

Technical Note

Project Number: T20517

Project: Brascote Lane, Newbold Verdon

Title: Hub Response to LCC Comments

Date: 11/8/2023

Prepared By: JC/GM

Distribution List: HBBC, LCC, Richborough

Floor 1B
4 Temple Row
Birmingham
B2 5HG

Background

- 1.1 Hub Transport Planning Ltd has been commissioned by Richborough Ltd to provide transport advice for a proposed residential development off Brascote Lane, Newbold Verdon.
- 1.2 A Transport Assessment (TA) was submitted to support the planning application (ref. 22/00277/OUT) which was validated in March 2022. An updated TA was provided in May 2023 and set out the results of the PRTM assessment. This considered a development quantum of 239 residential dwellings.
- 1.3 Following submission of the updated TA, a consultation response has been received from Leicestershire County Council (LCC) as local highway authority requesting clarification on a number of points. The purpose of this technical note is to address those comments and provide additional information where required. The full consultation response is proved in **Appendix A**.
- 1.4 The following section provides a summary of LCC's comments (*in italics*) followed by Hub's response to those comments.

LCC Comments and Response

LCC Comment 1 – *'it is noted the northern visibility splay at the site access shown on Hub drawing number 003 Rev C appears to have been drawn with an arc, this is incorrect and should be presented as a straight line as shown in Part 3, Figure DG2a of the Leicestershire Highway Design Guide ([LHDG] available at <https://resources.leicestershire.gov.uk/lhdg>). This requires amendment. Furthermore, the visibility envelope should be measured to a point no less than 0.26m as stated in Part 3, Figure DG2c of the LHDG. Therefore, the Applicant should give further consideration to the available visibility splays.'*

- 1.5 The site access drawing has been updated (see drawing **T20517.001 rev C**) to show the visibility splays extending to a point 0.26m above the carriageway as requested. It should be noted that to the south of the access, visibility in the vertical plane at a point 160m from the access, is only achievable to a point 0.34m above the carriageway. Whilst this is considered acceptable, the calculated stopping sight distance based on recorded speeds as set out in the TA, is 137.3m. The vertical profile provided on drawing **001 rev C** indicates that visibility to a point 0.26m above the carriageway can be achieved 137.3m from the access. The visibility to/from the site access is therefore deemed appropriate and in line with relevant local and national guidance.

LCC Comment 2 – *'The LHA advised within its first observations that updated Personal Injury Collision (PIC) analysis would be required as the Applicant's assessment was considered to be out of date. The LHA note the Applicant has now considered PICs between 1 January 2017 - 31 July 2022. The wider study area indicated by Figure 3.7 of the Transport Assessment does not however appear to have been considered in full. This is therefore requested'*.

Technical Note

- 1.6 Personal Injury Accident (PIA) data has been obtained from LCC for the area of influence identified by the PTRM i.e. for all junctions and links assessed in the Transport Assessment (TA) report.
- 1.7 The data covers the latest 65 months available; 01/01/2018 to 29/05/2023.
- 1.8 Full details of the PIA data can be seen in **Appendix B**, and the data is summarised in **Table 1**.

Table 1 - Accident Data Summary

Location	Severity			Total	Type	
	Slight	Serious	Fatal		Pedestrian	Cyclist
Junctions						
Elwell Avenue/Bardon Road (Barwell)	1	-	-	1	-	-
Mill Lane/Enston Street (Newbold Verdon)	-	1	-	1	-	-
A447 Ashby Road/Bosworth Lane (Cadeby)	-	1	-	1	-	-
A447 Hinckley Road/Barton Road (Osbaston)	1	-	-	1	-	-
Barton Road/Gregory Road (Barlestone)	1	-	-	1	-	-
Kirkby Road/Oxford Street (Barwell)	1	-	-	1	1	-
Stapleton Lane/High Street (Barwell)	1	-	-	1	-	-
B585 Wood Road/Bagworth Road (Nailstone)	1	-	-	1	-	-
B582/Dragon Lane (Newbold Verdon)	1	1	-	2	-	-
B585 Bagworth Road/Grange Lane (Ellistown)	1	-	-	1	-	-
A447 Ashby Road/Bosworth Road (Osbaston)	1	-	-	1	-	-
Shilton Road/Queen Street (Barwell)	-	1	-	1	-	1
Kirkby Road/Stapleton Lane (Barwell)	1	-	-	1	1	-
B585 Bagworth Road/Grange Lane (Nailstone)	1	-	-	1	-	-
Bosworth Road/Meadow Lane (Barlestone)	-	1	-	1	-	1
Bardon Road/Charnwood Road (Barwell)	1	-	-	1	1	-
Newbold Street/Bosworth Road/Main Street/Stapleton Lane (Kirkby Malloy)	-	1	-	1	-	-
B585 Bagworth Road/Heath Road (Barlestone)	-	1	-	1	-	-
B585 Bagworth Road/Barlestone Road (Barlestone)	1	-	-	1	-	-
A447 Crossroads with Lount Road & Barton Road (Barlestone)	1	-	-	1	-	-
Links						
Main Street (Newbold Verdon)	1	-	-	1	1	-
B585 Bagworth Road (Newbold Verdon)	-	1	-	1	-	-
Dragon Lane (Newbold Verdon)	1	-	-	1	-	-
B582 Grange Lane (Nailstone)	1	-	-	1	-	-
B585 Bosworth Lane (Osbaston)	-	1	-	1	-	1
A447 Ashby Road (Peckleton)	1	-	1	2	-	-
B582 Barlestone Road (Newbold Verdon)	-	1	-	1	1	-
Bosworth Road (Peckleton)	1	-	-	1	-	-

Technical Note

B585 Bagworth Road (Nailstone)	2	-	-	2	-	-
Kirkby Road (Barwell)	3	2	-	5	-	-
B585 Wood Road (Nailstone)	1	-	-	1	-	-
B582 Hunts Lane (Desford)	-	1	-	1	-	-
Little Mill Close (Barlestone)	1	-	-	1	1	-
Stapleton Lane (Barwell)	1	-	-	1	-	-
A447 Ashby Road (Cadeby)	1	-	-	1	-	-
Total						
TOTAL	28	13	1	42	6	3

- 1.9 At 20 of the junctions considered no more than one PIA was identified. The only junctions that experienced more than one accident was the B582/Dragon Lane junction where 2 accidents were recorded.
- 1.10 Of the 21 PIAs identified at junctions 14 were recorded as slight in severity and 7 as serious in severity. No fatalities were recorded. Three of the accidents at junctions involved pedestrians, all slight in severity, and two involved cyclists with both recorded as severe.
- 1.11 One of the accidents that involved the serious injury to a cyclist occurred at the junction between Shilton Road and Queen Street in Barwell. Conditions at the time were wet/damp during a period of darkness, albeit with street lighting present; the vehicle involved was turning right off the main road, whilst the cyclist was travelling through the junction going ahead when the collision occurred.
- 1.12 The other cyclist casualty recorded as severe and at a junction, occurred at Bosworth Road/Meadow Lane in Barlestone. Conditions at the time were wet/damp during a period of daylight; the vehicle involved was turning right off the main road, whilst the cyclist was waiting to turn right from the opposite direction.
- 1.13 A further 21 PIAs were recorded along links within the identified area of influence. Of these; 14 were recorded as slight, six as serious, and one accident resulted in a fatality.
- 1.14 Of the link based accidents three involved pedestrians, two were recorded as slight in severity and one as severe, and one involved a cyclist, recorded as serious.
- 1.15 The fatality occurred on the A447 Ashby Road in Peckleton on 24/08/2019, in dry conditions during a period of daylight. The two vehicles involved were a car and a motorcycle; the car was travelling from the south east and going ahead through a right bend, whilst the motorcyclist was going ahead from the opposite direction through a left-hand bend.
- 1.16 Along Kirkby Road in Barwell, there have been five PIAs, three of which were slight and two of which were serious in severity.
- 1.17 In total, there have been 42 PIAs across the what is a relatively wide area on the highway network during the latest 65-month period, which roughly equates to just over 8 PIAs per year.
- 1.18 Whilst all PIAs are regrettable, particularly those involving a fatality or serious accident, the volume and pattern of PIAs recorded within the area does not give rise to any undue concerns over the safety of the surrounding highway network, particularly considering that only one PIA has been recorded at any of the junctions over a 65-month period.

Technical Note

LCC Comment 3 – *'The LHA have reviewed the Applicants turning matrices and advise the following comments:*

It has been difficult to match the traffic flows with the '2021 Base Observed Flows + Covid Uplift' scenarios for junctions 3 and 6. This should therefore be clarified.'

- 1.19 As acknowledged in LCC's response, flows along the B585 and B582 have been adjusted based on 2018/2019 count data included in the Bloor Homes application (20/00143/FUL). This was due to the fact the more recent data collected in 2021 showed flows along this corridor were lower compared to data collected in 2018/19. This is likely to have been as a result of highway works at the B585/B582 junction.
- 1.20 The adjustments were carried through to junctions 3 and 6 based on the percentage difference of the adjacent junctions calculated when comparing the 2018/2019 data to the 2021 data. The following adjustments were made:
- Junction 3 (adjusted with reference to flows at J4 Barlestone Rd/Dragon Ln)
 - o Westbound – +16% AM, +35% PM
 - o Eastbound – +33% AM, +31% PM
 - Junction 6 (adjusted with reference to flows at J5 Barlestone Rd/Bosworth Ln)
 - o Westbound – +13% AM, +40% PM
 - o Eastbound – +32% AM, +29% PM.
- 1.21 The percentage increases listed above were applied to the covid adjusted base data collected at Junction 3 and 6 along the B585.

LCC Comment 4 – *'At junction 1, in the '2029 Base + Development Adjusted Flows' scenario, there appears to be an additional 20 vehicles routeing southbound along Brascote Lane during the AM peak over and above the '2029 Base Adjusted Flows' scenario. Similarly in the PM peak there appears to be an additional 15 vehicles routeing both northbound and southbound past the development. As these trips do not travel to/ from the development, it should be clarified why these additional vehicle trips are routing along Brascote Lane/ Dragon Lane/ Newbold Road. The additional trips appear to travel through a number of the junctions within the study area.'*

- 1.22 A review of the turning flow data extracted from the PRTM assessment does not indicate any clear reason why more traffic would head south past the site once development traffic is on the network. A slight increase in delays is predicted around the Bosworth Road (B585)/Brascote Lane (B582) junction which could mean more traffic is choosing to head south past the site. However, the volume of traffic re-assigning is not significant and the standalone junction modelling showed that there would not be significant queues or delays at the Bosworth Road (B585)/Brascote Lane (B582) junction.
- 1.23 It should also be recognised that the PRTM model is a dynamic strategic model and high level in nature. It is therefore possible that slight changes in delay on certain parts of the network could result in minor re-assignment in traffic which would not necessarily occur in reality. Nevertheless, the level of re-assignment predicted in this instance is not considered material.

Technical Note

LCC Comment 5 – ‘There are several junctions where the level of traffic routing through is reduced in the ‘2029 Base + Development Adjusted Flows’ scenario in comparison to the ‘2029 Base Adjusted Flows’ scenario. Notably at junction 10 (a reduction in 122 vehicles travelling from arm B to arm A in the AM peak) and 23 (a reduction in 122 vehicles travelling from arm A to arm C). It is also noted in the AECOM Forecasting Report that Para. 3.3.2 states ‘There are no reductions in flow that exceed -25PCUs in either peak hour’. There is also appears to be a reduction in traffic at junction 7 and a reduction in traffic turning towards this junction from the direction of Barlestone Road/ Bagworth Road at junction 5. The turning matrices should therefore be reviewed as necessary and, if correct, further consideration should be given as to why traffic may be re-routeing away from these junctions.’

- 1.24 Junction 10 – a transposing error has been identified which meant the with development scenario was 100 PCUs lower than it should have been, therefore the reduction in flow was overestimated. This has now been corrected and the PICADY assessment has been re-run. The results are shown in **Table 2** with full outputs provided in **Appendix C**. It should be noted that errors were found in the original results presented for this junction, but these have now been rectified. Updated traffic flow matrices for all junctions considered in this report are provided in **Appendix D**.

Table 2 – B585 Garland Lane/B585 Bagworth Road/Barlestone Road Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2024 Growthed Base						
Bagworth Road (LT)	0.09	0	7	0.05	0	7
Bagworth Road (RT)	0.34	1	10	0.29	0	9
Barlestone Road	0.12	0	8	0.09	0	7
2029 Adjusted Base						
Bagworth Road (LT)	0.09	0	7	0.05	0	7
Bagworth Road (RT)	0.40	1	11	0.31	1	10
Barlestone Road	0.12	0	7	0.07	0	7
2029 + Development Adjusted						
Bagworth Road (LT)	0.09	0	7	0.05	0	7
Bagworth Road (RT)	0.40	1	11	0.34	1	10
Barlestone Road	0.12	0	7	0.07	0	7

- 1.25 Junction 23 – a transposing error has been identified which meant the with development scenario was 100 PCUs lower than it should have been, therefore the reduction in flow was overestimated. This has now been corrected and the PICADY assessment has been re-run. The results are shown in **Table 3** with full outputs provided in **Appendix E**.

Technical Note

Table 3 – A447 Ashby Road/Bosworth Road Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2024 Growthed Base						
Bosworth Rd (LT)	0.14	0	11	0.08	0	9
Bosworth Rd (RT)	0.54	0	25	0.32	1	15
A447 Ashby Rd	0.07	0	5	0.11	0	5
2029 Adjusted Base						
Bosworth Rd (LT)	0.16	0	14	0.09	0	9
Bosworth Rd (RT)	0.65	2	29	0.41	1	16
A447 Ashby Rd	0.07	0	5	0.12	0	5
2029 + Development Adjusted						
Bosworth Rd (LT)	0.06	0	12	0.08	0	9
Bosworth Rd (RT)	0.65	2	28	0.38	1	16
A447 Ashby Rd	0.08	0	5	0.19	0	5

1.26 The results indicate that junctions 10 and 23 are predicted to operate well within capacity at the future assessment year of 2029 with development traffic added to the network.

1.27 Some minor reductions in flow are predicted at junction 7, however these are relatively minor and standalone junction modelling does not suggest there are specific issues on the network that would result in significant levels of development traffic to re-assign across the network.

LCC Comment 6 - 'At junction 13, it appears 21 vehicles route from arm A to arm C of the junction, while 57 vehicles route from arm C to arm A. The LHA require clarification as to whether these trips should be travelling in the opposite direction'.

1.28 It has been confirmed by AECOM that the turning flows extracted from the PRTM had wrongly labelled the Dragon Lane and Main Street East arm. This has now been corrected and the updated model flows are included in **Appendix D**. The updated PICADY results are included in **Table 4** with full PICADY outputs included in **Appendix F**.

Table 4 – Main Street/Dragon Lane Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2024 Growthed Base						
Main St (W)	0.03	0.0	6	0.01	0.0	6
Dragon Lane (N)	0.00	0.0	5	0.01	0.0	5
2029 Adjusted Base						
Main St (W)	0.03	0.0	6	0.01	0.0	6
Dragon Lane (N)	0.00	0.0	5	0.01	0.0	5
2029 + Development Adjusted						

Technical Note

Main St (W)	0.03	0.0	6	0.01	0.0	6
Dragon Lane (N)	0.00	0.0	5	0.01	0.0	5

- 1.29 **Table 3** indicates that due to the relatively low flows at the junction, the change in flow direction does not materially affect the results of the capacity assessment.

LCC Comment 7 – ‘At junction 17, there appears to be no change in the number of vehicles travelling from arm B to arm A in the AM peak, however there is an increase in vehicles travelling towards the development at all other nearby junctions. This should therefore be clarified.’

- 1.30 A review of the flow data has indicated that there was a transposing error which resulted in no change in flows between arms A to B. However, flows are actually predicted to increase by 5 PCUs on this arm. The traffic flow matrices have been updated and included in **Appendix D**. The updated PICADY results are included in **Table 5** with full PICADY outputs included in **Appendix G**

Table 5 - Church Road/Barwell Lane Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2024 Growthed Base						
Barwell Lane	0.14	0	8	0.07	0	7
Church Road	0.01	0	6	0.00	0	6
2029 Adjusted Base						
Barwell Lane	0.19	0	9	0.14	0	8
Church Road	0.01	0	6	0.00	0	6
2029 + Development Adjusted						
Barwell Lane	0.19	0	9	0.18	0	9
Church Road	0.01	0	6	0.00	0	6

- 1.31 It is clear that the junction operates well within capacity at forecast 2029 traffic flows including development traffic.

LCC Comment 8 – ‘The LHA have also reviewed the Applicants junction modelling and can advise that unfortunately the LINSIG model for junction 5 does not match up to LCC's current drawing/configuration. For example the phase letters are different and the phase mins and intergreens are incorrect. The model needs to be recreated using the latest configuration.’

- 1.32 The traffic signal specification data has been obtained from LCC for the Bosworth Lane/Barlestone Road junction. The LinSig model has been updated to reflect the latest specification data. The updated results are included in **Table 5**, with full outputs provided in **Appendix H**.
- 1.33 It should be noted that on-site observations indicate that the pedestrian facilities are called very infrequently. Nevertheless, in the interests of robustness the junction has been modelled on the basis that the pedestrian all-red phase is called every other cycle which is the equivalent of once every three minutes.

Table 5 – Barlestone Road (B582)/Bosworth Lane (B585) Signals – LinSig Summary Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
2024 Growthed						
Barlestone Road (NW)	44.3	7	18	32.5	4	18
Barlestone Road (SE)	65.9	12	29	81.0	17	34
Bosworth Lane	65.6	8	40	79.5	11	51
Cycle Time (s)	180			180		
PRC (%)	36.6			11.1		
Delay (PCU/Hr)	10.02			13.17		
2029 Adjusted Base						
Barlestone Road (NW)	48.8	7	20	32.9	4	17
Barlestone Road (SE)	68.9	13	29	81.9	18	33
Bosworth Lane	67.9	8	42	80.0	11	53
Cycle Time (s)	180			180		
PRC (%)	30.6			9.9		
Delay (PCU/Hr)	11.09			13.36		
2029 + Development Adjusted						
Barlestone Road (NW)	47.8	8	18	36.2	5	17
Barlestone Road (SE)	72.9	15	29	85.4	20	36
Bosworth Lane	72.6	9	46	84.2	12	58
Cycle Time (s)	180			180		
PRC (%)	23.5			5.4		
Delay (PCU/Hr)	11.77			15.18		

Sat is Degree of Saturation (%), Queues are in PCUs, and Delay is in seconds PCUs.

- 1.34 The modelling has been undertaken on an effective 90-second cycle time, assuming the all-red pedestrian stage is called every other cycle. As indicated, this is a robust assumption as on-site observations indicate that the pedestrian stage is called infrequently.
- 1.35 **Table 5** indicates the Bosworth Lane/Barlestone Road signal junction will operate well within capacity in the future year of 2029 with development traffic on the highway network. As a result, no mitigation is considered necessary at this location.

LCC Comment 9 – ‘It should also be noted that for junction 4, this has been modelled as a 2 lane approach but in reality there is only room for two PCU's to store in the right turn area. In the event that traffic flows are amended as a result of the above comments, it is suggested that suggest that Dragon Lane is modelled as a single lane with two PCU flare’.

- 1.36 The PICADY model for the Barlestone Road/Dragon Lane junction has been updated as requested. The summary PICADY results are provided in **Table 6** and full outputs are provided in **Appendix I**.

Technical Note

Table 6 – Barlestone Road (B582)/Dragon Lane Junction Capacity Assessment

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2024 Growth Base						
Dragon Lane (LT)	0.28	0	10	0.21	0	9
Dragon Lane (RT)	0.19	0	18	0.10	0	19
Barlestone Road	0.26	1	6	0.38	1	7
2029 Adjusted Base						
Dragon Lane (LT)	0.34	1	11	0.27	0	10
Dragon Lane (RT)	0.20	0	19	0.10	0	20
Barlestone Road	0.29	1	6	0.41	1	7
2029 + Development Adjusted						
Dragon Lane (LT)	0.46	1	14	0.32	1	11
Dragon Lane (RT)	0.21	0	20	0.12	0	23
Barlestone Road	0.35	1	6	0.60	2	11

- 1.37 The results indicate that the Barlestone Road/Dragon Lane junction will operate comfortably within capacity in the 2029 Base with development traffic added to the junction.

LCC Comment 10 – ‘Finally, it would be of great benefit to the LHA if traffic flow diagrams could be provided with the revised information to assist with reviewing the proposals.’

- 1.38 As requested, traffic flow diagrams for the following scenarios are provided in Figures TN 1.1 – 1.6:

- 2024 Base
- 2029 Base
- 2029 Base + Development

- 1.39 The traffic flow diagrams indicate the adjusted traffic flows based on the absolute change in flow calculated using the PRTM turning flow outputs.

- 1.40 It should be recognised that the base count data utilised to inform the stand alone junction models has been collected from various years. As a result, there will be some discrepancies between flows as they pass along certain links. Nevertheless, the assessment carried out is considered robust.

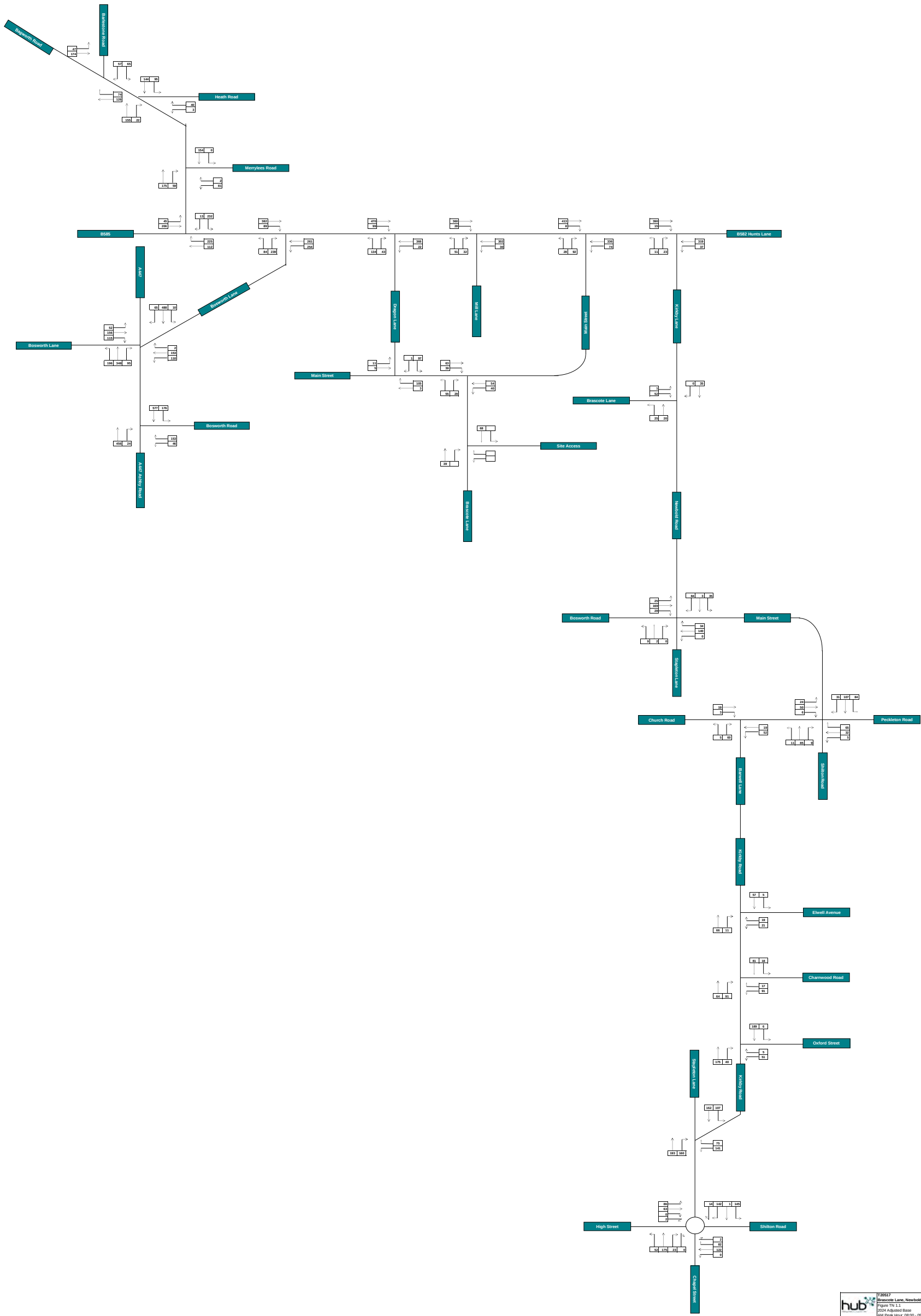
Summary

- 1.41 The additional information provided in this TA indicates that the proposed development will not have a material impact on the local highway network. Therefore, the assessment work undertaken and detailed in this report demonstrates that, in NPPF terms, the development will not have a severe impact on the operation of the local highway network nor any unacceptable impact on highway safety.

Technical Note

- 1.42 It is therefore concluded that the proposals accord with national, regional, and local transport related policies and, as such, it is considered there are no reasons why the proposals should be resisted on traffic or transportation grounds.

Figures



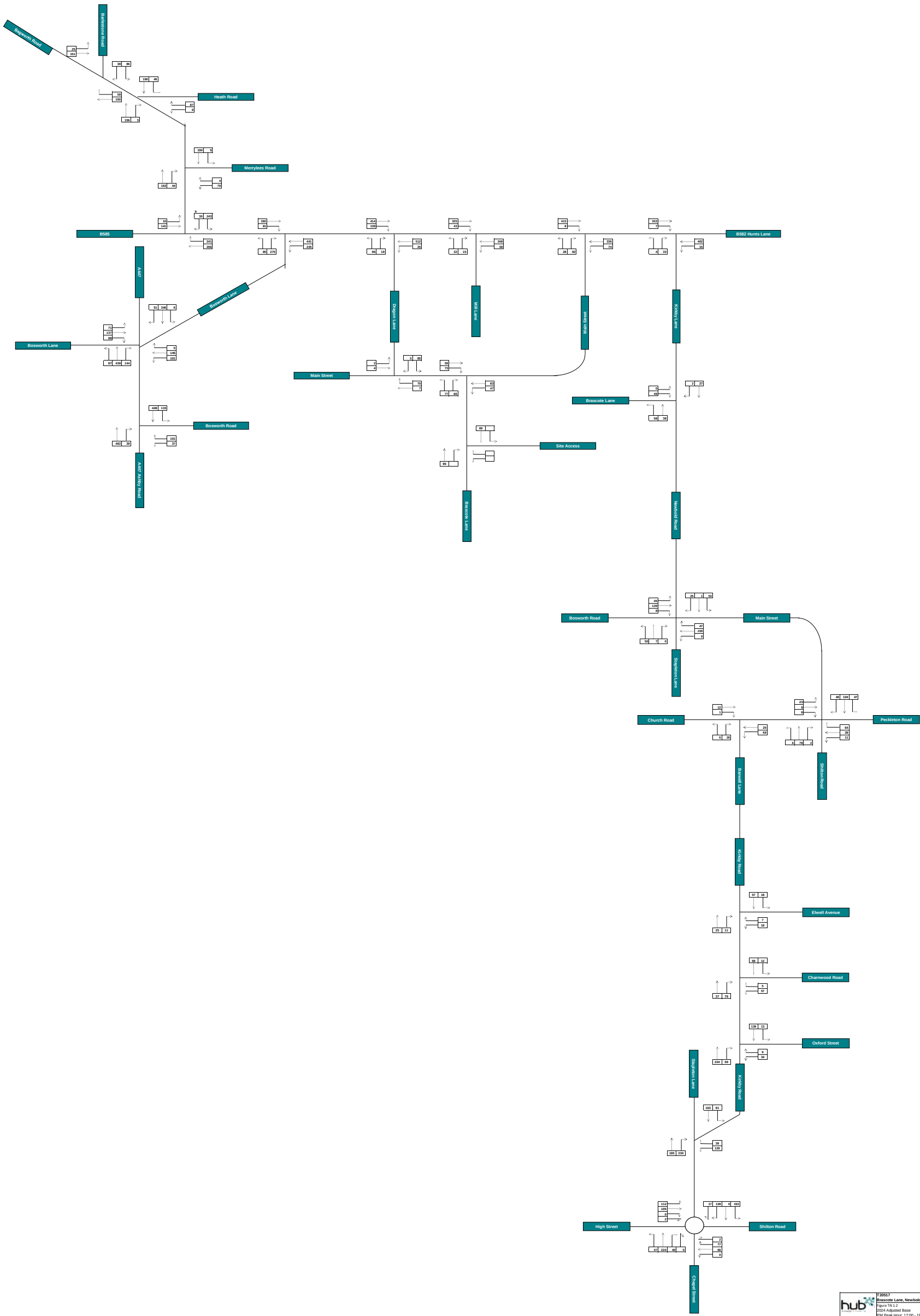
123	Total Vehicles
45	Number of HGVs

hub

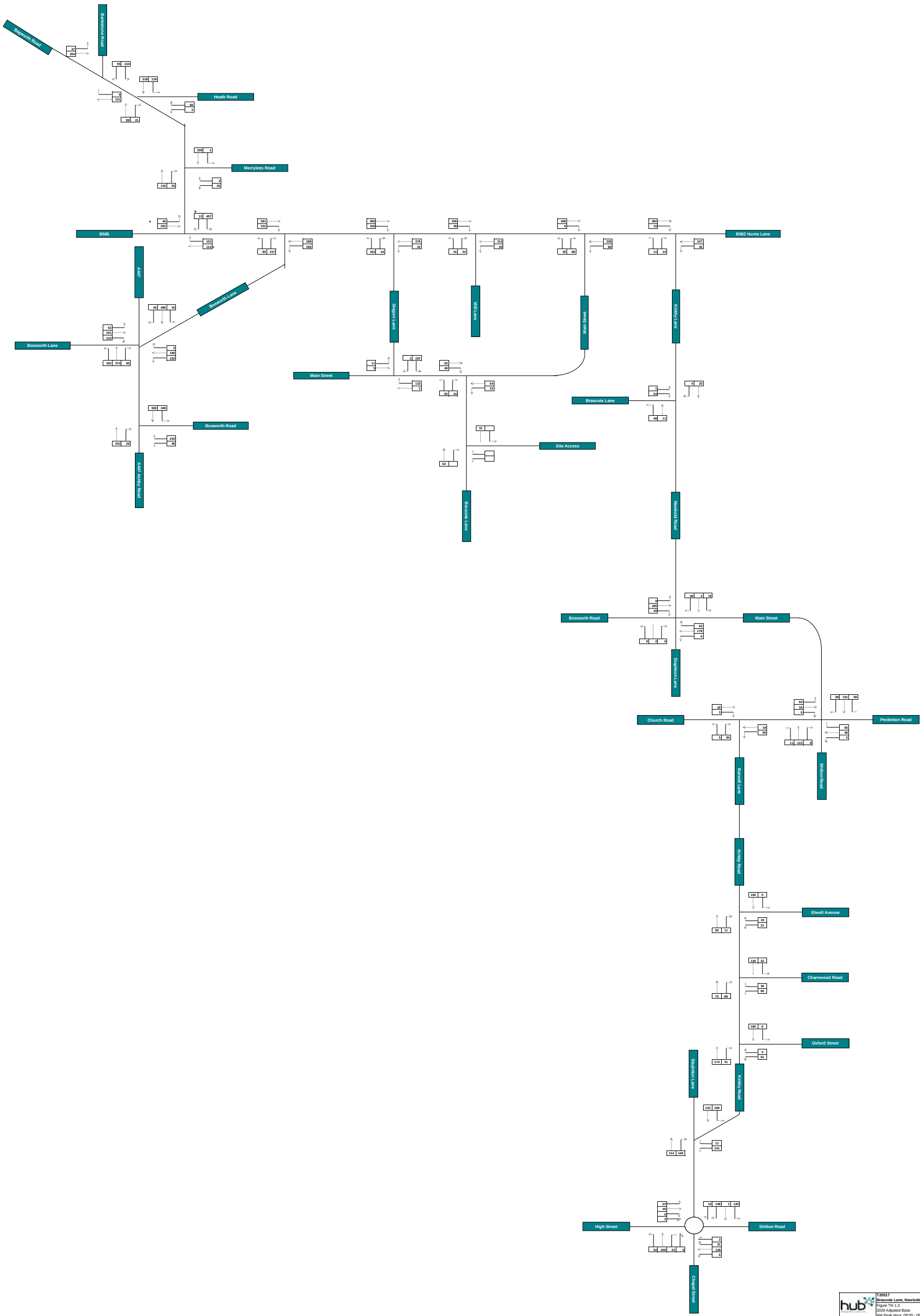
Figure TN 1.1

2024 Adjusted Base

JAM Peak Hour: 08:00 - 09:00

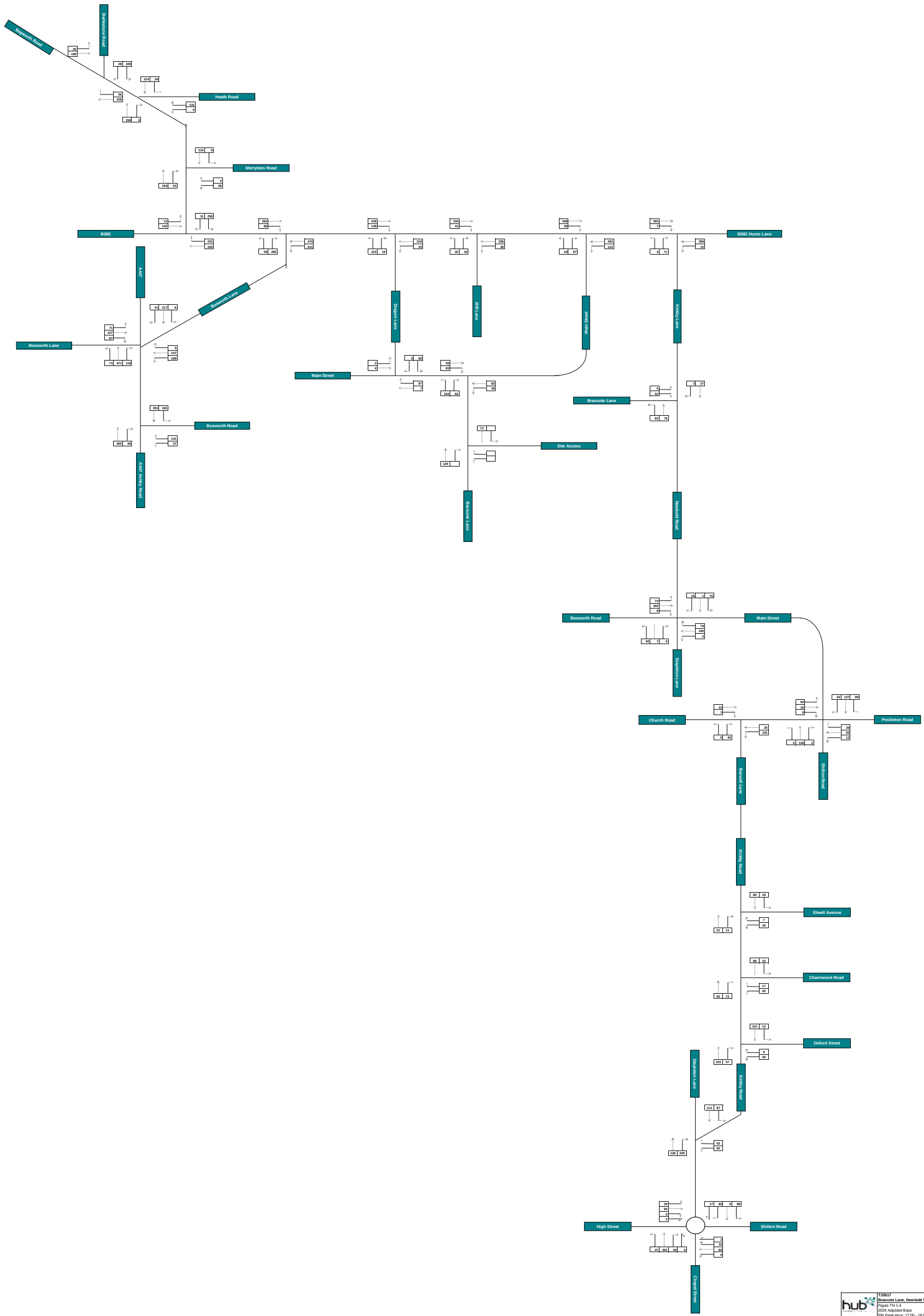


123	Total Vehicles
45	Number of HGVs

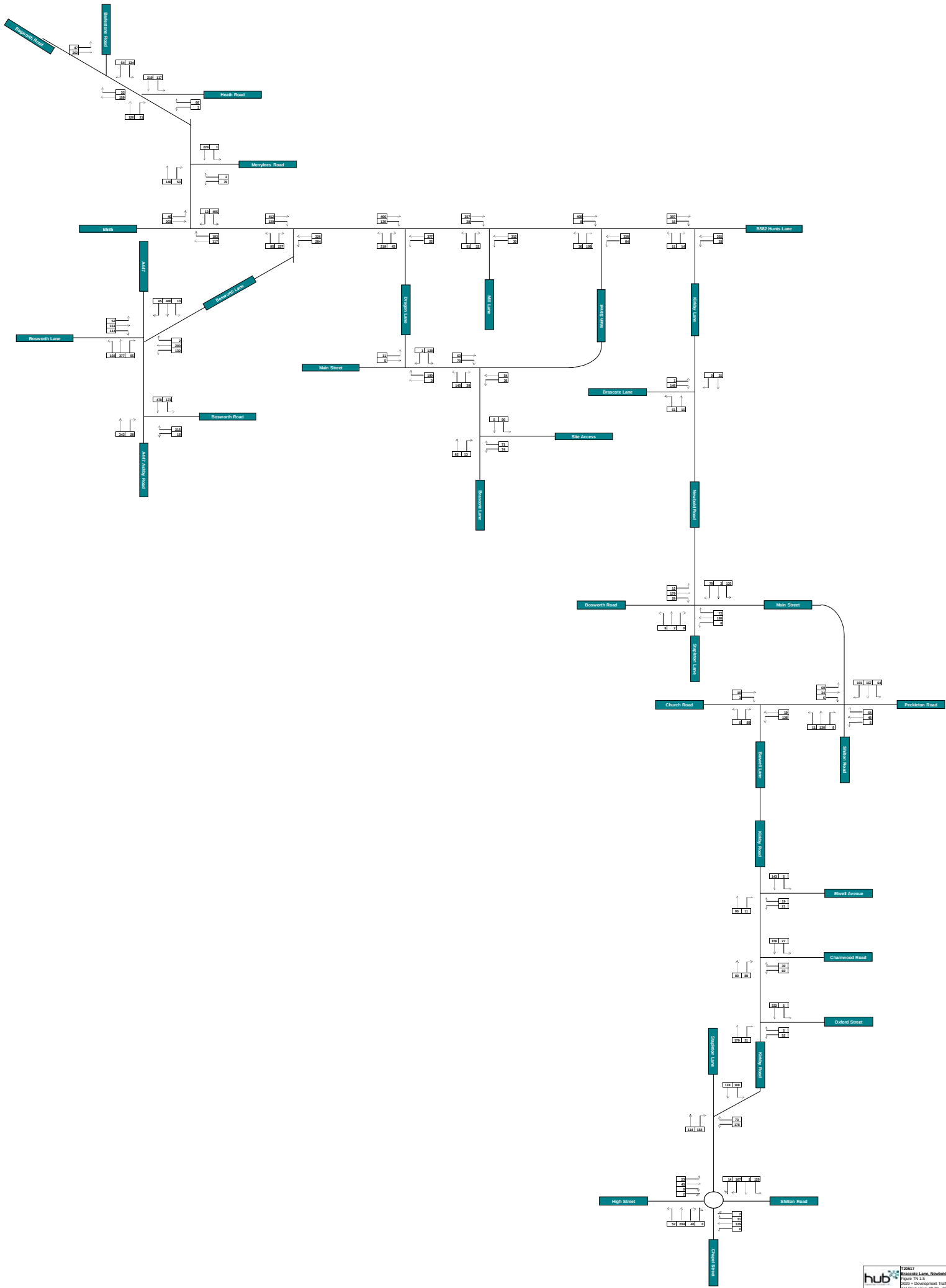


123	Total Vehicles
45	Number of HGVs

hub	Figure TN 1.3 2022 Adjusted Base AM Peak Hour: 08:00 - 09:00
-----	--



123	Total Vehicles
45	Number of HGVs



123	Total Vehicles
45	Number of HDVs



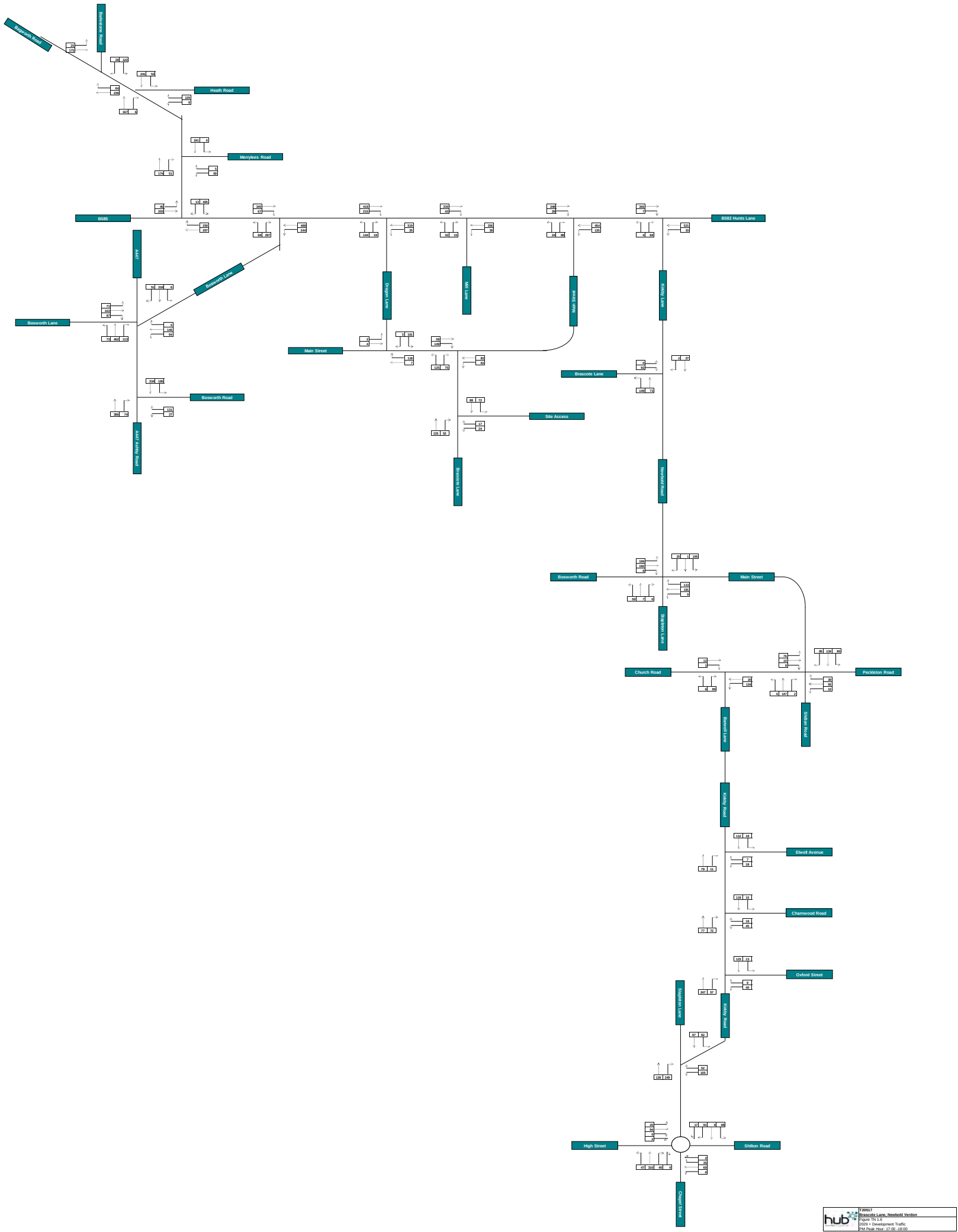
F20037

Brasscote Lane, Westcott Version

Figure T1.1-5

2025 - Development Traffic

AM Peak Hour: 08:00 - 09:00



123	Total Vehicles
45	Number of HDVs

 **hub**

F20037

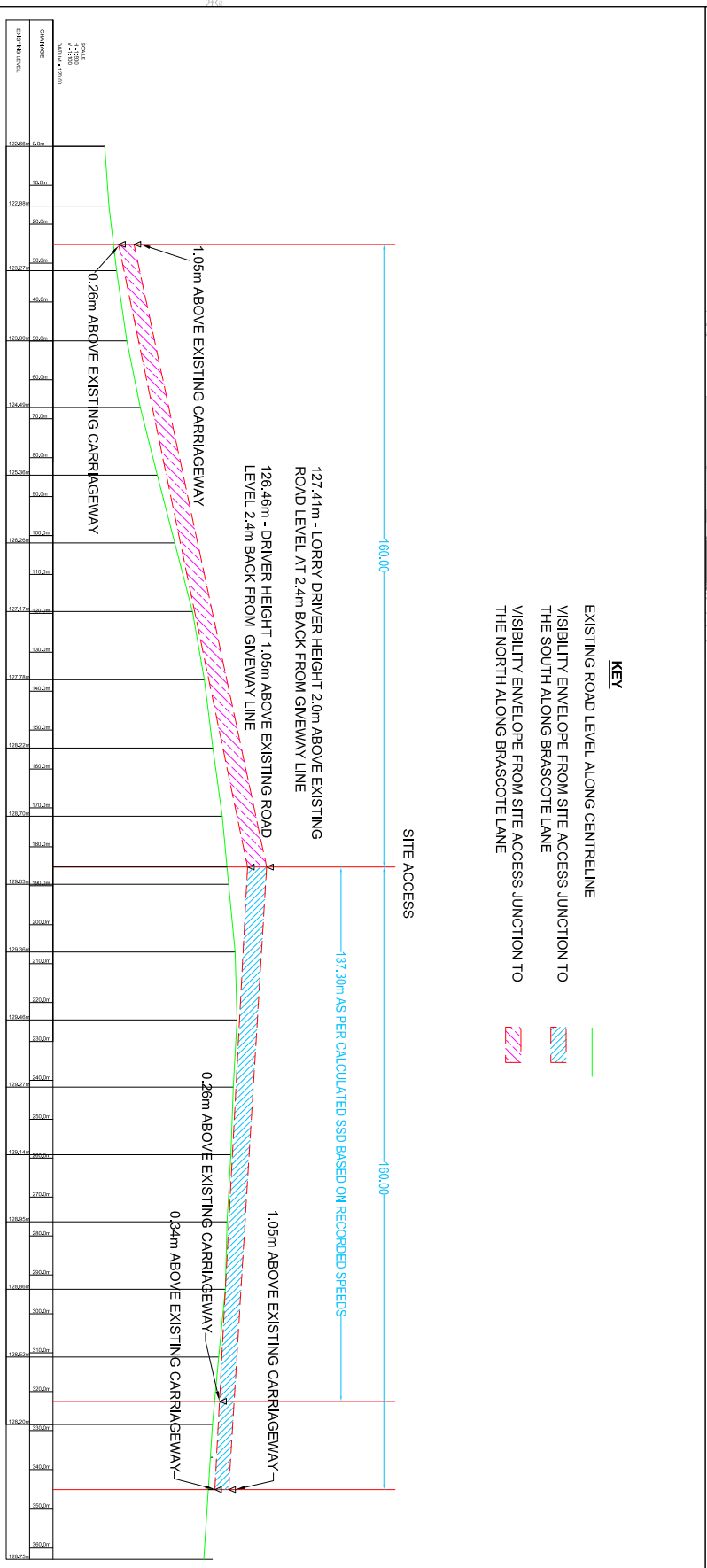
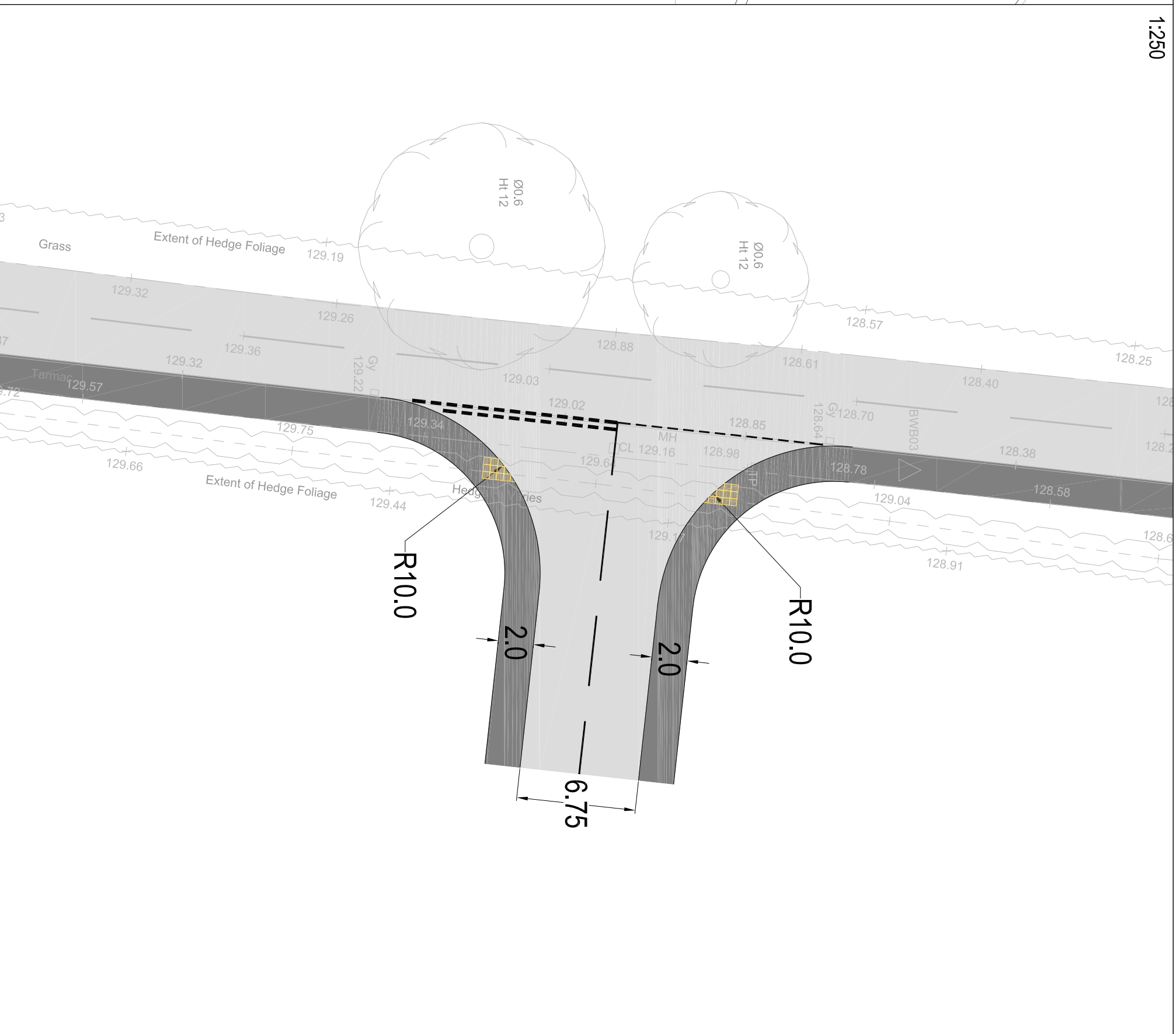
Briscoe Lane, Westcott Version

Figure T1.4.8

2025 - Development Traffic

Only peak hour: 17:00-18:00

Drawings



1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.

REV	DESCRIPTION	DATE	BY	AUTH
C	MINOR AMENDMENT FOLLOWING COMMENTS FROM LOCAL HIGHWAY AUTHORITY	02.08.23	JC	GM



Hub Transport Planning Ltd
Floor 1B
4 Temple Row
Birmingham
B2 5HG
T : 0121 454 5530

CLIENT
RICHBOROUGH ESTATES

PROJECT
LAND OFF BRASCOTE LANE
NEWBOLD VERDON

TITLE
PROPOSED SITE ACCESS LAYOUT

PROJECT NO.	DRAWING NO.	REV
T20517	001	C

Appendix A

LCC 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: 22/00277/OUT

Highway Reference Number: 2022/0277/04/H/R4

Application Address: Land East Of The Windmill Inn, Brascote Lane, Newbold Verdon,
Leicestershire

Application Type: Outline (with access)

Description of Application:

Re-consultation. Proposed development of up to 239 dwellings (Outline Application - Access Only)

GENERAL DETAILS

Planning Case Officer: Alex Jelley

Applicant: Richborough Estates

County Councillor: Ross Hills

Parish: Newbold Verdon

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.

Advice to Local Planning Authority

Background

The Local Highway Authority (LHA) previously advised within its observations dated 6 July 2022 that the following additional information was required from the Applicant:

- Further consideration of the site access arrangements in terms of visibility, location of access and a Stage 1 Road Safety Audit (RSA1) including designer's response;
- Analysis of up to date PIC data;
- Factoring up of the observed 2021 traffic flows to a base year of 2022 and a future year of 2027 or later if the development is likely to be completed at a later date due to build out rates;

- Use of the Pan Regional Transport Model (PRTM) to establish and understand trip distribution; and
- Updated capacity assessments and inclusion of the Main Street/ Barlestone Road (B582)/ Desford Road (B582) junction within assessments if necessary following PRTM results.

Subsequently, the Applicant submitted additional information in respect of the site access arrangements. The LHA advised within its observations dated 19 August 2022 however, that given the site access drawing was the only additional information submitted, no further detailed comments could be made at that time.

Since the previous observations were submitted, the Applicant has been discussing the use of PRTM with the LHA to understand the impact of the proposed development.

The Applicant has now submitted a revised Transport Assessment (TA) dated 9 May 2023 and a Stage 1 RSA1 of the site access proposals.

Site Access

The LHA previously advised it would accept a single point of access if appropriate vehicular visibility could be achieved at the single point of access, rather than have two access points with reduced visibility.

The Applicant has submitted Hub drawing number 001 Rev B, which details a single point of access to the site. Two metre footways are proposed on each side of the carriageway, along with a 6.75m wide carriageway and a 10.0m wide junction radii. Vehicle swept path analysis of a refuse collection vehicle arriving and departing the site access in all directions has also been provided on Hub drawing number 003 Rev C. Given the quantum of development proposed, the LHA considers the access width and radii to be acceptable.

The LHA has reviewed the Applicants RSA1 dated September 2022, undertaken by RKS associates. The RSA raised four problems. These were in respect of:

1. Surface water drainage details not being available.
2. Swept path analysis of the vehicles most likely to use the access not being available.
3. Overhanging tree branches in the vicinity of the site access which may pose a hazard to high sided vehicles.
4. The location of an existing telegraph pole in respect of the proposed access.

The Applicant has stated that points 1, 3 and 4 would be addressed at detailed design, which is acceptable to the LHA. It should however be noted that the trees located opposite the site access and overhanging the highway are not recorded as highway trees.

The LHA considers the swept path analysis of a refuse collection vehicle which has been provided on Hub drawing number T20517.003 Rev A to be acceptable.

Notwithstanding the above, it is noted the northern visibility splay at the site access shown on Hub drawing number 003 Rev C appear to have been drawn with an arc, this is incorrect and should be

presented as a straight line as shown in Part 3, Figure DG2a of the Leicestershire Highway Design Guide ([LHDG] available at <https://resources.leicestershire.gov.uk/lhdg>). This requires amendment. Furthermore, the visibility envelope should be measured to a point no less than 0.26m as stated in Part 3, Figure DG2c of the LHDG. Therefore, the Applicant should give further consideration to the available visibility splays.

Highway Safety

The LHA advised within its first observations that updated Personal Injury Collision (PIC) analysis would be required as the Applicants assessment was considered to be out of date. The LHA note the Applicant has now considered PIC's between 1 January 2017 - 31 July 2022. The wider study area indicated by Figure 3.7 of the Transport Assessment does not however appear to have been considered in full. This is therefore requested. Further consideration will be given to highway safety following updated analysis and updated turning matrices (advised further below). Up to date PIC data can be obtained from the LHA by contacting NDI@leics.gov.uk.

Trip Generation

The LHA previously advised the Applicants trip rates which were established using TRICS were considered to be acceptable. The Applicant had also considered the level of trips generated by 260 dwellings instead of the scale of the development which has been applied for, which is 239 dwellings. The scale of development being applied for has now been confirmed by the Applicant and the approximate number of vehicle trips which could be generated by the development during peak hours (08:00 - 09:00 and 17:00-18:00) is detailed in Table 1.

Peak Period	Trip Rate		Trips (239 Dwellings)		Total
	In	Out	In	Out	
AM	0.074	0.606	18	145	163
PM	0.521	0.170	125	41	166

NB: AM peak is 08:00-09:00, PM peak is 17:00-18:00; trips have been rounded.

Table 1: Vehicle trip rates and resulting approximate vehicle trips (239 dwellings)

The LHA accept the Applicants trip rates and trip generation.

The LHA previously advised it was discussing with the Applicant the use of the Pan Regional Transport Model (PRTM) to understand the impact of the proposed development on the surrounding highway network. Given the scale of the proposals, it is considered that the use of PRTM will more accurately establish likely trip distribution patterns as opposed to 2011 Census data.

Once the number (trip generation) and origin and destination (distribution) of trips has been agreed, the PRTM model is used to assign these trips onto the network. This approach has numerous advantages over a manual assessment however notably that an independent assessment is undertaken, and which takes account of all other trips on the network including those already on the network and those which will come forward over the forecast period as part of committed growth. Trips are assigned and route based on time and distance costs, the weighting

of which is dependent on various metrics such as journey purpose, user class and income threshold. Crucially such factors replicate the driver behaviour and route choice observed in real life and on which a credible and validated assessment of forecast highway impact can be based.

The PRTM modelling indicates that development traffic to and from the west and north take a route via Dragon Lane, towards Atherstone in the west and the M1 Junction 22 in the north. Traffic routeing to and from the south predominantly route via Newbold Road and Bosworth Road towards Hinckley, and traffic routeing to and from the east largely route via Main Street and the B582 Barlestone Road towards Desford.

Junction Capacity Assessments

The latest development proposals have been assessed using the PRTM model to determine the impact of the updated development proposals on the transport network. This work identified an area of influence, including the key junctions listed below. Traffic counts have also been undertaken at all junctions listed below on the dates shown in brackets. These counts were used to inform the junction capacity assessments.

1. Site Access /Brascote Lane (29.6.21)
2. Main Street/Brascote Lane (29.6.21)
3. B582 Barlestone Road (B582)/Main Street (29.6.21)
4. B582 Barlestone Road/Dragon Lane (11.9.19)
5. B582 Barlestone Road/Bosworth Lane (21.9.18)
6. B585 Barlestone Road/Bagworth Road (29.6.21)
7. B585 Bosworth Lane/A447/Bosworth Road (9.2.23)
8. B582 Desford Road/Mill Lane (9.2.23)
9. B582 Desford Road/Kirkby Road (29.9.21)
10. B585 Garland Lane/B585 Bagworth Road/Barlestone Road (23.3.23)
11. B585 Bagworth Road/Heath Road (23.3.23)
12. B585 Bagworth Road/Merrylees Road (23.3.23)
13. Main Street/Dragon Lane (23.3.23)
14. Brascote Lane/Kirkby Lane/Newbold Road (23.3.23)
15. Bosworth Road/Newbold Road/Main Street/Stapleton Lane (29.9.21)
16. Main Street/Peckleton Road/Shilton Road/Church Road (23.3.23)
17. Church Road/Barwell Lane (23.3.23)
18. Kirkby Road/Elwell Avenue (23.3.23)
19. Kirkby Road/Charnwood Road (23.3.23)
20. Kirkby Road/Oxford Street (23.3.23)
21. Stapleton Lane/Kirkby Road (23.3.23)
22. Stapleton Lane/Shilton Road/Chapel Street/High Street (23.3.23)
23. A447/Ashby Road/Bosworth Road (9.2.23)

Following obtaining traffic flows, the methodology outlined below has been used to factor and adjust the baseline traffic flows:

- All observed traffic counts have been growthed to a common base year of 2024 using TEMPro growth factors and LCC Covid-19 uplift factors where applicable.
- PRTM turning flows have been extracted from the PRTM for the common base year of 2024.
- At each junction under assessment the absolute change in flow between the PRTM 2024 base year and the forecast year 2029 (with and without development) has been calculated and sense checked to identify an unusual results.
- The change in flow has been applied to the observed turning count flows to provide the adjusted future year turning flow forecasts for the with and without development traffic scenarios.

The LHA note that the Applicant has stated within the original Transport Assessment that the Applicants analysis of their own 2021 turning count data + Covid uplift factors for the B582 junctions was found to show fewer movements than the counts conducted for the Land South of Bosworth Lane development (ref: 20/00143/FUL) in 2018/2019. As such, the 2018 count at junction 5 2019 count at junction 4 have been used and extrapolated to provide flows along the B582 and B585. This is accepted by the LHA under the site specific circumstances.

The LHA have reviewed the Applicants turning matrices and advise the following comments:

- It has been difficult to match the traffic flows with the '2021 Base Observed Flows + Covid Uplift' scenarios for junctions 3 and 6. This should therefore be clarified.
- At junction 1, in the '2029 Base + Development Adjusted Flows' scenario, there appears to be an additional 20 vehicles routeing southbound along Brascote Lane during the AM peak over and above the '2029 Base Adjusted Flows' scenario. Similarly in the PM peak there appears to be an additional 15 vehicles routeing both northbound and southbound past the development. As these trips do not travel to/ from the development, it should be clarified why these additional vehicle trips are routing along Brascote Lane/ Dragon Lane/ Newbold Road. The additional trips appear to travel through a number of the junctions within the study area.
- There are several junctions where the level of traffic routing through is reduced in the '2029 Base + Development Adjusted Flows' scenario in comparison to the '2029 Base Adjusted Flows' scenario. Notably at junction 10 (a reduction in 122 vehicles travelling from arm B to arm A in the AM peak) and 23 (a reduction in 122 vehicles travelling from arm A to arm C). It is also noted in the AECOM Forecasting Report that Para. 3.3.2 states '*There are no reductions in flow that exceed -25PCUs in either peak hour*'. There is also appears to be a reduction in traffic at junction 7 and a reduction in traffic turning towards this junction from the direction of Barlestone Road/ Bagworth Road at junction 5. The turning matrices should therefore be reviewed as necessary and, if correct, further consideration should be given as to why traffic may be re-routeing away from these junctions.

It should be noted that in respect of the above two points, in the event re-routeing is occurring due to capacity issues at nearby junctions caused as a result of the development, a scheme of

mitigation is likely to be required by the LHA.

- At junction 13, it appears 21 vehicles route from arm A to arm C of the junction, while 57 vehicles route from arm C to arm A. The LHA require clarification as to whether these trips should be travelling in the opposite direction.
- At junction 17, there appears to be no change in the number of vehicles travelling from arm B to arm A in the AM peak, however there is an increase in vehicles travelling towards the development at all other nearby junctions. This should therefore be clarified.

The LHA have also reviewed the Applicants junction modelling and can advise that unfortunately the LINSIG model for junction 5 does not match up to LCC's current drawing/configuration. For example the phase letters are different and the phase mins and intergreens are incorrect. The model needs to be recreated using the latest configuration. LCC are able to supply this to the Applicant for a fee. Please contact trafficandsignalsconsultation@leics.gov.uk.

It should also be noted that for junction 4, this has been modelled as a 2 lane approach but in reality there is only room for two PCU's to store in the right turn area. In the event that traffic flows are amended as a result of the above comments, it is suggested that Dragon Lane is modelled as a single lane with two PCU flare.

The Applicant will need to update all junction modelling where changes are made to traffic flows as a result of the above.

Finally, it would be of great benefit to the LHA if traffic flow diagrams could be provided with the revised information to assist with reviewing the proposals.

Off-Site Implications

The LHA will give further consideration to any off-site implications of the proposals following further clarification in respect of traffic flows and capacity assessments.

Internal Layout

As previously advised, the internal layout of the development is not for consideration at this stage and therefore this has not been considered in detail by the LHA.

Transport Sustainability

The LHA previously advised it considered the Travel Plan to be acceptable. It is noted that minor updates to the Travel Plan have since been made.

As previously advised, the details of the Travel Plan co-ordinator would need to be provided to Leicestershire County Council once appointed. It is also advised that LCC's preferred system to capture survey information is MODESHIFT STARSfor. A TP monitoring fee of £6,000 will be required by the LHA as part of any future Section 106 agreement.

The LHA also previously advised that one travel pack (currently £52.85 per pack if supplied through LCC) and two x six month bus passes (currently £360 per pass if supplied through LCC for an Arriva service) will be required in order to encourage sustainable travel to and from the site.

Closing

The LHA advise that the following additional information is required to be submitted to the LPA, for consideration by the highway authority

- Further information in respect of the vehicular visibility splays.
- A wider assessment of PIC data to cover the whole study area.
- Further consideration of the turning matrices as outlined in the Junction Capacity Assessments' above.
- Updated junction capacity assessments to reflect LCC's current configuration, along with any changes to the forecast traffic flows as necessary.

Date Received
12 June 2023

Case Officer
Ben Dutton

Reviewer
DH

Date issued
19 July 2023

Appendix B

Accident Data



This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Leicestershire County Council. LA100019271. Published 2023.

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Selected Polygon:Hub Newbold Verdon 27.07.2023

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201800086	27/01/2018	444861	303758	Other	Wet/Damp	Daylight	Slight
Location: MAIN STREETNEWBOLD VERDON OUTSIDE 103							

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Reversing	N	S

Casualties:

Class	Severity
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201800108	09/02/2018	444798	298113	Fine without high winds	Dry	Daylight	Slight

Location: ELWELL AVENUE BARWELL JW BARDON ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead other	SE	NW
Car	Cleared junction or waiting/parked at junction exit	Parked	Parked	Parked

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months
Selection: Notes:
; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201800665	24/06/2018	444685	303980	Fine without high winds	Dry	Daylight	Serious

Location: MILL LANE NEWBOLD VERDON JW ENSTON STREET.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning left	NE	SE

Casualties:

Class	Severity
Vehicle Passenger	Serious
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201800918	03/09/2018	442290	303230	Unknown	Dry	Daylight	Serious

Location: A447 ASHBY ROAD CADEBY JW BOSWORTH LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Starting	E	NW
Car	Mid Junction - on roundabout or main road	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Serious
Driver / Rider	Serious

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201800979	19/09/2018	441750	305660	Fine with high winds	Dry	Daylight	Slight

Location: A447 HINCKLEY ROAD OSBASTON JW BARTON ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Jct Approach	Going ahead but held up	N	S
Van / Goods 3.5 tonnes mgw and under	Jct Approach	Stopping	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201801309	11/12/2018	444444	303935	Fine without high winds	Wet/Damp	Daylight	Slight

Location: C5103 DRAGON LANE NEWBOLD VERDON EXACT LOCATION NOT KNOWN

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Parked	Parked	Parked
Car	Not at, or within 20M of Jct	Reversing	N	S

Casualties:

Class	Severity
Vehicle Passenger	Slight
Vehicle Passenger	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201801477	24/12/2018	444537	297187	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Slight

Location: KIRKBY ROAD BARWELL JW OXFORD STREET

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Turning left	E	S

Casualties:

Class	Severity
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201802006	02/02/2018	444355	304805	Fine without high winds	Dry	Daylight	Serious

Location: B585 BAGWORTH ROAD NEWBOLD VERDON EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	S	N

Casualties:

Class	Severity
Vehicle Passenger	Serious

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201802173	19/12/2018	442155	305695	Fine without high winds	Dry	Daylight	Slight

Location: C6117 BARTON ROAD BARLESTONE JW GREGORY ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	Going ahead other	W	E
Car	Mid Junction - on roundabout or main road	Going ahead other	W	E

Casualties:

Class	Severity
Driver / Rider	Slight
Vehicle Passenger	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900153	22/01/2019	442160	308373	Fine without high winds	Frost/Ice	Darkness: no street lighting	Slight

Location: B582 GRANGE LANE NAILSTONE APPROX. 12 METRES FROM WIGGS FARM ENTRANCE

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW
Car	Not at, or within 20M of Jct	Going ahead right bend	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900157	06/03/2019	443060	303541	Fine without high winds	Dry	Darkness: no street lighting	Serious

Location: B585 BOSWORTH LANE OSBASTON EXACT LOCATION UNKNOWN

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW
Pedal Cycle	Not at, or within 20M of Jct	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900188	13/03/2019	443340	299895	Fine with high winds	Wet/Damp	Daylight	Slight

Location: A447 ASHBY ROAD PECKLETON APPROX 70M N WOOD VIEW FARM.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900224	04/03/2019	444438	296857	Fine without high winds	Dry	Daylight	Slight

Location: C5116 STAPLETON LANE BARWELL JW HIGH STREET

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motor Cycle over 50 cc and up to 125cc	Mid Junction - on roundabout or main road	U-turn	NW	NW
Car	Entering roundabout	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900378	19/04/2019	444475	304420	Fine without high winds	Dry	Daylight	Serious

Location: B582 BARLESTONE ROAD NEWBOLD VERDON 10M NW DRAGON LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead other	SE	NW

Casualties:

Class	Severity
Pedestrian	Serious

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900505	31/05/2019	442470	307677	Fine without high winds	Dry	Daylight	Slight

Location: B585 WOOD ROAD NAILSTONE JW BAGWORTH ROAD

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Entering main road	Turning left	SE	SW
Car	Mid Junction - on roundabout or main road	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900766	24/08/2019	443380	299795	Fine without high winds	Dry	Daylight	Fatal

Location: A447 ASHBY ROAD PECKLETON APPROX 1100M S BOSWORTH ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Motorcycle over 500cc	Not at, or within 20M of Jct	Going ahead left bend	NW	SE
Car	Not at, or within 20M of Jct	Going ahead right bend	SE	NW

Casualties:

Class	Severity
Driver / Rider	Fatal

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900779	03/08/2019	442455	307665	Fine without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: B585 BAGWORTH ROAD ELLISTOWN JW GRANGE LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Going ahead other	N	S
Car	Mid Junction - on roundabout or main road	Going ahead other	NE	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900850	01/09/2019	442264	303278	Fine without high winds	Dry	Darkness: street lights present and lit	Slight

Location: A447 ASHBY RD OSBASTON J/W BOSWORTH RD

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning left	W	NW
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900896	17/10/2019	444665	296880	Fine without high winds	Wet/Damp	Darkness: street lights present and lit	Serious

Location: C5115 SHILTON ROAD BARWELL JW QUEEN STREET.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	E	S
Pedal Cycle	Mid Junction - on roundabout or main road	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900905	10/09/2019	445280	300860	Fine without high winds	Dry	Daylight	Slight

Location: C5101 BOSWORTH ROAD PECKLETON APPROX 50M W OF STAPLETON LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Parked	Parked	Parked
Car	Not at, or within 20M of Jct	Going ahead other	E	W

Casualties:

Class	Severity
Vehicle Passenger	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201900961	22/10/2019	442505	307682	Fine without high winds	Dry	Darkness: no street lighting	Slight

Location: B585 BAGWORTH ROAD NAILSTONE 20M W B582.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Going ahead other	W	E
Car	Jct Approach	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901162	26/10/2019	444865	298365	Raining without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: KIRKBY ROAD BARWELL APPROX 250M N ELWELL AVENUE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead right bend	NW	SW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901559	11/06/2019	444500	304395	Fine without high winds	Dry	Daylight	Slight

Location: B582 NEWBOLD VERDON JW DRAGON LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	Going ahead other	SE	NW
Car	Mid Junction - on roundabout or main road	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
201901560	12/06/2019	442950	307350	Fine without high winds	Dry	Daylight	Slight

Location: B585 BAGWORTH ROAD NAILSTONE EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000129	23/01/2020	444427	296909	Fog or mist	Wet/Damp	Darkness: street lights present and lit	Slight

Location: KIRKBY ROAD, BARWELL, JUNCTION WITH C5116 STAPLETON LANE

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Mid Junction - on roundabout or main road	U-turn	NE	NE

Casualties:

Class	Severity
Pedestrian	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000157	16/02/2020	442721	307971	Raining without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: B585 WOOD ROAD NAILSTONE EXACT LOCATION NOT KNOWN

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW
Car	Not at, or within 20M of Jct	Going ahead other	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000512	19/03/2020	446605	303615	Fine without high winds	Dry	Darkness: no street lighting	Serious

Location: B582 HUNTS LANE DESFORD OUTSIDE TUMBLIN FIELDS FARM.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead left bend	NW	E
Car	Not at, or within 20M of Jct	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000581	06/08/2020	442460	307670	Fine without high winds	Dry	Daylight	Slight

Location: B585 BAGWORTH ROAD NAILSTONE JW GRANGE LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Entering main road	Going ahead other	SW	NE
Car	Entering main road	Turning left	N	NE

Casualties:

Class	Severity
Driver / Rider	Slight
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202000933	30/11/2020	442663	305615	Fine without high winds	Wet/Damp	Daylight	Serious

Location: BOSWORTH ROAD BARLESTONE JW MEADOW LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Leaving main road	Turning right	SW	SE
Pedal Cycle	Mid Junction - on roundabout or main road	Waiting to turn right	SE	NE

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100248	24/04/2021	442350	305790	Fine without high winds	Dry	Daylight	Slight

Location: LITTLE MILL CLOSE BARLESTONE EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Reversing	S	N
Car	Not at, or within 20M of Jct	Parked	Parked	Parked

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100445	18/06/2021	444470	297010	Raining without high winds	Wet/Damp	Daylight	Serious

Location: KIRKBY ROAD BARWELL APPROX 25M S TOWNEND ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Parked	Parked	Parked
Car	Not at, or within 20M of Jct	Going ahead but held up	N	S
Motor Cycle over 50 cc and up to 125cc	Not at, or within 20M of Jct	Overtaking stat vehicle O/S	N	S

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100477	27/06/2021	444450	296940	Fine without high winds	Dry	Daylight	Serious

Location: KIRKBY ROAD BARWELL OUTSIDE NUMBER 5.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	N	S
Car	Not at, or within 20M of Jct	Parked	Parked	Parked
Car	Not at, or within 20M of Jct	Parked	Parked	Parked
Car	Not at, or within 20M of Jct	Parked	Parked	Parked

Casualties:

Class	Severity
Driver / Rider	Serious

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100551	25/07/2021	444285	297065	Fine without high winds	Dry	Daylight	Slight

Location: C5116 STAPLETON LANE BARWELL EXACT LOCATION UNKNOWN.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	SE	NW
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100610	09/08/2021	444590	297690	Fine without high winds	Dry	Daylight	Slight

Location: BARDON ROAD BARWELL JW CHARNWOOD ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	Reversing	S	N

Casualties:

Class	Severity
Pedestrian	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100701	12/09/2021	445320	300850	Fine without high winds	Dry	Daylight	Serious

Location: C5101 MAIN STREET KIRKBY MALLORY (PECKLETON) JW NEWBOLD ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning right	N	W
Van / Goods 3.5 tonnes mgw and under	Mid Junction - on roundabout or main road	Going ahead other	E	W

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202100963	24/11/2021	442320	303150	Raining without high winds	Wet/Damp	Darkness: no street lighting	Slight

Location: A447 ASHBY ROAD CADEBY S OF BULL IN THE OAK.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Overtaking moving vehicle O/S	S	N
Van / Goods 3.5 tonnes mgw and under	Not at, or within 20M of Jct	Going ahead other	N	S

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200074	25/01/2022	444355	306530	Fine without high winds	Wet/Damp	Darkness: no street lighting	Serious

Location: B585 BAGWORTH ROAD BARLESTONE JW HEATH ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning right	NE	NW
Motor Cycle over 50 cc and up to 125cc	Mid Junction - on roundabout or main road	Going ahead other	NW	SE

Casualties:

Class	Severity
Driver / Rider	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202200706	28/08/2022	443915	306935	Fine without high winds	Dry	Daylight	Slight

Location: B585 BAGWORTH ROAD BARLESTONE JW BARLESTONE ROAD.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Cleared junction or waiting/parked at junction exit	U-turn	NW	NW
Motorcycle over 500cc	Cleared junction or waiting/parked at junction exit	Going ahead other	SE	NW

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202201101	19/12/2022	444490	304405	Fine without high winds	Dry	Daylight	Serious

Location: B582 BARLESTON ROAD NEWBOLD VERSION JW DRAGON LANE.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Entering main road	Turning right	S	SE
Car	Mid Junction - on roundabout or main road	Going ahead other	SE	NW

Casualties:

Class	Severity
Vehicle Passenger	Serious

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300032	13/01/2023	445305	299335	Other	Flood	Daylight	Slight

Location: KIRKBY ROAD BARWELL NORTH OF THE BUNGALOW.

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead other	NE	SW
Taxi/Private hire car	Not at, or within 20M of Jct	Going ahead right bend	SW	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300146	20/02/2023	441754	305638	Other	Wet/Damp	Daylight	Slight
Location:	A447 CROSSROADS WITH LOUNT ROAD, BARLESTONE						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Van / Goods 3.5 tonnes mgw and under	Entering main road	Going ahead other	W	E
Car	Mid Junction - on roundabout or main road	Going ahead other	S	N

Casualties:

Class	Severity
Driver / Rider	Slight

Police_ref	Date	Easting	Northing	Weather	Road_cond	Visibility	Severity
202300385	24/05/2023	444835	298485	Fine without high winds	Dry	Darkness: no street lighting	Slight
Location:	KIRKBY ROAD BARWELL APPROX 150M N THE BROCKEY FARM.						

Vehicles:

Type	Junct_Locn	Manvres	Movef	Movet
Car	Not at, or within 20M of Jct	Going ahead right bend	S	NE

Casualties:

Class	Severity
Driver / Rider	Slight

Number of records in selection: 42

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data

Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Table 1 - Accidents by Month

	2018	2019	2020	2021	2022	2023	Total
January	1	1	1	-	1	1	5
February	2	-	1	-	-	1	4
March	-	3	1	-	-	-	4
April	-	1	-	1	-	-	2
May	-	1	-	-	-	1	2
June	1	2	-	2	-	-	5
July	-	-	-	1	-	-	1
August	-	2	1	1	1	-	5
September	2	2	-	1	-	-	5
October	-	3	-	-	-	-	3
November	-	-	1	1	-	-	2
December	3	-	-	-	1	-	4
TOTAL	9	15	5	7	3	3	42

Table 2 - Casualties by Month

	2018	2019	2020	2021	2022	2023	Total
January	1	2	1	-	1	1	6
February	2	-	2	-	-	1	5
March	-	3	2	-	-	-	5
April	-	1	-	1	-	-	2
May	-	1	-	-	-	1	2
June	2	2	-	2	-	-	6
July	-	-	-	1	-	-	1
August	-	2	2	1	1	-	6
September	4	3	-	1	-	-	8
October	-	4	-	-	-	-	4
November	-	-	1	1	-	-	2
December	5	-	-	-	1	-	6
TOTAL	14	18	8	7	3	3	53

Table 3 - All Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	1	0	0	0	0	1
Serious	3	3	2	3	2	0	13
Slight	6	11	3	4	1	3	28
TOTAL	9	15	5	7	3	3	42

Table 4 - Casualties by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	1	0	0	0	0	1
Serious	4	3	2	3	2	0	14
Slight	10	14	6	4	1	3	38
TOTAL	14	18	8	7	3	3	53

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection:

Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police Ref.	Date	Cas.	Sev.	Cycs	Peds	Ch	OAPs	Vis.	Manv.	Road Cond.	Time	Location
Selected Polygon:Hub Newbold Verdon 27.07.2023												
201800086	27/01/2018	1	Slight	0	1	0	1	Light	No turn	Wet/Damp	1420	MAIN STREETNEWBOLD VERDON OUTSIDE 103
201802006	02/02/2018	1	Serious	0	0	0	1	Light	No turn	Dry	0721	B585 BAGWORTH ROAD NEWBOLD VERDON EXACT LOCATION UNK
201800108	09/02/2018	1	Slight	0	0	0	1	Light	No turn	Dry	1633	ELWELL AVENUE BARWELL JW BARDON ROAD.
201800665	24/06/2018	2	Serious	0	0	0	0	Light	Left	Dry	1825	MILL LANE NEWBOLD VERDON JW ENSTON STREET.
201800918	03/09/2018	3	Serious	0	0	0	1	Light	No turn	Dry	1240	A447 ASHBY ROAD CADEBY JW BOSWORTH LANE.
201800979	19/09/2018	1	Slight	0	0	0	1	Light	No turn	Dry	1515	A447 HINCKLEY ROAD OSBASTON JW BARTON ROAD.
201801309	11/12/2018	2	Slight	0	0	2	0	Light	No turn	Wet/Damp	1530	C5103 DRAGON LANE NEWBOLD VERDON EXACT LOCATION NOT K
201802173	19/12/2018	2	Slight	0	0	0	2	Light	No turn	Dry	1501	C6117 BARTON ROAD BARLESTONE JW GREGORY ROAD.
201801477	24/12/2018	1	Slight	0	1	1	0	Dark	Left	Wet/Damp	1700	KIRKBY ROAD BARWELL JW OXFORD STREET
201900153	22/01/2019	2	Slight	0	0	0	0	Dark	No turn	Frost/Ice	0740	B582 GRANGE LANE NAILSTONE APPROX. 12 METRES FROM WIGGS I
201900224	04/03/2019	1	Slight	0	0	0	0	Light	Right	Dry	1710	C5116 STAPLETON LANE BARWELL JW HIGH STREET
201900157	06/03/2019	1	Serious	1	0	0	0	Dark	No turn	Dry	1821	B585 BOSWORTH LANE OSBASTON EXACT LOCATION UNKNOWN
201900188	13/03/2019	1	Slight	0	0	0	0	Light	No turn	Wet/Damp	0953	A447 ASHBY ROAD PECKLETON APPROX 70M N WOOD VIEW FARM.
201900378	19/04/2019	1	Serious	0	1	1	0	Light	No turn	Dry	1225	B582 BARLESTONE ROAD NEWBOLD VERDON 10M NW DRAGON LAN
201900505	31/05/2019	1	Slight	0	0	0	0	Light	Left	Dry	1929	B585 WOOD ROAD NAILSTONE JW BAGWORTH ROAD
201901559	11/06/2019	1	Slight	0	0	0	1	Light	No turn	Dry	1955	B582 NEWBOLD VERDON JW DRAGON LANE.
201901560	12/06/2019	1	Slight	0	0	0	0	Light	No turn	Dry	1324	B585 BAGWORTH ROAD NAILSTONE EXACT LOCATION UNKNOWN.
201900779	03/08/2019	1	Slight	0	0	0	0	Dark	No turn	Wet/Damp	2309	B585 BAGWORTH ROAD ELLISTOWN JW GRANGE LANE.
201900766	24/08/2019	1	Fatal	0	0	0	0	Light	No turn	Dry	1323	A447 ASHBY ROAD PECKLETON APPROX 1100M S BOSWORTH ROAD
201900850	01/09/2019	2	Slight	0	0	0	0	Dark	Left	Dry	2251	A447 ASHBY RD OSBASTON J/W BOSWORTH RD
201900905	10/09/2019	1	Slight	0	0	0	0	Light	No turn	Dry	1549	C5101 BOSWORTH ROAD PECKLETON APPROX 50M W OF STAPLETO
201900896	17/10/2019	1	Serious	1	0	0	0	Dark	Right	Wet/Damp	0530	C5115 SHILTON ROAD BARWELL JW QUEEN STREET.
201900961	22/10/2019	2	Slight	0	0	0	0	Dark	No turn	Dry	2030	B585 BAGWORTH ROAD NAILSTONE 20M W B582.
201901162	26/10/2019	1	Slight	0	0	0	0	Dark	No turn	Wet/Damp	1944	KIRKBY ROAD BARWELL APPROX 250M N ELWELL AVENUE.
202000129	23/01/2020	1	Slight	0	1	0	0	Dark	Right	Wet/Damp	0640	KIRKBY ROAD, BARWELL, JUNCTION WITH C5116 STAPLETON LAN
202000157	16/02/2020	2	Slight	0	0	0	0	Dark	No turn	Wet/Damp	1850	B585 WOOD ROAD NAILSTONE EXACT LOCATION NOT KNOWN
202000512	19/03/2020	2	Serious	0	0	0	1	Dark	No turn	Dry	1819	B582 HUNTS LANE DESFORD OUTSIDE TUMBLIN FIELDS FARM.
202000581	06/08/2020	2	Slight	0	0	0	1	Light	Left	Dry	1730	B585 BAGWORTH ROAD NAILSTONE JW GRANGE LANE.
202000933	30/11/2020	1	Serious	1	0	0	1	Light	Right	Wet/Damp	1125	BOSWORTH ROAD BARLESTONE JW MEADOW LANE.
202100248	24/04/2021	1	Slight	0	1	0	0	Light	No turn	Dry	1630	LITTLE MILL CLOSE BARLESTONE EXACT LOCATION UNKNOWN.
202100445	18/06/2021	1	Serious	0	0	0	0	Light	No turn	Wet/Damp	1814	KIRKBY ROAD BARWELL APPROX 25M S TOWNEND ROAD.
202100477	27/06/2021	1	Serious	0	0	0	1	Light	No turn	Dry	1645	KIRKBY ROAD BARWELL OUTSIDE NUMBER 5.
202100551	25/07/2021	1	Slight	0	0	0	0	Light	No turn	Dry	1530	C5116 STAPLETON LANE BARWELL EXACT LOCATION UNKNOWN.

Accidents between dates 01/01/2018 and 29/05/2023 (65) months

Selection: Notes:

; Refined using Accidents within selected Polygons -Data
Requests 2023 ("Hub Newbold Verdon 27.07.2023")

Police Ref.	Date	Cas.	Sev.	Cycs	Peds	Ch	OAPs	Vis.	Manv.	Road Cond.	Time	Location
202100610	09/08/2021	1	Slight	0	1	0	0	Light	No turn	Dry	0812	BARDON ROAD BARWELL JW CHARNWOOD ROAD.
202100701	12/09/2021	1	Serious	0	0	0	0	Light	Right	Dry	1442	C5101 MAIN STREET KIRKBY MALLORY (PECKLETON) JW NEWBOL
202100963	24/11/2021	1	Slight	0	0	0	0	Dark	No turn	Wet/Damp	0600	A447 ASHBY ROAD CADEBY S OF BULL IN THE OAK.
202200074	25/01/2022	1	Serious	0	0	0	0	Dark	Right	Wet/Damp	0635	B585 BAGWORTH ROAD BARLESTONE JW HEATH ROAD.
202200706	28/08/2022	1	Slight	0	0	0	0	Light	Right	Dry	1245	B585 BAGWORTH ROAD BARLESTONE JW BARLESTONE ROAD.
202201101	19/12/2022	1	Serious	0	0	0	1	Light	Right	Dry	1415	B582 BARLESTON ROAD NEWBOLD VERNON JW DRAGON LANE.
202300032	13/01/2023	1	Slight	0	0	0	0	Light	No turn	Flood	0800	KIRKBY ROAD BARWELL NORTH OF THE BUNGALOW.
202300146	20/02/2023	1	Slight	0	0	0	0	Light	No turn	Wet/Damp	0720	A447 CROSSROADS WITH LOUNT ROAD, BARLESTONE
202300385	24/05/2023	1	Slight	0	0	0	0	Dark	No turn	Dry	2300	KIRKBY ROAD BARWELL APPROX 150M N THE BROCKEY FARM.

Column Totals 53 3 6 4 13

No. of Accidents 3 6 3 12

Total number of accidents listed: 42

Appendix C

Junction 10 - PICADY Capacity Assessment

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.0.1.1519									
© Copyright TRL Software Limited, 2021									
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: T20517 - Barlestone Rd-Garland Ln-Bagworth Rd PRTM v2.j10

Path: C:\Users\JamesCorbett\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2020\T20517 Brascote Lane, Newbold Verdon\Junction Assessments\Picady\PRTM Flows

Report generation date: 11/08/2023 10:19:02

- »2023 Base, AM
- »2023 Base, PM
- »2024 Growth Base, AM
- »2024 Growth Base, PM
- »2029 Adjusted Base, AM
- »2029 Adjusted Base, PM
- »2029 + Dev Adjusted, AM
- »2029 + Dev Adjusted, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023 Base									
Stream B-C	D1	0.1	7.12	0.09	A	D2	0.1	6.67	0.05	A
Stream B-A		0.5	10.29	0.34	B		0.4	9.38	0.29	A
Stream C-AB		0.2	7.85	0.12	A		0.1	6.95	0.09	A
	2024 Growth Base									
Stream B-C	D3	0.1	7.13	0.09	A	D4	0.1	6.68	0.05	A
Stream B-A		0.5	10.34	0.34	B		0.4	9.42	0.29	A
Stream C-AB		0.2	7.84	0.12	A		0.1	6.95	0.09	A
	2029 Adjusted Base									
Stream B-C	D5	0.1	7.14	0.09	A	D6	0.1	6.78	0.05	A
Stream B-A		0.7	11.10	0.40	B		0.5	9.76	0.31	A
Stream C-AB		0.2	7.00	0.12	A		0.1	6.70	0.07	A
	2029 + Dev Adjusted									
Stream B-C	D7	0.1	7.24	0.09	A	D8	0.1	6.89	0.05	A
Stream B-A		0.7	11.31	0.40	B		0.5	10.30	0.34	B
Stream C-AB		0.2	7.08	0.12	A		0.1	6.61	0.07	A

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

File summary

File Description

Title	Barlestone Road/Garland lane/Bagworth Road
Location	Newbold Verdon
Site number	
Date	03/04/2023
Version	
Status	(new file)
Identifier	
Client	Richborough Estates
Jobnumber	T20517
Enumerator	AzureAD/MaxLaw
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	38.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Growth Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Growth Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2029 Adjusted Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2029 Adjusted Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2029 + Dev Adjusted	AM	ONE HOUR	07:45	09:15	15	✓
D8	2029 + Dev Adjusted	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2023 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.85	A

Arms

Arms

Arm	Name	Description	Arm type
A	Garland Lane		Major
B	Bagworth Road		Minor
C	Barlestone Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.10			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	8.70	6.20	4.60	4.20	✓	3.00	100	80

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	640	0.116	0.292	0.184	0.417
B-C	658	0.101	0.255	-	-
C-B	574	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	198	100.000
B		ONE HOUR	✓	220	100.000
C		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	From A	0	125	73
	From B	173	0	47
	From C	64	57	0

Proportions

	To			
		A	B	C
	From A	0.00	0.63	0.37
	From B	0.79	0.00	0.21
	From C	0.53	0.47	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	From A	0	6	7
	From B	6	0	2
	From C	2	11	0

Average PCU Per Veh

	To			
		A	B	C
	From A	1.000	1.060	1.070
	From B	1.060	1.000	1.020
	From C	1.020	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	149	149
	B	166	166
	C	91	91
08:00-08:15	A	178	178
	B	198	198
	C	109	109
08:15-08:30	A	218	218
	B	242	242
	C	133	133
08:30-08:45	A	218	218
	B	242	242
	C	133	133
08:45-09:00	A	178	178
	B	198	198
	C	109	109
09:00-09:15	A	149	149
	B	166	166
	C	91	91

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	7.12	0.1	A	43	65
B-A	0.34	10.29	0.5	B	159	238
C-AB	0.12	7.85	0.2	A	58	88
C-A					53	79
A-B					115	172
A-C					67	100

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	599	0.059	35	0.0	0.1	6.514	A
B-A	130	33	586	0.222	129	0.0	0.3	8.325	A
C-AB	47	12	575	0.082	46	0.0	0.1	7.505	A
C-A	44	11			44				
A-B	94	24			94				
A-C	55	14			55				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	586	0.072	42	0.1	0.1	6.753	A
B-A	156	39	576	0.270	155	0.3	0.4	9.067	A
C-AB	57	14	575	0.099	57	0.1	0.1	7.650	A
C-A	52	13			52				
A-B	112	28			112				
A-C	66	16			66				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	568	0.091	52	0.1	0.1	7.115	A
B-A	190	48	561	0.339	190	0.4	0.5	10.259	B
C-AB	72	18	576	0.124	71	0.1	0.2	7.848	A
C-A	62	15			62				
A-B	138	34			138				
A-C	80	20			80				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	567	0.091	52	0.1	0.1	7.119	A
B-A	190	48	561	0.339	190	0.5	0.5	10.292	B
C-AB	72	18	576	0.124	72	0.2	0.2	7.848	A
C-A	62	15			62				
A-B	138	34			138				
A-C	80	20			80				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	588	0.072	42	0.1	0.1	8.782	A
B-A	156	39	576	0.270	156	0.5	0.4	9.109	A
C-AB	57	14	575	0.099	57	0.2	0.1	7.644	A
C-A	52	13			52				
A-B	112	28			112				
A-C	66	16			66				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	598	0.059	35	0.1	0.1	6.529	A
B-A	130	33	586	0.222	131	0.4	0.3	8.385	A
C-AB	47	12	575	0.082	47	0.1	0.1	7.511	A
C-A	44	11			44				
A-B	94	24			94				
A-C	55	14			55				

2023 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	246	100.000
B		ONE HOUR	✓	175	100.000
C		ONE HOUR	✓	123	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	188	58
	B	150	0	25
From	C	85	38	0

Proportions

	To			
		A	B	C
	A	0.00	0.76	0.24
	B	0.86	0.00	0.14
From	C	0.69	0.31	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	1	0
	B	5	0	0
From	C	0	3	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.010	1.000
	B	1.050	1.000	1.000
From	C	1.000	1.030	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	185	185
	B	132	132
	C	93	93
17:00-17:15	A	221	221
	B	157	157
	C	111	111
17:15-17:30	A	271	271
	B	193	193
	C	135	135
17:30-17:45	A	271	271
	B	193	193
	C	135	135
17:45-18:00	A	221	221
	B	157	157
	C	111	111
18:00-18:15	A	185	185
	B	132	132
	C	93	93

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	6.67	0.1	A	23	34
B-A	0.29	9.38	0.4	A	138	206
C-AB	0.09	6.95	0.1	A	41	61
C-A					72	109
A-B					173	259
A-C					53	80

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	595	0.032	19	0.0	0.0	6.245	A
B-A	113	28	593	0.190	112	0.0	0.2	7.845	A
C-AB	32	8	578	0.056	32	0.0	0.1	6.764	A
C-A	60	15			60				
A-B	142	35			142				
A-C	44	11			44				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	583	0.039	22	0.0	0.0	6.416	A
B-A	135	34	582	0.232	135	0.2	0.3	8.436	A
C-AB	39	10	579	0.068	39	0.1	0.1	6.843	A
C-A	71	18			71				
A-B	169	42			169				
A-C	52	13			52				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	567	0.049	27	0.0	0.1	6.668	A
B-A	165	41	568	0.291	165	0.3	0.4	9.361	A
C-AB	50	12	581	0.086	50	0.1	0.1	6.951	A
C-A	85	21			85				
A-B	207	52			207				
A-C	64	16			64				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	567	0.049	28	0.1	0.1	6.670	A
B-A	165	41	568	0.291	165	0.4	0.4	9.362	A
C-AB	50	12	581	0.086	50	0.1	0.1	6.951	A
C-A	85	21			85				
A-B	207	52			207				
A-C	64	16			64				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	583	0.039	23	0.1	0.0	6.422	A
B-A	135	34	582	0.232	135	0.4	0.3	8.465	A
C-AB	39	10	579	0.068	40	0.1	0.1	6.844	A
C-A	71	18			71				
A-B	169	42			169				
A-C	52	13			52				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	595	0.032	19	0.0	0.0	6.252	A
B-A	113	28	593	0.191	113	0.3	0.2	7.889	A
C-AB	32	8	578	0.056	32	0.1	0.1	6.770	A
C-A	60	15			60				
A-B	142	35			142				
A-C	44	11			44				

2024 Growth Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.85	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Growth Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	200	100.000
B		ONE HOUR	✓	221	100.000
C		ONE HOUR	✓	122	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	126	74
	B	174	0	47
From	C	65	57	0

Proportions

	To			
		A	B	C
	A	0.00	0.63	0.37
	B	0.79	0.00	0.21
From	C	0.53	0.47	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	7
	B	6	0	2
From	C	2	11	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.060	1.070
	B	1.060	1.000	1.020
From	C	1.020	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	151	151
	B	166	166
	C	92	92
08:00-08:15	A	180	180
	B	199	199
	C	110	110
08:15-08:30	A	220	220
	B	243	243
	C	134	134
08:30-08:45	A	220	220
	B	243	243
	C	134	134
08:45-09:00	A	180	180
	B	199	199
	C	110	110
09:00-09:15	A	151	151
	B	166	166
	C	92	92

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	7.13	0.1	A	43	65
B-A	0.34	10.34	0.5	B	160	239
C-AB	0.12	7.84	0.2	A	59	88
C-A					53	80
A-B					116	173
A-C					68	102

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	598	0.059	35	0.0	0.1	6.521	A
B-A	131	33	586	0.224	130	0.0	0.3	8.345	A
C-AB	47	12	575	0.082	46	0.0	0.1	7.502	A
C-A	45	11			45				
A-B	95	24			95				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	585	0.072	42	0.1	0.1	8.782	A
B-A	156	39	575	0.272	156	0.3	0.4	9.095	A
C-AB	57	14	575	0.099	57	0.1	0.1	7.847	A
C-A	53	13			53				
A-B	113	28			113				
A-C	67	17			67				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	567	0.091	52	0.1	0.1	7.128	A
B-A	192	48	561	0.342	191	0.4	0.5	10.302	B
C-AB	72	18	576	0.125	72	0.1	0.2	7.845	A
C-A	63	16			63				
A-B	139	35			139				
A-C	81	20			81				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	567	0.091	52	0.1	0.1	7.132	A
B-A	192	48	561	0.342	192	0.5	0.5	10.337	B
C-AB	72	18	576	0.125	72	0.2	0.2	7.841	A
C-A	63	16			63				
A-B	139	35			139				
A-C	81	20			81				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	585	0.072	42	0.1	0.1	8.772	A
B-A	156	39	575	0.272	157	0.5	0.4	9.138	A
C-AB	57	14	575	0.099	57	0.2	0.1	7.638	A
C-A	53	13			53				
A-B	113	28			113				
A-C	67	17			67				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	597	0.059	35	0.1	0.1	8.537	A
B-A	131	33	586	0.224	131	0.4	0.3	8.405	A
C-AB	47	12	575	0.082	47	0.1	0.1	7.511	A
C-A	45	11			45				
A-B	95	24			95				
A-C	58	14			58				

2024 Growth Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.46	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Growth Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	248	100.000
B		ONE HOUR	✓	176	100.000
C		ONE HOUR	✓	124	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	190	58
	B	151	0	25
From	C	86	38	0

Proportions

	To			
		A	B	C
	A	0.00	0.77	0.23
	B	0.86	0.00	0.14
From	C	0.69	0.31	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	1	0
	B	5	0	0
From	C	0	3	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.010	1.000
	B	1.050	1.000	1.000
From	C	1.000	1.030	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	187	187
	B	133	133
	C	93	93
17:00-17:15	A	223	223
	B	158	158
	C	111	111
17:15-17:30	A	273	273
	B	194	194
	C	137	137
17:30-17:45	A	273	273
	B	194	194
	C	137	137
17:45-18:00	A	223	223
	B	158	158
	C	111	111
18:00-18:15	A	187	187
	B	133	133
	C	93	93

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	6.68	0.1	A	23	34
B-A	0.29	9.42	0.4	A	139	208
C-AB	0.09	6.95	0.1	A	41	61
C-A					73	110
A-B					174	262
A-C					53	80

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	595	0.032	19	0.0	0.0	6.249	A
B-A	114	28	593	0.192	113	0.0	0.2	7.862	A
C-AB	32	8	578	0.056	32	0.0	0.1	6.762	A
C-A	61	15			61				
A-B	143	36			143				
A-C	44	11			44				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	583	0.039	22	0.0	0.0	6.422	A
B-A	136	34	582	0.233	135	0.2	0.3	8.459	A
C-AB	39	10	579	0.068	39	0.1	0.1	6.841	A
C-A	72	18			72				
A-B	171	43			171				
A-C	52	13			52				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	567	0.049	27	0.0	0.1	6.676	A
B-A	166	42	568	0.293	166	0.3	0.4	9.397	A
C-AB	50	13	581	0.086	50	0.1	0.1	6.948	A
C-A	86	22			86				
A-B	209	52			209				
A-C	64	16			64				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	567	0.049	28	0.1	0.1	6.678	A
B-A	166	42	568	0.293	166	0.4	0.4	9.418	A
C-AB	50	13	581	0.086	50	0.1	0.1	6.947	A
C-A	86	22			86				
A-B	209	52			209				
A-C	64	16			64				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	583	0.039	23	0.1	0.0	6.425	A
B-A	136	34	582	0.233	136	0.4	0.3	8.487	A
C-AB	39	10	579	0.068	40	0.1	0.1	6.842	A
C-A	72	18			72				
A-B	171	43			171				
A-C	52	13			52				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	594	0.032	19	0.0	0.0	6.259	A
B-A	114	28	592	0.192	114	0.3	0.3	7.904	A
C-AB	32	8	578	0.056	32	0.1	0.1	6.788	A
C-A	61	15			61				
A-B	143	36			143				
A-C	44	11			44				

2029 Adjusted Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.14	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 Adjusted Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	251	100.000
C		ONE HOUR	✓	189	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	151	9
	B	204	0	47
	C	134	55	0

Proportions

	To			
	A	B	C	
From	A	0.00	0.94	0.06
	B	0.81	0.00	0.19
	C	0.71	0.29	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	6	7
	B	6	0	2
	C	2	11	0

Average PCU Per Veh

	To			
	A	B	C	
From	A	1.000	1.060	1.070
	B	1.060	1.000	1.020
	C	1.020	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	120	120
	B	189	189
	C	142	142
08:00-08:15	A	144	144
	B	226	226
	C	170	170
08:15-08:30	A	176	176
	B	276	276
	C	208	208
08:30-08:45	A	176	176
	B	276	276
	C	208	208
08:45-09:00	A	144	144
	B	226	226
	C	170	170
09:00-09:15	A	120	120
	B	189	189
	C	142	142

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	7.14	0.1	A	43	65
B-A	0.40	11.10	0.7	B	187	281
C-AB	0.12	7.00	0.2	A	63	95
C-A					110	165
A-B					139	208
A-C					8	12

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	598	0.059	35	0.0	0.1	6.518	A
B-A	154	38	592	0.259	152	0.0	0.4	8.645	A
C-AB	49	12	618	0.080	49	0.0	0.1	6.926	A
C-A	93	23			93				
A-B	114	28			114				
A-C	7	2			7				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	588	0.072	42	0.1	0.1	6.758	A
B-A	183	48	582	0.315	183	0.4	0.5	9.547	A
C-AB	81	15	626	0.098	81	0.1	0.1	6.961	A
C-A	109	27			109				
A-B	136	34			136				
A-C	8	2			8				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	588	0.091	52	0.1	0.1	7.135	A
B-A	225	56	588	0.395	224	0.5	0.7	11.052	B
C-AB	79	20	639	0.124	79	0.1	0.2	7.005	A
C-A	129	32			129				
A-B	166	42			166				
A-C	10	2			10				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	588	0.091	52	0.1	0.1	7.140	A
B-A	225	56	588	0.395	225	0.7	0.7	11.104	B
C-AB	79	20	639	0.124	79	0.2	0.2	7.000	A
C-A	129	32			129				
A-B	166	42			166				
A-C	10	2			10				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	588	0.072	42	0.1	0.1	6.768	A
B-A	183	48	582	0.315	184	0.7	0.5	9.613	A
C-AB	81	15	626	0.098	82	0.2	0.2	6.945	A
C-A	109	27			109				
A-B	136	34			136				
A-C	8	2			8				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	588	0.059	35	0.1	0.1	6.535	A
B-A	154	38	592	0.259	154	0.5	0.4	8.725	A
C-AB	50	12	618	0.080	50	0.2	0.1	6.931	A
C-A	93	23			93				
A-B	114	28			114				
A-C	7	2			7				

2029 Adjusted Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.17	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2029 Adjusted Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	294	100.000
B		ONE HOUR	✓	184	100.000
C		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	238	56
	B	159	0	25
From	C	109	28	0

Proportions

	To			
		A	B	C
	A	0.00	0.81	0.19
	B	0.88	0.00	0.14
From	C	0.80	0.20	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	1	0
	B	5	0	0
From	C	0	3	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.010	1.000
	B	1.050	1.000	1.000
From	C	1.000	1.030	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	221	221
	B	139	139
	C	103	103
17:00-17:15	A	264	264
	B	165	165
	C	123	123
17:15-17:30	A	324	324
	B	203	203
	C	151	151
17:30-17:45	A	324	324
	B	203	203
	C	151	151
17:45-18:00	A	264	264
	B	165	165
	C	123	123
18:00-18:15	A	221	221
	B	139	139
	C	103	103

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	6.78	0.1	A	23	34
B-A	0.31	9.76	0.5	A	146	219
C-AB	0.07	6.70	0.1	A	31	47
C-A					95	142
A-B					218	328
A-C					51	77

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	589	0.032	19	0.0	0.0	6.307	A
B-A	120	30	589	0.203	119	0.0	0.3	8.018	A
C-AB	25	6	583	0.042	24	0.0	0.1	6.607	A
C-A	79	20			79				
A-B	179	45			179				
A-C	42	11			42				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	577	0.039	22	0.0	0.0	6.495	A
B-A	143	36	578	0.247	143	0.3	0.3	8.678	A
C-AB	30	8	585	0.052	30	0.1	0.1	6.650	A
C-A	93	23			93				
A-B	214	53			214				
A-C	50	13			50				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	559	0.049	27	0.0	0.1	6.776	A
B-A	175	44	562	0.311	175	0.3	0.5	9.733	A
C-AB	39	10	589	0.066	39	0.1	0.1	6.702	A
C-A	112	28			112				
A-B	262	66			262				
A-C	62	15			62				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	559	0.049	28	0.1	0.1	6.778	A
B-A	175	44	562	0.311	175	0.5	0.5	9.758	A
C-AB	39	10	589	0.066	39	0.1	0.1	6.703	A
C-A	112	28			112				
A-B	262	66			262				
A-C	62	15			62				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	578	0.039	23	0.1	0.0	6.502	A
B-A	143	36	578	0.247	143	0.5	0.3	8.712	A
C-AB	30	8	585	0.052	30	0.1	0.1	6.647	A
C-A	93	23			93				
A-B	214	53			214				
A-C	50	13			50				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	589	0.032	19	0.0	0.0	6.315	A
B-A	120	30	589	0.203	120	0.3	0.3	8.066	A
C-AB	25	6	583	0.042	25	0.1	0.1	6.611	A
C-A	79	20			79				
A-B	179	45			179				
A-C	42	11			42				

2029 + Dev Adjusted, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.94	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 + Dev Adjusted	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	192	100.000
B		ONE HOUR	✓	249	100.000
C		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	159	33
	B	202	0	47
From	C	134	54	0

Proportions

	To			
		A	B	C
	A	0.00	0.83	0.17
	B	0.81	0.00	0.19
From	C	0.71	0.29	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	7
	B	6	0	2
From	C	2	11	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.060	1.070
	B	1.060	1.000	1.020
From	C	1.020	1.110	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A	145	145
	B	187	187
	C	142	142
08:00-08:15	A	173	173
	B	224	224
	C	169	169
08:15-08:30	A	211	211
	B	274	274
	C	207	207
08:30-08:45	A	211	211
	B	274	274
	C	207	207
08:45-09:00	A	173	173
	B	224	224
	C	169	169
09:00-09:15	A	145	145
	B	187	187
	C	142	142

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	7.24	0.1	A	43	65
B-A	0.40	11.31	0.7	B	185	278
C-AB	0.12	7.08	0.2	A	62	93
C-A					110	165
A-B					146	219
A-C					30	45

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	593	0.060	35	0.0	0.1	6.573	A
B-A	152	38	586	0.259	151	0.0	0.4	8.730	A
C-AB	49	12	612	0.079	48	0.0	0.1	6.977	A
C-A	93	23			93				
A-B	120	30			120				
A-C	25	6			25				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	580	0.073	42	0.1	0.1	8.830	A
B-A	182	45	575	0.316	181	0.4	0.5	9.873	A
C-AB	60	15	620	0.097	60	0.1	0.1	7.022	A
C-A	109	27			109				
A-B	143	36			143				
A-C	30	7			30				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	559	0.093	52	0.1	0.1	7.235	A
B-A	222	56	580	0.397	222	0.5	0.7	11.253	B
C-AB	78	19	632	0.123	78	0.1	0.2	7.079	A
C-A	129	32			129				
A-B	175	44			175				
A-C	36	9			36				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	13	559	0.093	52	0.1	0.1	7.240	A
B-A	222	56	580	0.397	222	0.7	0.7	11.308	B
C-AB	78	19	632	0.123	78	0.2	0.2	7.074	A
C-A	129	32			129				
A-B	175	44			175				
A-C	36	9			36				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	579	0.073	42	0.1	0.1	8.838	A
B-A	182	45	575	0.316	182	0.7	0.5	9.736	A
C-AB	60	15	620	0.097	61	0.2	0.2	7.008	A
C-A	109	27			109				
A-B	143	36			143				
A-C	30	7			30				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	593	0.080	35	0.1	0.1	8.590	A
B-A	152	38	586	0.259	153	0.5	0.4	8.812	A
C-AB	49	12	613	0.080	49	0.2	0.1	8.981	A
C-A	93	23			93				
A-B	120	30			120				
A-C	25	6			25				

2029 + Dev Adjusted, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.35	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 + Dev Adjusted	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	303	100.000
B		ONE HOUR	✓	198	100.000
C		ONE HOUR	✓	150	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	239	64
	B	173	0	25
From	C	122	28	0

Proportions

	To			
		A	B	C
	A	0.00	0.79	0.21
	B	0.87	0.00	0.13
From	C	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	1	0
	B	5	0	0
From	C	0	3	0

Average PCU Per Veh

	To			
		A	B	C
	A	1.000	1.010	1.000
	B	1.050	1.000	1.000
From	C	1.000	1.030	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A	228	228
	B	149	149
	C	113	113
17:00-17:15	A	272	272
	B	178	178
	C	135	135
17:15-17:30	A	334	334
	B	218	218
	C	165	165
17:30-17:45	A	334	334
	B	218	218
	C	165	165
17:45-18:00	A	272	272
	B	178	178
	C	135	135
18:00-18:15	A	228	228
	B	149	149
	C	113	113

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	6.89	0.1	A	23	34
B-A	0.34	10.30	0.5	B	159	238
C-AB	0.07	6.61	0.1	A	32	48
C-A					106	159
A-B					219	329
A-C					59	88

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	584	0.032	19	0.0	0.0	6.366	A
B-A	130	33	586	0.222	129	0.0	0.3	8.252	A
C-AB	25	6	589	0.042	25	0.0	0.1	6.544	A
C-A	88	22			88				
A-B	180	45			180				
A-C	48	12			48				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	8	570	0.039	22	0.0	0.0	8.571	A
B-A	158	39	574	0.271	155	0.3	0.4	9.018	A
C-AB	31	8	592	0.052	31	0.1	0.1	8.573	A
C-A	104	28			104				
A-B	215	54			215				
A-C	58	14			58				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	550	0.050	27	0.0	0.1	8.884	A
B-A	190	48	558	0.342	190	0.4	0.5	10.262	B
C-AB	40	10	597	0.067	40	0.1	0.1	8.614	A
C-A	125	31			125				
A-B	283	68			283				
A-C	70	18			70				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	550	0.050	28	0.1	0.1	8.888	A
B-A	190	48	558	0.342	190	0.5	0.5	10.297	B
C-AB	40	10	597	0.067	40	0.1	0.1	8.613	A
C-A	125	31			125				
A-B	283	68			283				
A-C	70	18			70				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	8	570	0.039	23	0.1	0.0	8.575	A
B-A	158	39	574	0.271	156	0.5	0.4	9.060	A
C-AB	31	8	592	0.052	31	0.1	0.1	8.570	A
C-A	104	28			104				
A-B	215	54			215				
A-C	58	14			58				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	19	5	584	0.032	19	0.0	0.0	8.374	A
B-A	130	33	586	0.222	131	0.4	0.3	8.311	A
C-AB	25	8	589	0.043	25	0.1	0.1	8.549	A
C-A	88	22			88				
A-B	180	45			180				
A-C	48	12			48				

Appendix D

Junction Flow Matrices

Garland Lane/Bagworth Road/Barlestone Road

Junctions 10 Arms

A B585 (Garland Ln)
B B585 (Bagworth Rd)
C B585 (Barlestone Rd)

Hinckley & Bosworth TEMPro

2023 - 2024 AM: 1.0083
2023 - 2024 PM: 1.0082

Method 1: Absolute Change

Method 1: Absolute Change

2024 Growth Base Flows			
From/To	A	B	C
A	0	126	74
B	174	0	47
C	65	57	0

2024 Growth Base Flows			
From/To	A	B	C
A	0	190	58
B	151	0	25
C	86	38	0

Junctions 10 Arms

AM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	223	337
B	357	0	116
C	194	92	0

From/To	A	B	C
A			
B			
C			

From/To	A	B	C
A			
B			
C			

PM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	414	286
B	323	0	110
C	342	101	0

From/To	A	B	C
A			
B			
C			

From/To	A	B	C
A			
B			
C			

2023 Base Observed Flows			
From/To	A	B	C
A	0	125	73
B	173	0	47
C	64	57	0

2023 Base Observed Flows			
From/To	A	B	C
A	0	188	58
B	150	0	25
C	85	38	0

AM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A	0	235	270
B	319	0	148
C	179	102	0

AM Peak

PRTM 2021/2024 Differences			
From/To	A	B	C
A			
B			
C			

AM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	126	74
B	174	0	47
C	65	57	0

PM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A	0	419	244
B	349	0	168
C	330	106	0

PM Peak

PRTM 2021/2026 Differences			
From/To	A	B	C
A			
B			
C			

PM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	190	58
B	151	0	25
C	86	38	0

AM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	0	260	205
B	349	0	80
C	248	100	0

AM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	25	-65
B	30	0	-68
C	69	-2	0

AM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	151	9
B	204	0	47
C	134	55	0

PM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	0	467	242
B	357	0	75
C	353	96	0

PM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	48	-2
B	8	0	-93
C	23	-10	0

PM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	238	56
B	159	0	25
C	109	28	0

AM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A	0	268	229
B	347	0	80
C	248	99	0

AM Peak

PRTM 2024/2029 + Development Difference			
From/To	A	B	C
A	0	33	-41
B	28	0	-68
C	69	-3	0

AM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	159	33
B	202	0	47
C	134	54	0

PM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A	0	468	250
B	371	0	76
C	366	96	0

PM Peak

PRTM 2024/2029 + Development Difference			
From/To	A	B	C
A	0	49	6
B	22	0	-92
C	36	-10	0

PM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	239	64
B	173	0	25
C	122	28	0

543

548

600

615

629

651

A447/Bosworth Road

Junctions 10 Arms

A A447 (N)
B Bosworth Road
C A447 (S)

Hinckley & Bosworth TEMPro
2023 - 2024 AM: 1.0083
2023 - 2024 PM: 1.0082

Method 1: Absolute Change

Method 1: Absolute Change

AM Peak (PCUs)

2024 Growth Base Flows			
From/To	A	B	C
A	0	176	577
B	153	0	46
C	456	24	0

HGV % Base			
From/To	A	B	C
A	0%	3%	6%
B	1%	0%	2%
C	6%	0%	0%

PM Peak (PCUs)

2024 Growth Base Flows			
From/To	A	B	C
A	0	115	448
B	101	0	37
C	482	39	0

HGV % Base			
From/To	A	B	C
A	0%	0%	2%
B	1%	0%	8%
C	2%	0%	0%

2023 Base Observed Flows			
From/To	A	B	C
A	0	175	572
B	152	0	46
C	452	24	0

AM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	358	548
B	219	0	135
C	674	75	0

From/To	A	B	C
A			
B			
C			

From/To	A	B	C
A			
B			
C			

PM Peak (PCUs)

2023 Base Observed Flows			
From/To	A	B	C
A	0	114	444
B	100	0	37
C	478	39	0

PM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	238	576
B	331	0	111
C	536	103	0

From/To	A	B	C
A			
B			
C			

From/To	A	B	C
A			
B			
C			

AM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A	0	478	533
B	279	0	162
C	666	75	0

AM Peak

PRTM 2021/2024 Differences			
From/To	A	B	C
A			
B			
C			

AM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	176	577
B	153	0	46
C	456	24	0

PM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A	0	313	576
B	354	0	123
C	520	170	0

PM Peak

PRTM 2021/2026 Differences			
From/To	A	B	C
A			
B			
C			

PM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	115	448
B	101	0	37
C	482	39	0

AM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	0	471	456
B	336	0	109
C	553	77	0

AM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	-7	-77
B	57	0	-53
C	-113	2	0

AM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	169	500
B	210	0	46
C	343	26	0

PM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	0	389	479
B	394	0	73
C	443	177	0

PM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	76	-97
B	40	0	-50
C	-77	7	0

PM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	191	351
B	141	0	37
C	405	46	0

AM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A	0	473	434
B	342	0	134
C	553	79	0

AM Peak

PRTM 2024/2029 + Development Difference			
From/To	A	B	C
A	0	-5	-99
B	63	0	-28
C	-113	4	0

AM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	171	478
B	216	0	18
C	343	28	0

PM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A	0	393	462
B	384	0	82
C	424	205	0

PM Peak

PRTM 2024/2029 + Development Difference			
From/To	A	B	C
A	0	80	-114
B	30	0	-41
C	-96	35	0

PM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	195	334
B	131	0	37
C	386	74	0

1433

1222

1295

1171

1255

1157

Main Street/Dragon Lane

Junctions 10 Arms

- AMain Street (E)
- BMain Street (W)
- CDragon Lane

Hinckley & Bosworth TEMPro

2023 - 2024 AM:1.0083

2023 - 2024 PM:1.0082

Method 1: Absolute Change

Method 1: Absolute Change

2024 Growth Base Flows			
From/To	A	B	C
A	0	3	105
B	5	0	11
C	97	1	0

HGV % Base			
From/To	A	B	C
A	0%	0%	6%
B	0%	0%	18%
C	3%	0%	0%

2024 Growth Base Flows			
From/To	A	B	C
A	0	7	70
B	4	0	2
C	85	5	0

HGV % Base			
From/To	A	B	C
A	0%	0%	1%
B	0%	0%	0%
C	2%	0%	0%

Junctions 10 Arms

2023 Base Observed Flows			
From/To	A	B	C
A	0	3	104
B	5	0	11
C	96	1	0

AM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	0	59
B	0	0	0
C	7	0	0

2023 Base Observed Flows			
From/To	A	B	C
A	0	7	69
B	4	0	2
C	84	5	0

PM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	0	42
B	0	0	0
C	77	0	0

AM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A	0	0	55
B	0	0	0
C	10	0	0

AM Peak

PRTM 2021/2024 Differences			
From/To	A	B	C
A			
B			
C			

AM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	3	105
B	5	0	11
C	97	1	0

PM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A	0	0	49
B	0	0	0
C	73	0	0

PM Peak

PRTM 2021/2026 Differences			
From/To	A	B	C
A			
B			
C			

PM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	7	70
B	4	0	2
C	85	5	0

AM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	0	0	83
B	0	0	0
C	20	0	0

AM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	0	28
B	0	0	0
C	10	0	0

AM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	3	133
B	5	0	11
C	107	1	0

PM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	0	0	76
B	0	0	0
C	83	0	0

PM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	0	27
B	0	0	0
C	10	0	0

PM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	7	97
B	4	0	2
C	95	5	0

AM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A	0	0	140
B	0	0	0
C	41	0	0

AM Peak

PRTM 2024/2029 + Development Difference			
From/To	A	B	C
A	0	0	85
B	0	0	0
C	31	0	0

AM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	3	190
B	5	0	11
C	128	1	0

PM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A	0	0	97
B	0	0	0
C	149	0	0

PM Peak

PRTM 2024/2029 + Development Difference			
From/To	A	B	C
A	0	0	48
B	0	0	0
C	76	0	0

PM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	7	118
B	4	0	2
C	161	5	0

222

172

260

209

338

296

Church Road/Barwell Lane

Junctions 10 Arms

- AChurch Road (E)
- BBarwell Ln
- CChurch Road (W)

Hinckley & Bosworth TEMPro
2023 - 2024 AM:1.0083
2023 - 2024 PM:1.0082

Method 1: Absolute Change

Method 1: Absolute Change

2024 Growth Base Flows			
From/To	A	B	C
A	0	52	19
B	60	0	5
C	19	3	0

HGV % Base			
From/To	A	B	C
A	0%	0%	0%
B	0%	0%	0%
C	11%	0%	0%

2024 Growth Base Flows			
From/To	A	B	C
A	0	69	20
B	26	0	6
C	12	1	0

HGV % Base			
From/To	A	B	C
A	0%	0%	10%
B	0%	0%	0%
C	8%	0%	0%

2023 Base Observed Flows			
From/To	A	B	C
A	0	52	19
B	60	0	5
C	19	3	0

AM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A	0	52	0
B	110	0	
C			0

2023 Base Observed Flows			
From/To	A	B	C
A	0	68	20
B	26	0	6
C	12	1	0

PM Peak (PCUs)

2021 Base PRTM Model			
From/To	A	B	C
A		157	
B	90		
C			

AM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A		46	
B	128		
C			

AM Peak

PRTM 2021/2024 Differences			
From/To	A	B	C
A			
B			
C			

AM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	52	19
B	60	0	5
C	19	3	0

PM Peak (PCUs)

2024 Base PRTM Model			
From/To	A	B	C
A		88	
B	137		
C			

PM Peak

PRTM 2021/2026 Differences			
From/To	A	B	C
A			
B			
C			

PM Peak

2024 Base Adjusted Flows			
From/To	A	B	C
A	0	69	20
B	26	0	6
C	12	1	0

AM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A		89	
B	152		
C			

AM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	43	0
B	24	0	0
C	0	0	0

AM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	95	19
B	84	0	5
C	19	3	0

PM Peak (PCUs)

2029 Base PRTM Model			
From/To	A	B	C
A	120		
B	173		
C			

PM Peak

PRTM 2024/2029 Differences			
From/To	A	B	C
A	0	32	0
B	36	0	0
C	0	0	0

PM Peak

2029 Base Adjusted Flows			
From/To	A	B	C
A	0	101	20
B	62	0	6
C	12	1	0

AM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A		132	
B	157		
C			

AM Peak

PRTM 2024/2029 + Development Differences			
From/To	A	B	C
A	0	86	0
B	29	0	0
C	0	0	0

AM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	138	19
B	89	0	5
C	19	3	0

PM Peak (PCUs)

2029 Base + Development PRTM Model			
From/To	A	B	C
A		143	
B	191		
C			

PM Peak

PRTM 2024/2029 + Development Differences			
From/To	A	B	C
A	0	55	0
B	54	0	0
C	0	0	0

PM Peak

2029 Base + Development Adjusted Flows			
From/To	A	B	C
A	0	124	20
B	80	0	6
C	12	1	0

159

134

226

202

274

243

Appendix E

Junction 23 - PICADY Capacity Assessment

Junctions 10									
PICADY 10 - Priority Intersection Module									
Version: 10.0.1.1519									
© Copyright TRL Software Limited, 2021									
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: T20517 - A447-Bosworth Rd PRTM.j10

Path: C:\Users\JamesCorbett\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2020\T20517 Brascote Lane, Newbold Verdon\Junction Assessments\Picady\PRTM Flows

Report generation date: 11/07/2023 10:42:40

- »2023 Base, AM
- »2023 Base, PM
- »2024 Growth Base, AM
- »2024 Growth Base, PM
- »2029 Adjusted Base, AM
- »2029 Adjusted Base, PM
- »2029 + Dev Adjusted, AM
- »2029 + Dev Adjusted, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023 Base									
Stream B-C	D1	0.2	11.27	0.13	B	D2	0.1	8.55	0.08	A
Stream B-A		1.1	24.41	0.53	C		0.5	15.20	0.32	C
Stream C-AB		0.1	4.84	0.07	A		0.3	4.61	0.11	A
	2024 Growth Base									
Stream B-C	D3	0.2	11.44	0.14	B	D4	0.1	8.60	0.08	A
Stream B-A		1.1	24.98	0.54	C		0.5	15.40	0.32	C
Stream C-AB		0.1	4.83	0.07	A		0.3	4.60	0.11	A
	2029 Adjusted Base									
Stream B-C	D5	0.2	13.50	0.16	B	D6	0.1	9.04	0.09	A
Stream B-A		1.8	28.55	0.65	D		0.7	16.15	0.41	C
Stream C-AB		0.1	5.09	0.07	A		0.3	4.84	0.12	A
	2029 + Dev Adjusted									
Stream B-C	D7	0.1	12.46	0.06	B	D8	0.1	8.74	0.08	A
Stream B-A		1.8	28.25	0.65	D		0.6	15.68	0.38	C
Stream C-AB		0.1	5.08	0.08	A		0.4	5.29	0.19	A

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

File summary

File Description

Title	A447/Bosworth Road
Location	Newbold Verdon
Site number	
Date	03/04/2023
Version	
Status	(new file)
Identifier	
Client	Richborough Estates
Jobnumber	T20517
Enumerator	AzureAD/MaxLaw
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	38.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Growth Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Growth Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2029 Adjusted Base	AM	ONE HOUR	07:45	09:15	15	✓
D6	2029 Adjusted Base	PM	ONE HOUR	16:45	18:15	15	✓
D7	2029 + Dev Adjusted	AM	ONE HOUR	07:45	09:15	15	✓
D8	2029 + Dev Adjusted	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2023 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.15	A

Arms

Arms

Arm	Name	Description	Arm type
A	A447 (N)		Major
B	Bosworth Road		Minor
C	A447 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.80			240.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.20	4.00	3.20	3.20	✓	1.00	80	80

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	600	0.105	0.267	0.168	0.381
B-C	689	0.102	0.258	-	-
C-B	713	0.267	0.267	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	747	100.000
B		ONE HOUR	✓	198	100.000
C		ONE HOUR	✓	478	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	175	572
	B	152	0	48
	C	452	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	3	8
	B	1	0	2
	C	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.13	11.27	0.2	B	42	63
B-A	0.53	24.41	1.1	C	139	209
C-AB	0.07	4.84	0.1	A	48	69
C-A					391	586
A-B					161	241
A-C					525	787

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	514	0.067	34	0.0	0.1	7.642	A
B-A	114	29	407	0.281	113	0.0	0.4	12.311	B
C-AB	32	8	797	0.040	31	0.0	0.1	4.818	A
C-A	327	82			327				
A-B	132	33			132				
A-C	431	108			431				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	467	0.089	41	0.1	0.1	8.626	A
B-A	137	34	369	0.370	136	0.4	0.6	15.552	C
C-AB	43	11	820	0.052	43	0.1	0.1	4.760	A
C-A	385	96			385				
A-B	157	39			157				
A-C	514	129			514				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	379	0.133	50	0.1	0.2	11.153	B
B-A	167	42	316	0.530	165	0.6	1.1	23.822	C
C-AB	63	16	855	0.074	63	0.1	0.1	4.693	A
C-A	461	115			461				
A-B	193	48			193				
A-C	630	157			630				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	376	0.135	51	0.2	0.2	11.271	B
B-A	167	42	316	0.530	167	1.1	1.1	24.407	C
C-AB	64	16	855	0.074	64	0.1	0.1	4.707	A
C-A	461	115			461				
A-B	193	48			193				
A-C	630	157			630				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	464	0.089	42	0.2	0.1	8.697	A
B-A	137	34	369	0.370	139	1.1	0.6	15.924	C
C-AB	43	11	820	0.052	43	0.1	0.1	4.786	A
C-A	385	96			385				
A-B	157	39			157				
A-C	514	129			514				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	513	0.068	35	0.1	0.1	7.684	A
B-A	114	29	407	0.281	115	0.6	0.4	12.510	B
C-AB	32	8	797	0.040	32	0.1	0.1	4.836	A
C-A	327	82			327				
A-B	132	33			132				
A-C	431	108			431				

2023 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.82	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	558	100.000
B		ONE HOUR	✓	137	100.000
C		ONE HOUR	✓	517	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	114	444
	B	100	0	37
	C	478	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	2
	B	1	0	8
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	8.55	0.1	A	34	51
B-A	0.32	15.20	0.5	C	92	138
C-AB	0.11	4.61	0.3	A	74	111
C-A					400	600
A-B					105	157
A-C					407	611

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	571	0.049	28	0.0	0.1	7.143	A
B-A	75	19	428	0.176	74	0.0	0.2	10.255	B
C-AB	51	13	841	0.061	51	0.0	0.1	4.597	A
C-A	338	84			338				
A-B	86	21			86				
A-C	334	84			334				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	542	0.061	33	0.1	0.1	7.636	A
B-A	90	22	395	0.228	90	0.2	0.3	11.887	B
C-AB	69	17	871	0.080	69	0.1	0.1	4.534	A
C-A	395	99			395				
A-B	102	26			102				
A-C	399	100			399				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	496	0.082	41	0.1	0.1	8.530	A
B-A	110	28	349	0.315	109	0.3	0.5	15.123	C
C-AB	102	25	915	0.111	101	0.1	0.2	4.474	A
C-A	468	117			468				
A-B	126	31			126				
A-C	469	122			469				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	496	0.082	41	0.1	0.1	8.545	A
B-A	110	28	349	0.315	110	0.5	0.5	15.201	C
C-AB	102	25	915	0.111	102	0.2	0.3	4.482	A
C-A	468	117			468				
A-B	126	31			126				
A-C	469	122			469				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	542	0.061	33	0.1	0.1	7.654	A
B-A	90	22	395	0.228	91	0.5	0.3	11.968	B
C-AB	70	17	871	0.080	70	0.3	0.2	4.548	A
C-A	395	99			395				
A-B	102	26			102				
A-C	399	100			399				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	571	0.049	28	0.1	0.1	7.162	A
B-A	75	19	428	0.176	76	0.3	0.2	10.329	B
C-AB	52	13	841	0.061	52	0.2	0.1	4.607	A
C-A	338	84			338				
A-B	86	21			86				
A-C	334	84			334				

2024 Growth Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.21	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Growth Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	753	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	480	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	178	577
	B	153	0	46
	C	456	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	3	6
	B	1	0	2
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.14	11.44	0.2	B	42	63
B-A	0.54	24.98	1.1	C	140	211
C-AB	0.07	4.83	0.1	A	46	70
C-A					394	591
A-B					162	242
A-C					529	794

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	513	0.068	34	0.0	0.1	7.673	A
B-A	115	29	405	0.284	114	0.0	0.4	12.407	B
C-AB	32	8	798	0.040	31	0.0	0.1	4.813	A
C-A	330	82			330				
A-B	133	33			133				
A-C	434	109			434				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	464	0.089	41	0.1	0.1	8.680	A
B-A	138	34	367	0.375	137	0.4	0.6	15.735	C
C-AB	43	11	821	0.053	43	0.1	0.1	4.755	A
C-A	388	97			388				
A-B	158	40			158				
A-C	519	130			519				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	375	0.135	50	0.1	0.2	11.313	B
B-A	168	42	314	0.537	166	0.6	1.1	24.344	C
C-AB	64	16	857	0.075	64	0.1	0.1	4.686	A
C-A	464	116			464				
A-B	194	48			194				
A-C	635	159			635				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	372	0.136	51	0.2	0.2	11.440	B
B-A	168	42	314	0.537	168	1.1	1.1	24.975	C
C-AB	64	16	857	0.075	64	0.1	0.1	4.699	A
C-A	464	116			464				
A-B	194	48			194				
A-C	635	159			635				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	461	0.090	42	0.2	0.1	8.753	A
B-A	138	34	367	0.375	140	1.1	0.6	16.132	C
C-AB	43	11	821	0.053	44	0.1	0.1	4.780	A
C-A	388	97			388				
A-B	158	40			158				
A-C	519	130			519				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	511	0.068	35	0.1	0.1	7.715	A
B-A	115	29	405	0.284	116	0.6	0.4	12.613	B
C-AB	32	8	798	0.040	32	0.1	0.1	4.829	A
C-A	330	82			330				
A-B	133	33			133				
A-C	434	109			434				

2024 Growth Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.84	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.84	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Growth Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	583	100.000
B		ONE HOUR	✓	138	100.000
C		ONE HOUR	✓	521	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	115	448
	B	101	0	37
	C	482	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	2
	B	1	0	8
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	8.60	0.1	A	34	51
B-A	0.32	15.40	0.5	C	93	139
C-AB	0.11	4.60	0.3	A	75	112
C-A					403	605
A-B					106	158
A-C					411	617

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	570	0.049	28	0.0	0.1	7.166	A
B-A	76	19	427	0.178	75	0.0	0.2	10.315	B
C-AB	52	13	842	0.061	51	0.0	0.1	4.592	A
C-A	341	85			341				
A-B	87	22			87				
A-C	337	84			337				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	540	0.062	33	0.1	0.1	7.666	A
B-A	91	23	394	0.231	90	0.2	0.3	11.984	B
C-AB	70	17	872	0.080	70	0.1	0.1	4.530	A
C-A	398	100			398				
A-B	103	26			103				
A-C	403	101			403				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	493	0.083	41	0.1	0.1	8.584	A
B-A	111	28	347	0.320	111	0.3	0.5	15.309	C
C-AB	102	26	917	0.112	102	0.1	0.3	4.468	A
C-A	471	118			471				
A-B	127	32			127				
A-C	493	123			493				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	493	0.083	41	0.1	0.1	8.599	A
B-A	111	28	347	0.320	111	0.5	0.5	15.397	C
C-AB	103	26	917	0.112	103	0.3	0.3	4.474	A
C-A	471	118			471				
A-B	127	32			127				
A-C	493	123			493				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	540	0.062	33	0.1	0.1	7.684	A
B-A	91	23	393	0.231	91	0.5	0.3	12.088	B
C-AB	70	18	873	0.080	71	0.3	0.2	4.542	A
C-A	398	100			398				
A-B	103	26			103				
A-C	403	101			403				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	569	0.049	28	0.1	0.1	7.184	A
B-A	76	19	427	0.178	76	0.3	0.2	10.390	B
C-AB	52	13	842	0.062	52	0.2	0.1	4.603	A
C-A	340	85			340				
A-B	87	22			87				
A-C	337	84			337				

2029 Adjusted Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.29	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 Adjusted Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	889	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	169	500
	B	210	0	46
	C	343	26	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	3	6
	B	1	0	2
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.16	13.50	0.2	B	42	63
B-A	0.65	28.55	1.8	D	193	289
C-AB	0.07	5.09	0.1	A	41	62
C-A					297	446
A-B					155	233
A-C					459	688

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	498	0.070	34	0.0	0.1	7.912	A
B-A	158	40	437	0.362	156	0.0	0.6	12.854	B
C-AB	30	7	754	0.039	30	0.0	0.1	5.067	A
C-A	248	62			248				
A-B	127	32			127				
A-C	376	94			376				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	440	0.094	41	0.1	0.1	9.208	A
B-A	189	47	404	0.468	188	0.6	0.9	16.723	C
C-AB	39	10	766	0.051	39	0.1	0.1	5.058	A
C-A	293	73			293				
A-B	152	38			152				
A-C	449	112			449				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	328	0.154	50	0.1	0.2	13.193	B
B-A	231	58	358	0.646	228	0.9	1.7	27.283	D
C-AB	55	14	786	0.070	55	0.1	0.1	5.056	A
C-A	351	88			351				
A-B	186	47			186				
A-C	551	138			551				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	13	323	0.157	51	0.2	0.2	13.499	B
B-A	231	58	358	0.647	231	1.7	1.8	28.553	D
C-AB	55	14	786	0.070	55	0.1	0.1	5.069	A
C-A	351	88			351				
A-B	186	47			186				
A-C	551	138			551				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	435	0.095	42	0.2	0.1	9.350	A
B-A	189	47	404	0.488	192	1.8	0.9	17.480	C
C-AB	39	10	786	0.051	39	0.1	0.1	5.088	A
C-A	292	73			292				
A-B	152	38			152				
A-C	449	112			449				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	9	495	0.070	35	0.1	0.1	7.975	A
B-A	158	40	436	0.362	159	0.9	0.6	13.189	B
C-AB	30	7	754	0.040	30	0.1	0.1	5.082	A
C-A	248	62			248				
A-B	127	32			127				
A-C	376	94			376				

2029 Adjusted Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.58	A

Junction Network

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2029 Adjusted Base	PM	ONE HOUR	18:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	542	100.000
B		ONE HOUR	✓	178	100.000
C		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	191	351
	B	141	0	37
	C	405	46	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	2
	B	1	0	8
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	9.04	0.1	A	34	51
B-A	0.41	16.15	0.7	C	129	194
C-AB	0.12	4.84	0.3	A	78	118
C-A					335	503
A-B					175	283
A-C					322	483

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	559	0.050	28	0.0	0.1	7.311	A
B-A	106	27	451	0.235	105	0.0	0.3	10.475	B
C-AB	56	14	807	0.069	55	0.0	0.1	4.823	A
C-A	284	71			284				
A-B	144	38			144				
A-C	264	66			264				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	527	0.063	33	0.1	0.1	7.879	A
B-A	127	32	421	0.301	126	0.3	0.4	12.301	B
C-AB	74	18	829	0.089	74	0.1	0.2	4.805	A
C-A	331	83			331				
A-B	172	43			172				
A-C	316	79			316				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	472	0.086	41	0.1	0.1	9.012	A
B-A	155	39	380	0.408	154	0.4	0.7	16.008	C
C-AB	105	26	883	0.122	105	0.2	0.3	4.801	A
C-A	391	98			391				
A-B	210	53			210				
A-C	386	97			386				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	471	0.087	41	0.1	0.1	9.039	A
B-A	155	39	380	0.408	155	0.7	0.7	16.148	C
C-AB	105	26	883	0.122	105	0.3	0.3	4.809	A
C-A	391	98			391				
A-B	210	53			210				
A-C	386	97			386				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	525	0.063	33	0.1	0.1	7.904	A
B-A	127	32	421	0.301	128	0.7	0.4	12.429	B
C-AB	74	19	830	0.089	75	0.3	0.2	4.822	A
C-A	331	83			331				
A-B	172	43			172				
A-C	316	79			316				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	558	0.050	28	0.1	0.1	7.338	A
B-A	106	27	451	0.236	107	0.4	0.3	10.585	B
C-AB	56	14	807	0.069	56	0.2	0.1	4.838	A
C-A	284	71			284				
A-B	144	36			144				
A-C	264	66			264				

2029 + Dev Adjusted, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.24	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2029 + Dev Adjusted	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	649	100.000
B		ONE HOUR	✓	234	100.000
C		ONE HOUR	✓	371	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	171	478
	B	216	0	18
	C	343	28	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	3	6
	B	1	0	2
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	12.46	0.1	B	17	25
B-A	0.65	28.25	1.8	D	198	297
C-AB	0.08	5.08	0.1	A	44	67
C-A					296	444
A-B					157	235
A-C					439	658

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	3	498	0.027	13	0.0	0.0	7.575	A
B-A	163	41	441	0.369	160	0.0	0.6	12.862	B
C-AB	32	8	757	0.042	32	0.0	0.1	5.058	A
C-A	247	62			247				
A-B	129	32			129				
A-C	360	90			360				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	4	438	0.037	16	0.0	0.0	8.710	A
B-A	194	49	409	0.474	193	0.6	0.9	16.710	C
C-AB	42	11	770	0.055	42	0.1	0.1	5.052	A
C-A	291	73			291				
A-B	154	38			154				
A-C	430	107			430				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	321	0.062	20	0.0	0.1	12.195	B
B-A	238	59	366	0.650	234	0.9	1.7	27.010	D
C-AB	59	15	791	0.075	59	0.1	0.1	5.051	A
C-A	349	87			349				
A-B	188	47			188				
A-C	526	132			526				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	315	0.063	20	0.1	0.1	12.456	B
B-A	238	59	366	0.651	238	1.7	1.8	28.247	D
C-AB	59	15	791	0.075	59	0.1	0.1	5.062	A
C-A	349	87			349				
A-B	188	47			188				
A-C	526	132			526				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	4	432	0.037	16	0.1	0.0	8.834	A
B-A	194	49	409	0.475	198	1.8	0.9	17.448	C
C-AB	42	11	770	0.055	42	0.1	0.1	5.076	A
C-A	291	73			291				
A-B	154	38			154				
A-C	430	107			430				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	3	495	0.027	14	0.0	0.0	7.630	A
B-A	163	41	441	0.369	164	0.9	0.6	13.204	B
C-AB	32	8	757	0.042	32	0.1	0.1	5.076	A
C-A	247	62			247				
A-B	129	32			129				
A-C	360	90			360				

2029 + Dev Adjusted, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.67	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 + Dev Adjusted	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	529	100.000
B		ONE HOUR	✓	168	100.000
C		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	195	334
	B	131	0	37
	C	388	74	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	2
	B	1	0	8
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.08	8.74	0.1	A	34	51
B-A	0.38	15.68	0.6	C	120	180
C-AB	0.19	5.29	0.4	A	122	184
C-A					300	450
A-B					179	288
A-C					308	460

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	568	0.049	28	0.0	0.1	7.196	A
B-A	99	25	448	0.220	97	0.0	0.3	10.349	B
C-AB	88	22	799	0.109	87	0.0	0.2	5.086	A
C-A	259	65			259				
A-B	147	37			147				
A-C	251	63			251				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	537	0.062	33	0.1	0.1	7.714	A
B-A	118	29	418	0.282	117	0.3	0.4	12.087	B
C-AB	116	29	820	0.141	115	0.2	0.3	5.151	A
C-A	298	74			298				
A-B	175	44			175				
A-C	300	75			300				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	486	0.084	41	0.1	0.1	8.719	A
B-A	144	36	376	0.383	143	0.4	0.6	15.559	C
C-AB	163	41	851	0.192	163	0.3	0.4	5.284	A
C-A	343	86			343				
A-B	215	54			215				
A-C	368	92			368				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	486	0.084	41	0.1	0.1	8.741	A
B-A	144	36	376	0.384	144	0.6	0.6	15.681	C
C-AB	164	41	852	0.192	164	0.4	0.4	5.295	A
C-A	343	86			343				
A-B	215	54			215				
A-C	368	92			368				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	536	0.062	33	0.1	0.1	7.737	A
B-A	118	29	417	0.282	119	0.6	0.4	12.200	B
C-AB	116	29	821	0.141	117	0.4	0.3	5.172	A
C-A	298	74			298				
A-B	175	44			175				
A-C	300	75			300				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	567	0.049	28	0.1	0.1	7.221	A
B-A	99	25	447	0.220	99	0.4	0.3	10.450	B
C-AB	88	22	800	0.110	88	0.3	0.2	5.108	A
C-A	258	65			258				
A-B	147	37			147				
A-C	251	63			251				