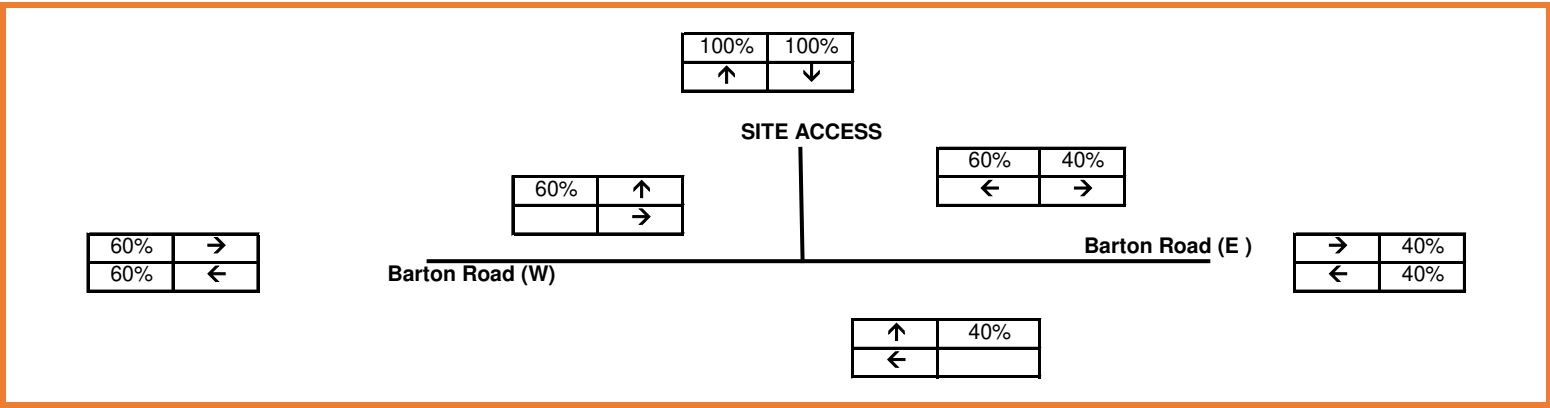


DIAGRAM 1 2026 with development (tidal flow distribution)

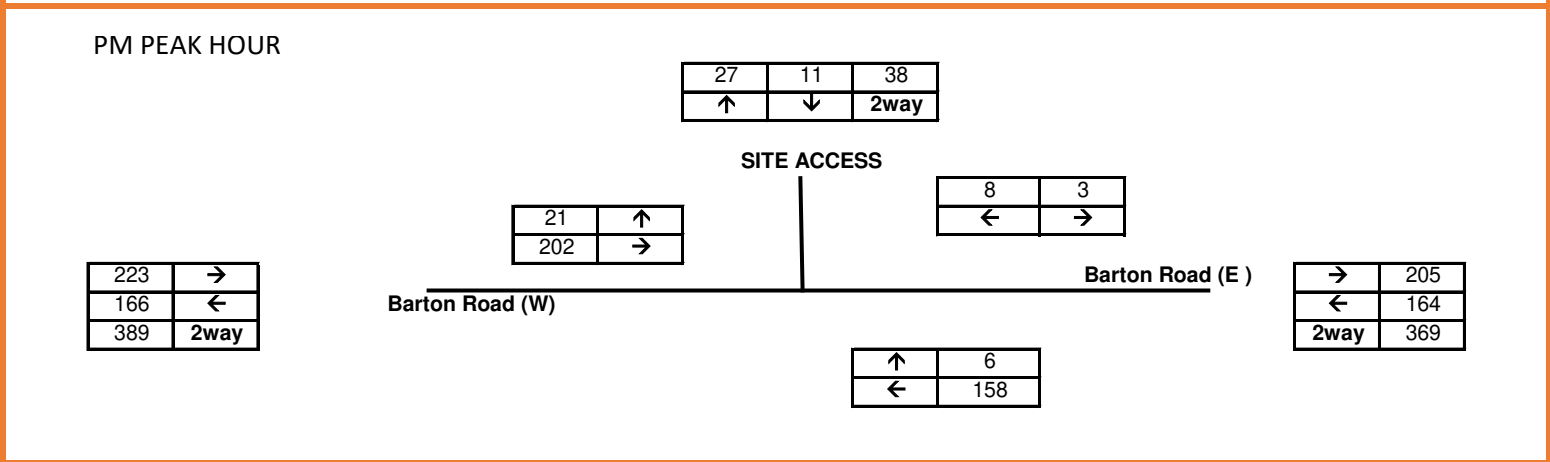
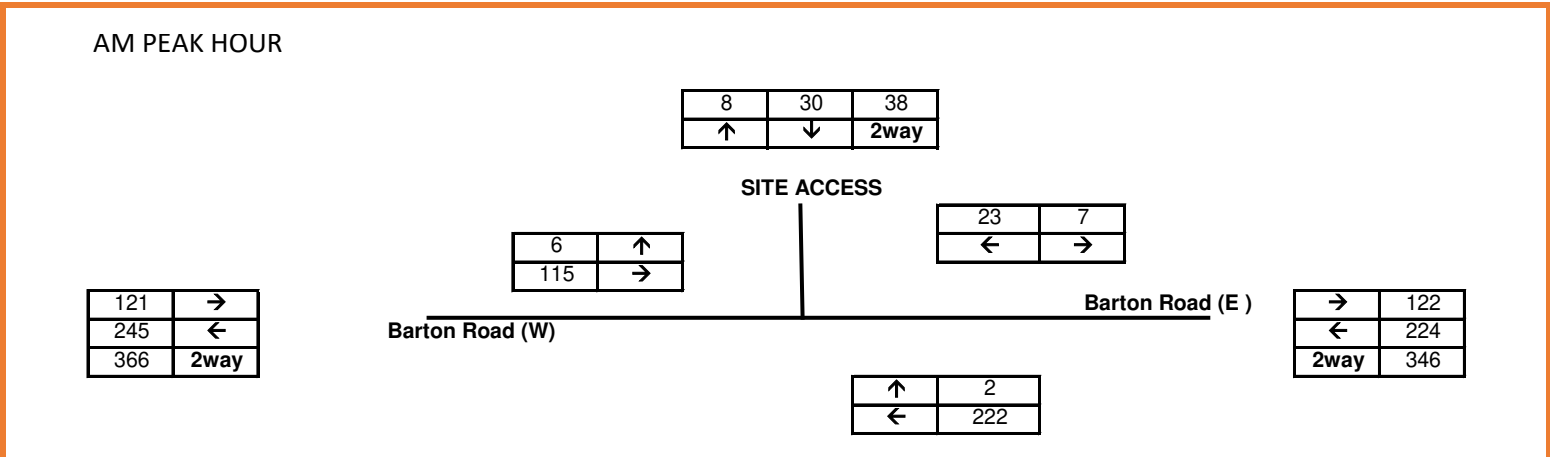
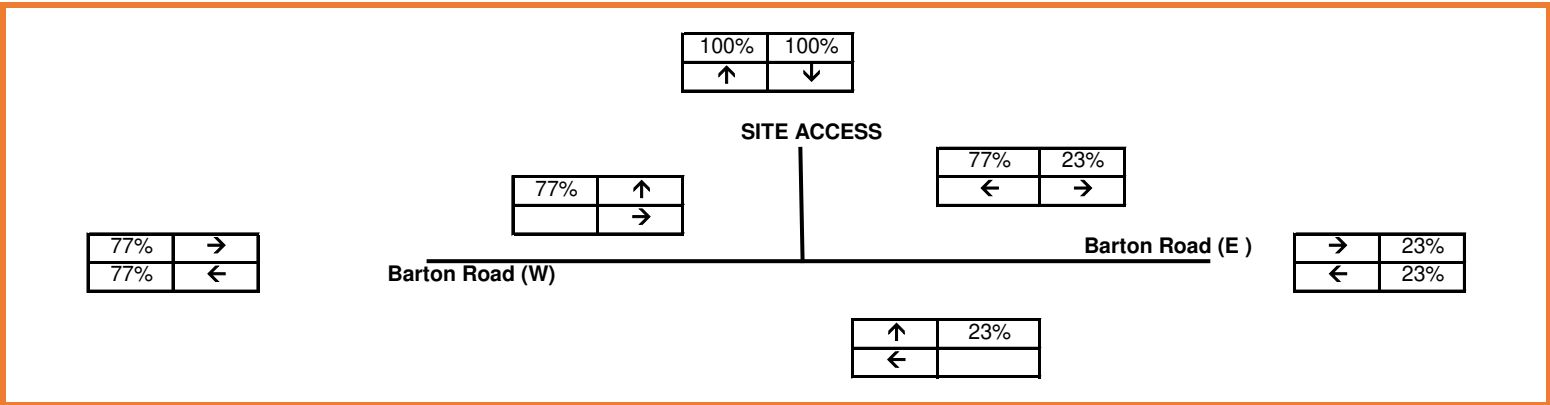
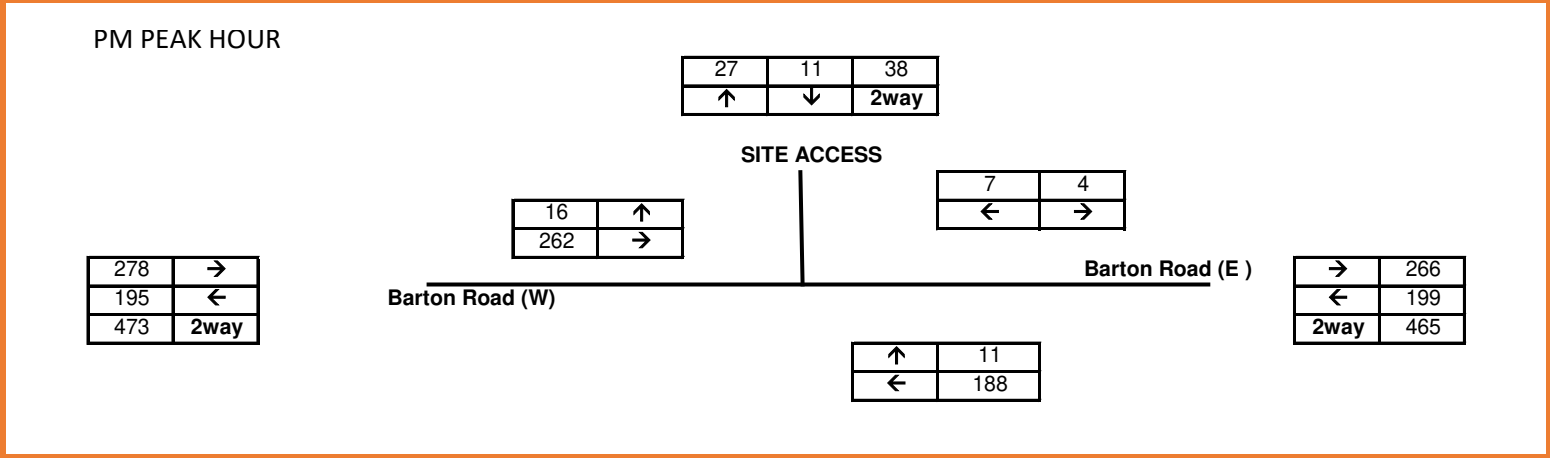
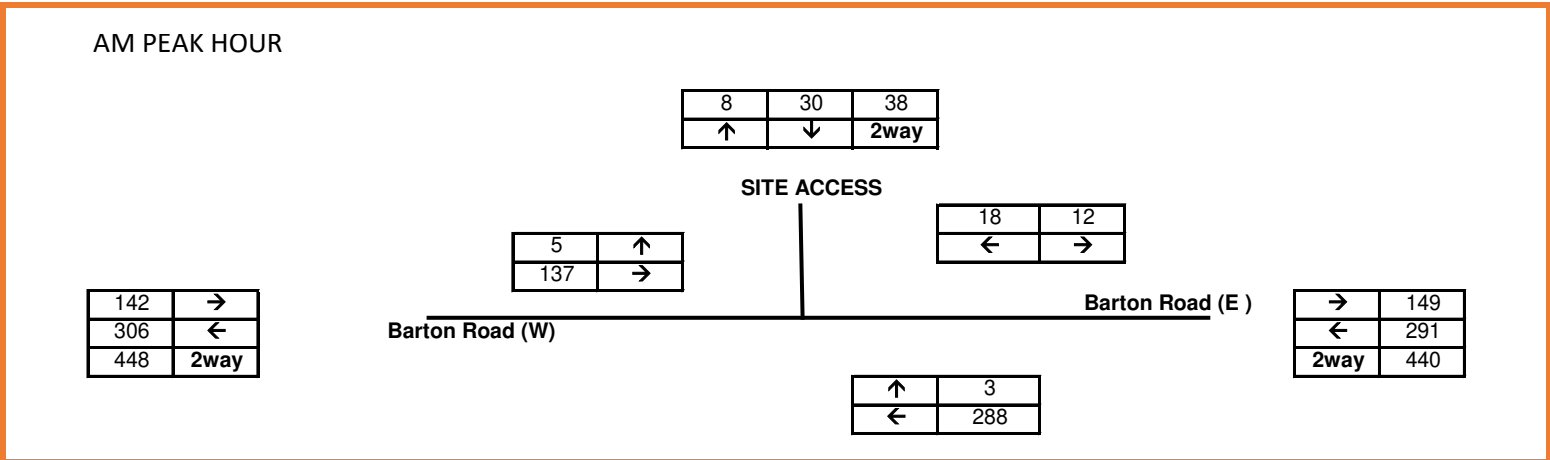
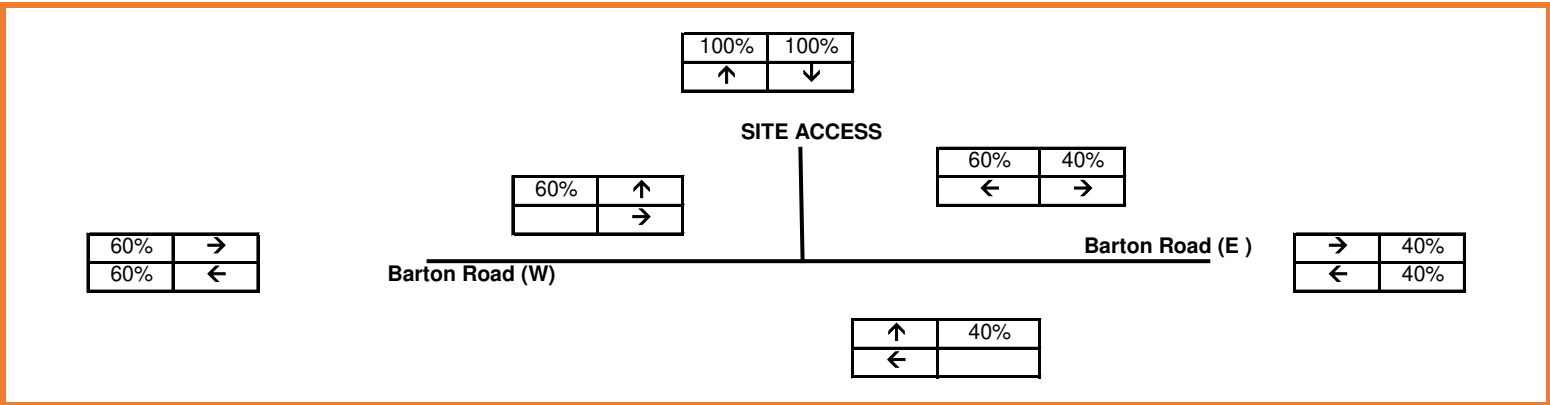


DIAGRAM 2 2026 with development (census distribution)



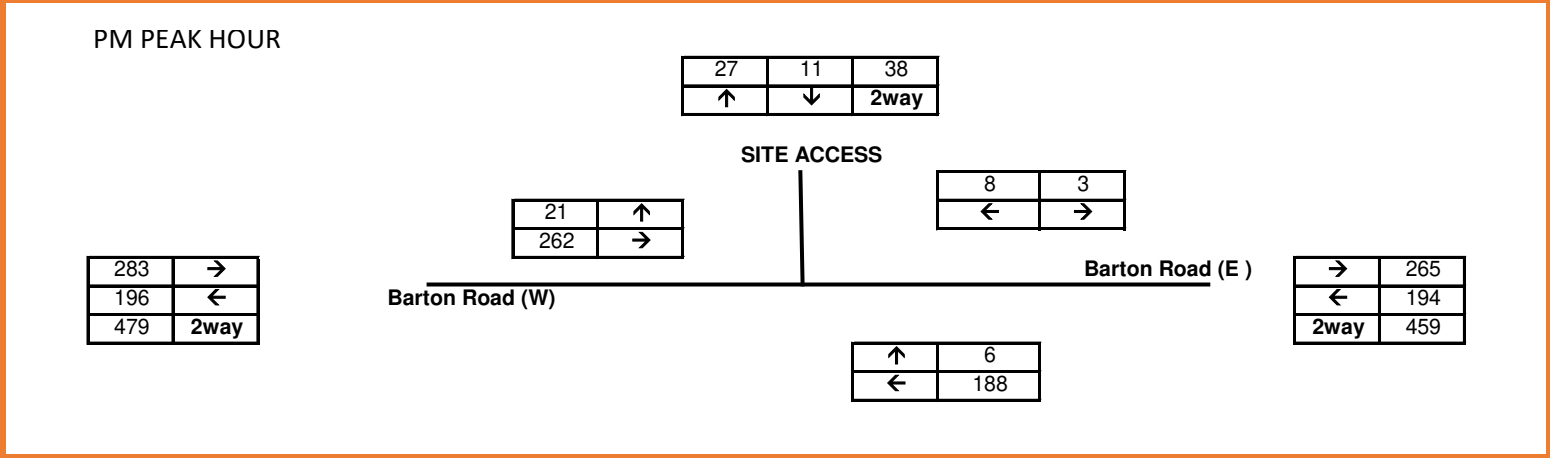
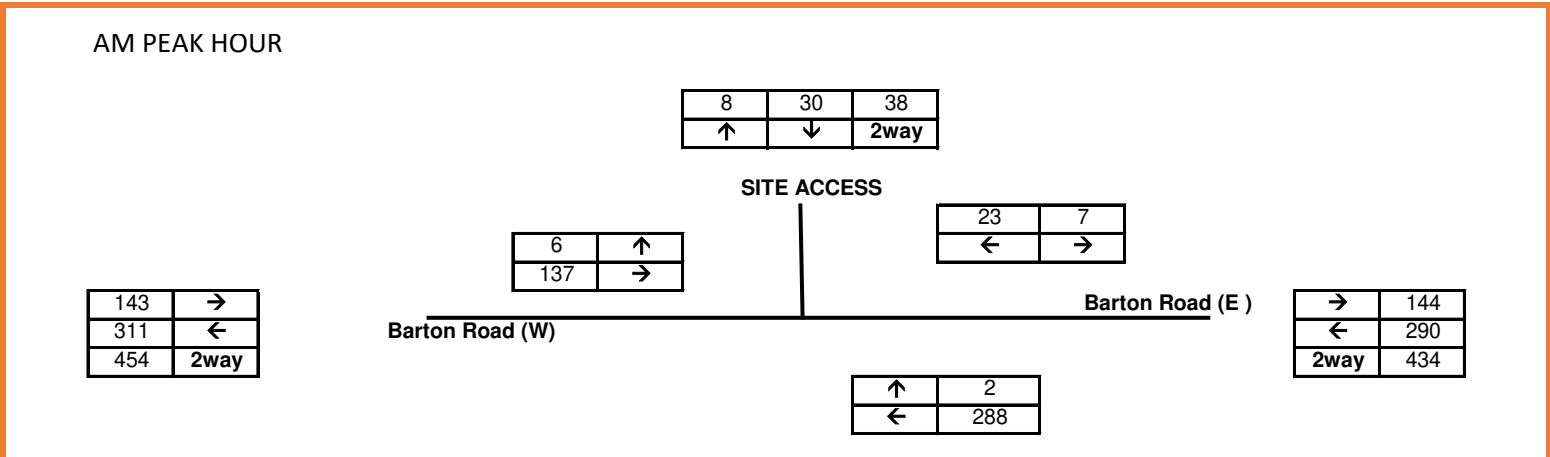
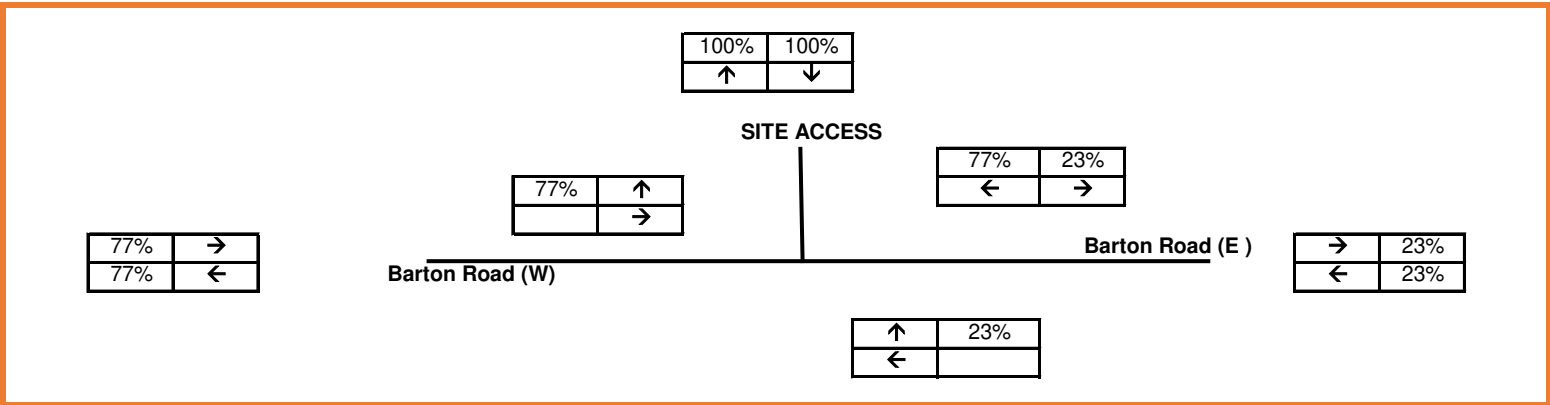


DIAGRAM 4 2026 with development (census distribution) including Cunnery Close and Garden Farm

APPENDIX I

SITE ACCESS PICADY OUTPUT

Junctions 9		
PICADY 9 - Priority Intersection Module		
Version: 9.5.1.7462 © Copyright TRL Limited, 2019		
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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: proposed site access jct V3.j9

Path: D:\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1996 Land at Barton Road, Barlestone\Calculations

Report generation date: 31/03/2021 11:04:42

- »Proposed layout - 2026 With Dev, AM
- »Proposed layout - 2026 With Dev, PM
- »Proposed layout - 2026 With Dev (Sens), AM
- »Proposed layout - 2026 With Dev (Sens), PM
- »Proposed layout - 2026 With Dev + Comm Dev, AM
- »Proposed layout - 2026 With Dev + Comm Dev, PM
- »Proposed layout - 2026 With Dev + Comm Dev (Sens), AM
- »Proposed layout - 2026 With Dev + Comm Dev (Sens), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
Proposed layout - 2026 With Dev						
Stream B-AC	0.1	7.67	0.07	0.0	7.72	0.03
Stream C-AB	0.0	6.22	0.01	0.0	6.59	0.02
Proposed layout - 2026 With Dev (Sens)						
Stream B-AC	0.1	8.09	0.07	0.0	7.91	0.03
Stream C-AB	0.0	6.22	0.00	0.0	6.56	0.01
Proposed layout - 2026 With Dev + Comm Dev						
Stream B-AC	0.1	7.94	0.07	0.0	8.09	0.03
Stream C-AB	0.0	6.29	0.01	0.0	6.78	0.02
Proposed layout - 2026 With Dev + Comm Dev (Sens)						
Stream B-AC	0.1	8.41	0.07	0.0	8.31	0.03
Stream C-AB	0.0	6.29	0.00	0.0	6.76	0.01

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

File summary

File Description

Title	Proposed site access junction
Location	
Site number	
Date	10/09/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADCteam
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 With Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 With Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 With Dev (Sens)	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 With Dev (Sens)	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 With Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 With Dev + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 With Dev + Comm Dev (Sens)	AM	ONE HOUR	07:45	09:15	15	✓
D8	2026 With Dev + Comm Dev (Sens)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Proposed layout - 2026 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Barton Rd W		Major
B	site access		Minor
C	Barton Rd E		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			70.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	70	70

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	522	0.095	0.240	0.151	0.343
B-C	651	0.100	0.252	-	-
C-B	615	0.238	0.238	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 With Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	120	100.000
B		ONE HOUR	✓	30	100.000
C		ONE HOUR	✓	225	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	115
	B	18	0	12
	C	222	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	10
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	7.67	0.1	A	28	41
C-AB	0.01	6.22	0.0	A	3	4
C-A					204	306
A-B					5	7
A-C					106	158

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	523	0.043	22	0.0	0.0	7.191	A
C-AB	2	0.57	592	0.004	2	0.0	0.0	6.107	A
C-A	167	42			167				
A-B	4	0.94			4				
A-C	87	22			87				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	514	0.052	27	0.0	0.1	7.387	A
C-AB	3	0.68	587	0.005	3	0.0	0.0	6.156	A
C-A	200	50			200				
A-B	4	1			4				
A-C	103	26			103				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	502	0.066	33	0.1	0.1	7.672	A
C-AB	3	0.83	582	0.006	3	0.0	0.0	6.224	A
C-A	244	61			244				
A-B	6	1			6				
A-C	127	32			127				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	502	0.066	33	0.1	0.1	7.672	A
C-AB	3	0.83	582	0.006	3	0.0	0.0	6.224	A
C-A	244	61			244				
A-B	6	1			6				
A-C	127	32			127				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	514	0.052	27	0.1	0.1	7.391	A
C-AB	3	0.68	587	0.005	3	0.0	0.0	6.156	A
C-A	200	50			200				
A-B	4	1			4				
A-C	103	26			103				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	523	0.043	23	0.1	0.0	7.198	A
C-AB	2	0.57	592	0.004	2	0.0	0.0	6.109	A
C-A	167	42			167				
A-B	4	0.94			4				
A-C	87	22			87				

Proposed layout - 2026 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 With Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	218	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	16	202
	B	7	0	4
	C	158	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	7.72	0.0	A	10	15
C-AB	0.02	6.59	0.0	A	10	15
C-A					145	217
A-B					15	22
A-C					185	278

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	505	0.016	8	0.0	0.0	7.241	A
C-AB	8	2	575	0.014	8	0.0	0.0	6.348	A
C-A	119	30			119				
A-B	12	3			12				
A-C	152	38			152				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	494	0.020	10	0.0	0.0	7.432	A
C-AB	10	2	568	0.017	10	0.0	0.0	6.448	A
C-A	142	35			142				
A-B	14	4			14				
A-C	182	45			182				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	479	0.025	12	0.0	0.0	7.716	A
C-AB	12	3	558	0.022	12	0.0	0.0	6.589	A
C-A	174	43			174				
A-B	18	4			18				
A-C	222	56			222				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	479	0.025	12	0.0	0.0	7.716	A
C-AB	12	3	558	0.022	12	0.0	0.0	6.589	A
C-A	174	43			174				
A-B	18	4			18				
A-C	222	56			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	494	0.020	10	0.0	0.0	7.433	A
C-AB	10	2	568	0.017	10	0.0	0.0	6.451	A
C-A	142	35			142				
A-B	14	4			14				
A-C	182	45			182				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	505	0.016	8	0.0	0.0	7.242	A
C-AB	8	2	575	0.014	8	0.0	0.0	6.351	A
C-A	119	30			119				
A-B	12	3			12				
A-C	152	38			152				

Proposed layout - 2026 With Dev (Sens), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 With Dev (Sens)	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	121	100.000
B		ONE HOUR	✓	30	100.000
C		ONE HOUR	✓	224	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	6	115
	B	23	0	7
	C	222	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	10
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	8.09	0.1	A	28	41
C-AB	0.00	6.22	0.0	A	2	3
C-A					204	306
A-B					6	8
A-C					106	158

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	500	0.045	22	0.0	0.0	7.538	A
C-AB	2	0.38	591	0.003	1	0.0	0.0	6.103	A
C-A	167	42			167				
A-B	5	1			5				
A-C	87	22			87				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	491	0.055	27	0.0	0.1	7.761	A
C-AB	2	0.45	587	0.003	2	0.0	0.0	6.152	A
C-A	200	50			200				
A-B	5	1			5				
A-C	103	26			103				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	478	0.069	33	0.1	0.1	8.089	A
C-AB	2	0.55	581	0.004	2	0.0	0.0	6.220	A
C-A	244	61			244				
A-B	7	2			7				
A-C	127	32			127				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	478	0.069	33	0.1	0.1	8.091	A
C-AB	2	0.55	581	0.004	2	0.0	0.0	6.220	A
C-A	244	61			244				
A-B	7	2			7				
A-C	127	32			127				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	491	0.055	27	0.1	0.1	7.763	A
C-AB	2	0.45	587	0.003	2	0.0	0.0	6.152	A
C-A	200	50			200				
A-B	5	1			5				
A-C	103	26			103				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	500	0.045	23	0.1	0.0	7.540	A
C-AB	2	0.38	591	0.003	2	0.0	0.0	6.103	A
C-A	167	42			167				
A-B	5	1			5				
A-C	87	22			87				

Proposed layout - 2026 With Dev (Sens), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 With Dev (Sens)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	223	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	164	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	21	202
	B	8	0	3
	C	158	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	7.91	0.0	A	10	15
C-AB	0.01	6.56	0.0	A	6	8
C-A					145	217
A-B					19	29
A-C					185	278

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	494	0.017	8	0.0	0.0	7.410	A
C-AB	5	1	574	0.008	4	0.0	0.0	6.325	A
C-A	119	30			119				
A-B	16	4			16				
A-C	152	38			152				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	483	0.020	10	0.0	0.0	7.612	A
C-AB	5	1	566	0.010	5	0.0	0.0	6.421	A
C-A	142	36			142				
A-B	19	5			19				
A-C	182	45			182				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	467	0.026	12	0.0	0.0	7.912	A
C-AB	7	2	555	0.012	7	0.0	0.0	6.559	A
C-A	174	43			174				
A-B	23	6			23				
A-C	222	56			222				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	467	0.026	12	0.0	0.0	7.912	A
C-AB	7	2	555	0.012	7	0.0	0.0	6.559	A
C-A	174	43			174				
A-B	23	6			23				
A-C	222	56			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	483	0.020	10	0.0	0.0	7.613	A
C-AB	5	1	566	0.010	5	0.0	0.0	6.422	A
C-A	142	36			142				
A-B	19	5			19				
A-C	182	45			182				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	494	0.017	8	0.0	0.0	7.411	A
C-AB	5	1	574	0.008	5	0.0	0.0	6.325	A
C-A	119	30			119				
A-B	16	4			16				
A-C	152	38			152				

Proposed layout - 2026 With Dev + Comm Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 With Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	142	100.000
B		ONE HOUR	✓	30	100.000
C		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	5	137
	B	18	0	12
	C	288	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	10
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	7.94	0.1	A	28	41
C-AB	0.01	6.29	0.0	A	3	4
C-A					264	396
A-B					5	7
A-C					126	189

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	512	0.044	22	0.0	0.0	7.345	A
C-AB	2	0.57	588	0.004	2	0.0	0.0	6.150	A
C-A	217	54			217				
A-B	4	0.94			4				
A-C	103	26			103				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	502	0.054	27	0.0	0.1	7.583	A
C-AB	3	0.68	583	0.005	3	0.0	0.0	6.208	A
C-A	259	65			259				
A-B	4	1			4				
A-C	123	31			123				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	487	0.068	33	0.1	0.1	7.935	A
C-AB	3	0.83	576	0.006	3	0.0	0.0	6.288	A
C-A	317	79			317				
A-B	6	1			6				
A-C	151	38			151				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	487	0.068	33	0.1	0.1	7.937	A
C-AB	3	0.83	576	0.006	3	0.0	0.0	6.288	A
C-A	317	79			317				
A-B	6	1			6				
A-C	151	38			151				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	502	0.054	27	0.1	0.1	7.588	A
C-AB	3	0.68	583	0.005	3	0.0	0.0	6.210	A
C-A	259	65			259				
A-B	4	1			4				
A-C	123	31			123				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	512	0.044	23	0.1	0.0	7.353	A
C-AB	2	0.57	588	0.004	2	0.0	0.0	6.150	A
C-A	217	54			217				
A-B	4	0.94			4				
A-C	103	26			103				

Proposed layout - 2026 With Dev + Comm Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 With Dev + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	278	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	199	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	16	262
	B	7	0	4
	C	188	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	8.09	0.0	A	10	15
C-AB	0.02	6.78	0.0	A	10	15
C-A					172	259
A-B					15	22
A-C					240	361

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	491	0.017	8	0.0	0.0	7.459	A
C-AB	8	2	564	0.015	8	0.0	0.0	6.473	A
C-A	142	35			142				
A-B	12	3			12				
A-C	197	49			197				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	477	0.021	10	0.0	0.0	7.710	A
C-AB	10	2	555	0.018	10	0.0	0.0	6.602	A
C-A	169	42			169				
A-B	14	4			14				
A-C	236	59			236				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	457	0.026	12	0.0	0.0	8.087	A
C-AB	12	3	543	0.023	12	0.0	0.0	6.784	A
C-A	207	52			207				
A-B	18	4			18				
A-C	288	72			288				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	457	0.026	12	0.0	0.0	8.087	A
C-AB	12	3	543	0.023	12	0.0	0.0	6.784	A
C-A	207	52			207				
A-B	18	4			18				
A-C	288	72			288				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	477	0.021	10	0.0	0.0	7.713	A
C-AB	10	2	555	0.018	10	0.0	0.0	6.605	A
C-A	169	42			169				
A-B	14	4			14				
A-C	236	59			236				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	491	0.017	8	0.0	0.0	7.460	A
C-AB	8	2	564	0.015	8	0.0	0.0	6.473	A
C-A	142	35			142				
A-B	12	3			12				
A-C	197	49			197				

Proposed layout - 2026 With Dev + Comm Dev (Sens), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 With Dev + Comm Dev (Sens)	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	143	100.000
B		ONE HOUR	✓	30	100.000
C		ONE HOUR	✓	290	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	6	137
	B	23	0	7
	C	288	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	10
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	8.41	0.1	A	28	41
C-AB	0.00	6.29	0.0	A	2	3
C-A					264	396
A-B					6	8
A-C					126	189

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	489	0.046	22	0.0	0.0	7.719	A
C-AB	2	0.38	587	0.003	1	0.0	0.0	6.146	A
C-A	217	54			217				
A-B	5	1			5				
A-C	103	26			103				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	477	0.057	27	0.0	0.1	7.996	A
C-AB	2	0.45	582	0.003	2	0.0	0.0	6.205	A
C-A	259	65			259				
A-B	5	1			5				
A-C	123	31			123				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	461	0.072	33	0.1	0.1	8.408	A
C-AB	2	0.55	575	0.004	2	0.0	0.0	6.286	A
C-A	317	79			317				
A-B	7	2			7				
A-C	151	38			151				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	461	0.072	33	0.1	0.1	8.410	A
C-AB	2	0.55	575	0.004	2	0.0	0.0	6.286	A
C-A	317	79			317				
A-B	7	2			7				
A-C	151	38			151				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	27	7	477	0.057	27	0.1	0.1	8.002	A
C-AB	2	0.45	582	0.003	2	0.0	0.0	6.207	A
C-A	259	65			259				
A-B	5	1			5				
A-C	123	31			123				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	489	0.046	23	0.1	0.0	7.726	A
C-AB	2	0.38	587	0.003	2	0.0	0.0	6.147	A
C-A	217	54			217				
A-B	5	1			5				
A-C	103	26			103				

Proposed layout - 2026 With Dev + Comm Dev (Sens), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 With Dev + Comm Dev (Sens)	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	283	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	194	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	21	262
	B	8	0	3
	C	188	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	8.31	0.0	A	10	15
C-AB	0.01	6.76	0.0	A	6	8
C-A					172	259
A-B					19	29
A-C					240	361

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	479	0.017	8	0.0	0.0	7.641	A
C-AB	5	1	563	0.008	4	0.0	0.0	6.450	A
C-A	142	35			142				
A-B	16	4			16				
A-C	197	49			197				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	465	0.021	10	0.0	0.0	7.907	A
C-AB	5	1	553	0.010	5	0.0	0.0	6.576	A
C-A	169	42			169				
A-B	19	5			19				
A-C	236	59			236				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	445	0.027	12	0.0	0.0	8.306	A
C-AB	7	2	539	0.012	7	0.0	0.0	6.756	A
C-A	207	52			207				
A-B	23	6			23				
A-C	288	72			288				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	12	3	445	0.027	12	0.0	0.0	8.307	A
C-AB	7	2	539	0.012	7	0.0	0.0	6.756	A
C-A	207	52			207				
A-B	23	6			23				
A-C	288	72			288				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	465	0.021	10	0.0	0.0	7.908	A
C-AB	5	1	553	0.010	5	0.0	0.0	6.577	A
C-A	169	42			169				
A-B	19	5			19				
A-C	236	59			236				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	479	0.017	8	0.0	0.0	7.642	A
C-AB	5	1	563	0.008	5	0.0	0.0	6.453	A
C-A	142	35			142				
A-B	16	4			16				
A-C	197	49			197				