

TECHNICAL NOTE 4 (TN04)

Re: SH5034-13PD – Albrighton South (Application 24/02108/OUT)
Date: December 2024
Subject: Response to the SC Highways Consultation Comments (TN04)
Client: Boningale Homes

1.0 INTRODUCTION

- 1.1 An outline planning application (reference 24/02108/OUT) was submitted to Shropshire Council (SC) in May 2024 for up to 800 residential units, land for an 80-unit care facility, land for a Secondary School, land for a neighbourhood centre / supermarket / doctors surgery-pharmacy and flexible employment space on land at Albrighton South, Shropshire. Access is applied for in detail.
- 1.2 A Transport Assessment (TA) and Travel Plan (TP), both dated May 2024, were prepared by DLP Planning Ltd's Sustainable Development and Delivery (SDD) Team and submitted to accompany the application.
- 1.3 Following the submission of the application, a meeting was held on the 28th August 2024 between the SDD Team and Shropshire Council (SC) Highways as the Local Highway Authority (LHA). During this meeting, the LHA confirmed that, overall, they were content with the TA and, in particular, the proposed access strategy for the site was discussed and agreed in principle. Following this meeting, the LHA provided formal consultation comments on 15th October 2024 to provide further clarity on the matters discussed in the post application meeting.
- 1.4 The consultation comments set out matters that were agreed as part of the TA, including the principles of the access strategy. In addition, the comments also included matters that should be addressed including, but not exclusively, a review of the morning peak hour residential trip generation, trip generation calculations, and the additional junction modelling to be undertaken for the wider off-site junctions which were highlighted for assessment within the submitted TA.
- 1.5 The full LHA response is provided at **Appendix A** of this Technical Note (Note) with a summary of the key matters raised in the LHA comments and the SDD Team response provided in the sections below.
- 1.6 For clarity the key LHA comments to which a response is required are provided in *Italics* with the SDD Team response provided in the paragraphs below. Where appropriate, the key section headings/matters set out in the LHA response are replicated in this Note. As per the LHA response, these matters are the following and contained in the relevant sections of this Note:
 - Section 2.0 - Highway Network;
 - Section 3.0 - Accessibility;
 - Section 4.0 - Personal Injury Accident Data;
 - Section 5.0 - Existing Traffic Flows;

TECHNICAL NOTE 4 (TN04)

- Section 6.0 - Development Proposals;
- Section 7.0 - Trip Generation;
- Section 8.0 - Trip Distribution and Assignment;
- Section 9.0 - Junction Capacity Assessments;
- Section 10.0 - Sustainable Travel Promotion / Accessibility Improvement;
- Section 11.0 - Stage 1 Road Safety Audit.

- 1.7 It should be noted that not all of the comments in the LHA response require a direct response or additional information to be provided. Where this is the case, the points made have been summarised but are not shown in *Italics*.
- 1.8 It should be noted that this Note has been informed by responses prepared by SDD Team to address comments on the application raised by Active Travel England (ATE). These responses (TN02, October 2024 and TN03, November 2024) are available for review on the Shropshire Council Planning Portal.
- 1.9 Following receipt of TN03, ATE provided a further response on the updated proposals in December 2024 which confirms that they are content with the updated proposals and recommend the application for 'conditional approval' subject to appropriate planning conditions/obligations.
- 1.10 In addition, the site access proposals and associated off-site active travel improvements proposed as part of the application have also been updated following the completion of a Stage 1 Road Safety Audit (RSA).
- 1.11 Further details on both the ATE responses and the RSA are provided where appropriate throughout this Note.

TECHNICAL NOTE 4 (TN04)

2.0 EXISTING CONDITIONS RESPONSE

- 2.1 The LHA response provides a summary of the existing conditions described in depth in the TA submitted with the application. However, the response does not provide any comments to be addressed and as such, no further information or clarification is deemed to be required.

TECHNICAL NOTE 4 (TN04)

3.0 ACCESSIBILITY

Pedestrian Accessibility

- 3.1 In reference to the proximity of local facilities to the site, Paragraph 1 of the pedestrian accessibility section in the LHA's response states that:

*"Paragraph 3.29 (of the TA) outlines the 14 services that are accessible within the 2,000 metre maximum walking distance from the town centre. **Shropshire Council as Local Highway Authority have reviewed the information and considers acceptable**".*

- 3.2 Based on the above, it is clear that the LHA accept that the proposals are within an appropriate walking and cycling distance of key local facilities.
- 3.3 The remainder of the LHA response under the 'pedestrian accessibility' heading provides a summary of the existing pedestrian conditions described in depth in the TA submitted with the application. As such, no further information or action is deemed to be required.

Cycle Accessibility

- 3.4 Paragraph 1 of cycle accessibility section in the LHA's response confirms that as per the information set out in the TA, NCN Route 81 passes through Albrighton along High Street. No further action is deemed to be required.

Audit of Active Travel Routes

- 3.5 The LHA comments on the 'audit of active travel routes' broadly re-iterate the description of the routes set out in the TA submitted with the application including where pedestrian improvements are proposed to existing road crossings on the three routes audited. The LHA comments conclude stating:

"SC has reviewed the audit of active travel routes presented and considers this acceptable at this stage subject to further review and identification of infrastructure".

- 3.6 Given that no further active travel routes are recommended for audit by the LHA and that pedestrian infrastructure improvements are recommended where appropriate in the TA, it is not considered that the SC response requires any additional work to be undertaken at this time.
- 3.7 Notwithstanding this, the active travel improvements proposed as part of the TA were reviewed by ATE in their initial consultation response dated 29th July 2024, concluding that further off-site improvements over and above those set out in the TA should be proposed to further encourage active travel. As such, a suite of additional off-site active travel measures were proposed as part of the ATE Response Note Technical Note 01 (TN01, October 2024) that is available to view on the SC Planning Portal. These additional off-site improvements were shown on Drawing SH5034-4PD-010 which was included at Appendix C of the report. The improvements included the provision of additional dropped kerb and tactile paving crossings on key desire lines to the Albrighton rail station and local facilities on the High Street, speed cushions on Cross Road to enforce the existing 30mph speed limit and improve the walking and cycling environment. In addition, the updated improvement proposals also included for the potential provision of a

TECHNICAL NOTE 4 (TN04)

signalised crossing point over High Street to the west of the junction with Station Road/Cross Road.

- 3.8 ATE provided a further consultation response dated 4th November 2024, commenting on the suitability of the additional active travel improvements. In terms of the improvements proposed, ATE welcomed the potential provision of traffic calming measures along Cross Road although stated that they would not favour speed cushions and that the active travel measures proposed should be a matter for ongoing discussions with the LHA. A further ATE Response Note Technical Note 03 (TN03, November 2024) was prepared and is available to view on the SC Planning Portal. The revised off-site improvements were shown on **Drawing SH5034-4PD-010 Revision A** which was included at Appendix C of the report.
- 3.9 ATE provided a further response on the updated proposals in December 2024 which confirms that they are content with the latest version of the proposals and recommend the application for 'conditional approval' subject to appropriate planning conditions/obligations.
- 3.10 Following submission of the ATE Response Note Technical Note 03 (TN03, November 2024), the design of the off-site traffic calming measures have also been subject to a Stage 1 Road Safety Audit (RSA), and as such the latest package of off-site improvements are shown on **Drawing SH5034-4PD-010 Revision B** which is included at RSA **Appendix B** of this Note. Further details of the RSA and the associated Designer's Response are provided later in this Note.

Bus Accessibility

- 3.11 Paragraph 2 of the bus accessibility section in the LHA's response states that:
- "Paragraph 3.81 (of the TA) states the improvements to existing public transport services inclusive of bus routes and bus infrastructure include the ability for new or re-routed bus services to travel through the site and link with key facilities in Albrighton. There is also a proposed shuttle service facilitating mass transport movements between the site and Albrighton Village and the Rail Station. **SC notes this and considers it acceptable in principle if the application is taken forward this will require further consideration in terms of likely infrastructure required and level of contributions to be secured through a Section 106 agreement**".*
- 3.12 Based on the above response, it is concluded that subject to S106 contributions being agreed as part of the planning process, no further work is required at this time.

Rail Accessibility

- 3.13 The rail accessibility section in the LHA's response re-iterates the information set out in the TA. No specific comments are raised by the LHA and as such it is considered that no further work is required.

TECHNICAL NOTE 4 (TN04)

4.0 PERSONAL INJURY ACCIDENT (PIA) DATA

4.1 Paragraph 1 of the PIA section in the LHA's response states that:

*"Paragraph 3.94 (of the TA) states there has been 5 Personal Injury Accidents (PIA) within the 5 year period 2018-2022. Three of these PIAs were recorded as slight and two as serious with no PIAs recorded as involving a fatality. **It is noted that none of the 5 PIAs involved a pedestrian or pedal cycle casualty, additionally with five collisions recorded over the 5 year period the average rate of one collision per year means the study area is not considered to have a high collision rate**".*

4.2 Paragraph 4 of the LHA's PIA response goes on to state that:

*"Paragraph 3.101 concludes the PIA review suggests there are no material PIA safety concerns that could be exacerbated by the development proposals. **SC has reviewed and considers acceptable in principle based on current vehicle movements and travel behaviour. As part of any application further consideration will need to be given to ensure the number of PIA where possible remains minimal**".*

4.3 Based on the above response, it is clear that the LHA agree with the conclusions set out in the TA that the roads around the site are not considered to have a high collision rate and that there are no current material PIA safety concerns that could be exacerbated by the development.

4.4 In addition to this, all access junctions, road and active travel measures and improvements submitted with the application TA and subsequent ATE Technical Notes have been designed with due consideration to road safety, national and local design guidance and industry best practice and have been subject to a Stage 1 RSA. The results of the RSA are set out later in this Note.

TECHNICAL NOTE 4 (TN04)

5.0 EXISTING TRAFFIC FLOWS

5.1 Paragraph 1 of the existing traffic flows section in the LHA's response states that:

*"Paragraph 3.102 states Automatic Traffic Surveys (ATCs) and Manual Classified Counts (MCCs) were undertaken on key road links and junctions on the site. The ATCs were undertaken over a seven-day period starting on Thursday 14th March 2024 while the MCCs were undertaken on Tuesday 19th March 2024. The surveys were undertaken in a period with no significant roadworks or constraints to traffic flows that could materially impact the results meaning the surveys are considered as providing appropriate traffic data of vehicle speed and quantum assessments. **SC notes this and considers it acceptable in principle**".*

5.2 Based on the above response, it is clear that the LHA have accepted that the traffic data included in the TA is an appropriate baseline from which to generate traffic flows for junction modelling purposes.

5.3 Paragraph 4 of the existing traffic flows section in the LHA's response states that:

"It is noted that these 85th percentile speeds are in line with what would be anticipated with ATCs located at a speed limit change of 40-60 mph".

5.4 Based on the above response, it is clear that the LHA have accepted that the vehicle speeds recorded by the Automatic Traffic Counters (ATCs) are as anticipated on the A464 Holyhead Road.

TECHNICAL NOTE 4 (TN04)

6.0 DEVELOPMENT PROPOSALS

Overview of Proposals

- 6.1 Paragraph 2 of the overview of proposals section in the LHA's response states that:

*"Paragraph 4.5 (of the TA) outlines further detail of the development proposals. The proposed secondary school would be located towards the northeastern boundary of the site to be close to the main population centre of Albrighton. The care facility, doctors' surgery and retail/employment facilities are to be provided more centrally within the site with access to a new walking/cycling 'greenroute' provided on Patshull Road and the new pedestrian provision on Cross Road to the west of the Patshull Road junction, two new junctions are proposed into the site from the A464 Holyhead Road. A spine road is to be provided between the two new access junctions on to the A464 Holyhead Road crossing Patshull Road and Newhouse Lane. **SC notes this and considers it acceptable in principle. However, it is unclear from the masterplan layout submitted how the school will be accessed**".*

- 6.2 As set out in the TA submitted as part of the planning application, the internal layout of the site is reserved for future determination with further details of the internal road and access strategy to be provided as part of any subsequent Reserved Matters (RM) and detailed design submissions. As such, further information will be provided on the access strategy for the school at the appropriate time. Notwithstanding this, at this time it is anticipated that the school will be accessed by an internal road and will not take direct vehicle access from the existing public highway i.e Patshull Road.

- 6.3 Paragraph 3 of the overview of proposals section in the LHA's response states that:

*"Bus stops would be provided along the spine road subject to discussions with the local bus companies to provide a new route or divert an existing route. A new north/south spine road link would be provided between the main east/west spine road to link with Cross Road to the north. **SC notes this and considers it acceptable in principle**".*

- 6.4 Based on the above response and the fact that the internal layout of the site is submitted in outline only, it is concluded that no further work is required at this time.

- 6.5 Paragraph 4 of the overview of proposals section in the LHA's response states that:

*"Both Patshull Road and Newhouse Lane would be downgraded to 'access only.' **Further consideration should be given to these proposals, specifically Patshull Road as vehicular access to residential properties needs to be maintained and it is unclear how the proposed secondary school will be accessed**".*

- 6.6 As set out, the final vehicle access route / routes into the school are anticipated to be via the internal road network and not from Patshull Road. Further details will be provided on this as part of any RM submission. In terms of maintaining access to the properties on the northern section of Patshull Road, this could be via a link into the main site to the west or south and on to the internal spine road. The detailed access strategy for these units will be confirmed as part of any RM

TECHNICAL NOTE 4 (TN04)

submission.

- 6.7 Paragraph 5 of the overview of proposals section in the LHA's response states that:

*"And the speed limit on the A464 along the frontage of the site would also be reduced from 60mph to 40mph. **SC notes this and considers it acceptable in principle subject to further assessment and details being submitted**".*

- 6.8 As requested above, additional details and information on the measures proposed to facilitate a speed limit reduction from 60mph to 40mph along the frontage of the site are shown in **Drawing Number SH5034-4PD-011 Revision A** which is included as **RSA Appendix B** to this Note. These measures include speed repeater signage, roundels on the road, gateway features, rumble strips, lining to reduce the visual width of the road and potential (subject to S278 requirements) lighting to reduce vehicle speeds. It should be noted that **Drawing Number SH5034-4PD-011 Revision A** has been subject to a Stage 1 Road Safety Audit (RSA), with further details on the RSA and the associated Designer's Response are provided later in this Note. Such works would also form part of a S278 Agreement with details to be agreed at that stage.

Proposed Access

- 6.9 Paragraph 1 of the proposed access section in the LHA's response states that:

*"Paragraph 4.14 outlines the overall access strategy for the area, removing vehicle through movements from Patshull Road and Newhouse Lane and improving existing vehicle routes on Cross Road. Paragraph 4.16 states, the overall access strategy includes the provision of a new north/south spin road extending from Cross Road to the east/west spine road connecting into the A464 Holyhead Road to the southwest. **SC has reviewed and considers information acceptable subject to further detailed design and road safety audits**".*

- 6.10 Based on the information above and the discussions held with SC Highways Officers on the 28th August 2024 meeting, it is understood that the overall access strategy for the site is accepted and agreed in principle. Notwithstanding this, the LHA comment recommends that the agreement in principle is subject to further detailed design and RSA's.
- 6.11 Paragraph 2 and 3 of the proposed access section in the LHA's response summarise the principles of the main site access junctions on to the A464 Holyhead Road. The one recommendation from the two paragraphs is:

*"The roundabout provides a stopping sight distance of 120 metres and a speed limit of 40mph along the A464 Holyhead Road. This reduces to 43 metres of visibility and a 30mph speed limit along the spine road. **It is recommended that visibility is maximised where possible**".*

- 6.12 This request is noted and will be a material consideration when the RM applications for the internal site layout comes forward.
- 6.13 Paragraph 4 of the proposed access section in the LHA's response states:

TECHNICAL NOTE 4 (TN04)

*“Paragraph 4.34 outlines the proposed speed limit reduction measures along the A464 Holyhead Road to create a new 1.6km stretch with a 40mph speed limit, speed limit repeaters, lining to visually reduce the width of the A464 through carriageway, lighting at either side of the junction, carriageway treatments on the approach to the proposed access junctions, and advance junction warning signage. **SC has reviewed and considers information acceptable subject to further detailed design and road safety audits**”.*

- 6.14 As set out in Paragraph 6.8 of this Note, additional details and information on the measures proposed to facilitate a speed limit reduction from 60mph to 40mph along the frontage of the site are shown in **Drawing Number SH5034-4PD-011 Revision A** which is included as **RSA Appendix B** to this Note, noting the design has been subject to a Stage 1 Road Safety Audit (RSA), with further details on the RSA and the associated Designer’s Response are provided later in this Note.

- 6.15 Paragraph 5 of the proposed access section in the LHA’s response relates to the active travel improvements proposed on Cross Road. The one recommendation from the two paragraphs is:

“It is recommended that visibility is maximised where possible and an assessment is undertaken that a zebra crossing is suitable intervention at this location”.

- 6.16 The inclusion of a pedestrian crossing over Cross Road was proposed as part of the original Transport Assessment application drawing submission package. This drawing package has since been subject to a Stage 1 RSA and amendments made to the off-site improvement proposals to reflect the results of the RSA comments.

- 6.17 In summary, following the receipt of the RSA comments, the previously proposed zebra crossing has been upgraded to provide a ‘Parallel’ pedestrian and cycle crossing with the previously proposed footway to the south west which links to the crossing point to Patshull Road upgraded to a shared footway/cycleway. The changes to this element of the proposals are set out in detail in the Designer’s Response to the RSA which is provided at **Appendix B** to this Note with the revised improvement proposals shown on **Drawing Number SH5034-4PD-004 Revision B** contained at **RSA Appendix B**.

- 6.18 Paragraph 6 of the proposed access section in the LHA’s response states:

“Paragraph 4.43 (of the TA) outlines the proposed 6.5 metre carriageway to facilitate two way movements by busses along Spine Road including a 3 metre footway/cycleway at one edge and a 2 metre footway on the other edge, traffic calming measures, limited frontage access, bus stops, internal junctions designed in accordance with Manual for Streets, and regular pedestrian and cycle crossings. **SC has reviewed and considers information acceptable at this stage**”.

- 6.19 Based on the above and the fact that further details on the internal road layout and overall site layout will be provided at the RM application stage, it is considered that no further work in relation to this is required at this time.

TECHNICAL NOTE 4 (TN04)

Swept Path Analysis

- 6.20 Paragraph 1 of the swept path analysis section in the LHA's response states:

*"Swept path analysis has been undertaken for the proposed accesses, confirming large vehicles such as a 16.5 metres articulated lorry passing a 7.5 tonnes box van, or two single deck buses, could suitably pass each other. **SC has reviewed and considers information acceptable**".*

- 6.21 Based on the above it is considered that no further work in this regard is required at this time, noting that **Drawing Number SH5034-4PD-008 Revision B** shows the swept path analysis based on the latest highway arrangement and is contained at **RSA Appendix B**.

Internal Layout

- 6.22 Paragraph 1 of the internal layout section in the LHA's response states:

*"Paragraph 4.43 of the TA notes that the spine road throughout the site is not for determination currently, yet some expected features are presented including carriageway width, the inclusion of footways/cycleways alongside the road, traffic calming, limited frontage access and provision of bus stops. **SC has reviewed and considers information acceptable, and requests further information as and when this is available for consideration. Similarly, further information is requested regarding refuse and recycling arrangements for the proposed development**".*

- 6.23 Based on the above and the fact that further details on the internal road layout and overall site layout will be provided at the RM application stage, it is considered that no further work on this is required at this time.

TECHNICAL NOTE 4 (TN04)

7.0 TRIP GENERATION

Residential

7.1 Paragraph 1 of the residential trip generation section in the LHA's response states:

"Vehicle trip rates have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 358 with the arrivals being 87 and the departures being 271. The reviewed 17:00-18:00 two-way PM trip generation was 388 with the arrivals being 262 and the departures being 126. WSP have reviewed trip rates on Shropshire Councils behalf against those derived from the latest version of TRICS (7.11.2) which considered more recent survey sites and site-specific selection with regards to population and car ownership. There was a slight discrepancy between these results and table 4 as the reviewed 08:00-09:00 two-way AM trip generation was 450 with the arrivals being 134 and the departures being 316. The reviewed 17:00-18:00 two-way PM trip generation was 411 with the arrivals being 282 and the departures being 129. The AM Trip Generation numbers are unlikely to be robust and acceptable, however the PM numbers are likely robust and acceptable."

7.2 Based on the comments provided by the LHA, it is considered that the proposed trip rates for the residential element of the site set out in the TA could be agreeable in terms of the PM peak, however are not agreed for the AM peak. This is on the basis there was a negligible difference of 23 fewer trips when comparing the PM figures, however when comparing the AM figures there was a more significant difference of 92 fewer trips.

7.3 It should be noted that whilst the LHA response contained a proposed revised vehicle trip generation for the residential element, no further information such as a breakdown of the TRICS criteria used to calculate the revised trip rates was provided. As such, for robustness and to provide a clear justifiable methodology for calculating revised residential trip rates, a detailed review of the TRICS database has once again been undertaken by the SDD Team.

7.4 The revised TRICS assessment undertaken has used the following parameters:

- Residential - Houses privately owned;
- Multi-modal surveys only;
- Sites between 550 and 1200 dwellings;
- Weekday surveys only; and
- Sites in edge of town locations.

7.5 The above parameters generated a TRICS assessment that included 4 sites. The full TRICS parameters and outputs are provided at **Appendix C**, with the average vehicle trip rates and trip generation based on the development of 800 dwellings is provided in **Table 1** below:

TECHNICAL NOTE 4 (TN04)

Time Period	Arrivals	Departures	Two-Way
08:00–09:00 Trip Rate (per unit)	0.155	0.376	0.531
08:00–09:00 Trip Generation (800 units)	124	301	425
17:00–18:00 Trip Rate (per unit)	0.334	0.151	0.485
17:00–18:00 Trip Generation (800 units)	267	121	388

Table 1. Revised Residential Vehicle Trip Generation Based on TRICS Assessment

- 7.6 As shown in **Table 1**, using the figures generated from the detailed / revised TRICS assessment undertaken by the SDD Team, the proposals could generate 425 vehicle trips in the AM peak period and 388 in the PM peak period.
- 7.7 Whilst the AM peak period trips generated using the TRICS assessment are 25 two-way trips lower than those put forward by the LHA, the PM trips are identical to those included in the TA (and agreed as appropriate by the LHA) for the PM peak period. Given that the LHA confirmed that the PM peak vehicle trip rates set out in the TA were accepted (despite generating 23 fewer trips than those proposed by the LHA), it is considered that the AM vehicle trip rates generated using the revised TRICS methodology should also be acceptable as the detailed methodology generates a similar figure (25 lower) to those proposed by the LHA.
- 7.8 Whilst SDD consider that the residential vehicle trip rates proposed in the TA are appropriate to apply to the proposed Albrighton South site, for robustness, and to ensure that an auditable trip generation methodology is set out, it is proposed that the revised data shown in **Table 1** will be used to inform the updated site access and wider off-site junction modelling which is detailed later in this Note.

Care Facility

- 7.9 Paragraph 1 of the care facility trip generation section in the LHA's response states:
- “Vehicle trip rates for the care home have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 12 with the arrivals being 7 and the departures being 4. The reviewed 17:00-18:00 two-way PM trip generation was 6 with the arrivals being 2 and the departures being 5. These numbers include a 15% internalisation factor, which is proposed as there are opportunities for staff and visitors to live within the development. **SC notes the information provided. Please may the developer confirm why the arrivals and departures do not match the two-way trips. Trips and internalisation are otherwise at an acceptable level, based on methodology used**”.*
- 7.10 In response to the LHA query, the arrivals and departures do not match the two-way movements as to ensure a whole number is provided, all trips are 'rounded' up or down to the nearest whole number. This rounding can lead to the final 'two-way' total being different to the combined arrivals and departures when added together. This is accepted and is the case in this instance.

TECHNICAL NOTE 4 (TN04)

- 7.11 Given the additional information provided above and the confirmation from the LHA on the overall suitability of the proposed trip generation and internalisation figures, it is considered that the care facility trip rates are agreed.

Secondary School

- 7.12 Paragraph 1 of the secondary school trip generation section in the LHA's response states:

*"Vehicle trip rates for the secondary school have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 172 with the arrivals being 92 and the departures being 80. The reviewed 17:00-18:00 two-way PM trip generation was 30 with the arrivals being 17 and the departures being 13. A 15:00-16:00 two-way trip generation was also presented, with 69 trips comprising 24 arrivals and 45 departures. **SC notes the information provided and considers acceptable**".*

- 7.13 Based on the comments provided by the LHA, it is considered that the proposed trip rates for the secondary school element of the site set out in the TA are agreed.

GP Surgery / Pharmacy

- 7.14 Paragraph 1 of the GP surgery, pharmacy facility trip generation section in the LHA's response states:

*"Vehicle trip rates for the GP / pharmacy have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 29 with the arrivals being 19 and the departures being 11. The reviewed 17:00-18:00 two-way PM trip generation was 23 with the arrivals being 14 and the departures being 9. These numbers include a 25% internalisation factor, which is proposed as there will be patients and potentially staff associated with this element. **SC notes the information provided. Please may the developer confirm why the arrivals and departures do not match the two-way trips. Trips and internalisation are otherwise at an acceptable level, based on methodology used**".*

- 7.15 In response to the LHA query, the arrivals and departures do not match the two-way movements as to ensure a whole number is provided, all trips are 'rounded' up or down to the nearest whole number. This rounding can lead to the final 'two-way' total being different to the combined arrivals and departures when added together. This is the case in this instance

- 7.16 Given the additional information provided above the confirmation from the LHA on the overall suitability of the proposed trip generation and internalisation figures, it is considered that the care facility trip rates are agreed.

Supermarket

- 7.17 Paragraph 1 of the supermarket facility trip generation section in the LHA's response states:

"Vehicle trip rates for the supermarket have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 34 with the arrivals being 17 and the departures being 17. The reviewed 17:00-18:00 two-way PM trip generation was 78 with the

TECHNICAL NOTE 4 (TN04)

*arrivals being 40 and the departures being 38. These numbers include a 25% internalisation factor, which is proposed as there will be customers and potentially staff associated with this element **SC notes the information provided and considers acceptable**".*

- 7.18 Based on the comments provided by the LHA, it is considered that the proposed trip rates for the supermarket element of the site set out in the TA are agreed.

TECHNICAL NOTE 4 (TN04)

8.0 TRIP DISTRIBUTION AND ASSIGNMENT

8.1 Paragraph 1 of the trip distribution and assignment section in the LHA's response states:

*"Paragraphs 6.1 to 6.3 (of the TA) set out the methodology used for trip distribution and assignment, rooted in Census 2011 journey to work data using the Shropshire 027 Middle Super Output Area (MSOA). Whilst the census suggests that 36.7% of all future residents would work within the Shropshire area, the Planning Statement and Economic Benefit Assessment prepared in support of the planning application identified this will be lower, and that a reassignment to larger neighbouring areas of employment is required. It concluded that of the current Shropshire dataset, only 13% would be retained within the Shopshire area, with the 87% travelling external to Wolverhampton (67%), Telford and Wrekin (12%), Walsall (4%), and Dudley (4%). **SC notes the information provided and considers acceptable**".*

8.2 Based on the comments provided by the LHA, it is considered that the proposed vehicle distribution and assignment for the elements of the scheme that utilise the above distribution (namely the residential, care element, Secondary School (only departures in the morning peak and arrivals in the evening peak), GP surgery / pharmacy and supermarket) set out in the TA are agreed.

8.3 Paragraph 2 trip distribution and assignment section in the LHA's response goes on to state:

*"A separate exercise has been undertaken for school traffic distribution, as set out across paragraphs 6.5 to 6.8. This examines nearby settlements and existing secondary schools, and concludes that "75% of future pupils located outside the development would arrive in the morning and depart in the evening from the north via the northern access at the Cross Road junction. The remaining 25% of future pupils located outside the development would arrive in the morning and depart in the evening from the south via the southwestern access at the A464 junction." **SC notes the information provided and considers acceptable, however would raise the issue with regard to timing of the development coming forward. We would seek further clarification from the applicant with regard to whether the site is being promoted within the Local Plan Review, and on that basis needs to take into account proposed allocations with the Local Plan review to include proposed development in Shifnal place plan area**".*

8.4 Based on the comments provided by the LHA, it is considered that the proposed vehicle distribution and assignment for the proposed School (arrivals in the morning peak and departures in the evening peak), set out in the TA are agreed.

8.5 Overall, the two LHA paragraphs which cover the proposed traffic distribution and assignment set out in the TA combine to confirm that all elements of the proposed distribution and assignment are agreed. As such the subsequent agreed distribution pattern and traffic assignment for the development is contained at **Traffic Flow (TF) Figures 1 to 5** contained at **Appendix D** of this Note.

TECHNICAL NOTE 4 (TN04)

- 8.6 In terms of the timing of the development, it is confirmed that the site is being promoted as part of the Local Plan Review but is not included as a proposed allocation in the submission version. It is pertinent to note that at the time of preparing this Note, the Local Plan Review Inspectors' have written to the Council with a holding letter (ID46) which states that they have serious concerns about the soundness of the Local Plan as submitted. A further substantive letter is to follow which will confirm the fate of the Plan.

TECHNICAL NOTE 4 (TN04)

9.0 JUNCTION CAPACITY ASSESSMENTS

Study Area

- 9.1 Following agreement of the junction modelling undertaken to date, the LHA response commented on the proposed scope of wider off-site junction modelling to be undertaken following the submission of the application. On this, the LHA noted:

“Further junction capacity assessments will be undertaken at seven junctions around the site location, following submission of the TA, for the following location specifically:

- J1 – M54 J3 / A41 Newport Road roundabout;
- J2 – A41 Albrighton-By-Pass / Newport Road priority junction;
- J3 – A41 Albrighton-By-Pass / Station Road / Cordy Lane priority junction;
- J4 – Station Road / High Street / Cross Road priority junction;
- J5 - A464 Holyhead Road / A41 Newport Road signal junction;
- J6 – Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road Roundabout; and
- J7 – M54 J4 / Castle Farm Road / Priorslee Road / A464 roundabout.

SC notes the information provided on assessment locations and considers this acceptable, and requests these results are presented to inform further appraisal of the transport impacts of the development”.

- 9.2 Whilst the above is broadly acceptable, it is not considered reasonable that an assessment of the A41 Albrighton-By-Pass / Station Road / Cordy Lane priority junction is required, as the agreed proposed development distribution pattern has not assigned any vehicle trips at this location, hence the development would have no impact. Once the development is operational, it could be that a negligible number of vehicles choose to use this junction in the peak period as part of a linked trip with a drop-off at the train station, but even in this scenario there would be a negligible change and would not materially alter how the junction currently operates. For these reasons, it is not considered a junction capacity assessment is required and thus one has not been undertaken.

- 9.3 Based on the above, the following junction assessments have been completed:

- SAJ1 – A464 Holyhead Road / Spine Road ghost island
- SAJ2 – A464 Holyhead Road / Spine Road roundabout
- SAJ3 – Cross Road / Elm Road priority junction
- J1 – M54 J3 / A41 Newport Road roundabout;
- J2 – A41 Albrighton-By-Pass / Newport Road priority junction;
- J3 – Station Road / High Street / Cross Road staggered crossroads;
- J4 – Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road roundabout;
- J5 – Cross Road / Newhouse Lane priority junction;

TECHNICAL NOTE 4 (TN04)

- J6 - M54 J4 / Castle Farm Road / Priorslee Road / A464 roundabout
- J7 - A464 / A41 signal junction (results included in Staffordshire County Council Response Note Technical Note 05 (TN05, December 2024); and
- J8 - A41 / Heath House Lane / Wrottesley Park Road signal junction (results included in Staffordshire County Council Response Note Technical Note 05 (TN05, December 2024).

Assessment Years

- 9.4 Paragraph 1 of the LHA junction capacity assessment response relates to the TEMPRO traffic growth factors that were used to inform the junction modelling that was included in the TA, this paragraph states:

“Paragraph 7.1 sets out that a future design year five years post-registration of application is to be considered, and a further ten year future design year sensitivity test is considered. TEMPRO factors have been presented in relation to this and are as follows:

- 2024 to 2029 AM Peak = 1.0407
- 2024 to 2029 PM Peak = 1.0397
- 2024 to 2034 AM Peak = 1.0760
- 2024 to 2034 PM Peak = 1.0740

SC notes the information provided on assessment years and TEMPRO factors and considers these acceptable”.

- 9.5 Based on the comments provided by the LHA, it is understood that the capacity testing future years set out in the TA as well as the TEMPRO growth rates used to growth traffic to these future years are acceptable.

Committed Developments

- 9.6 A review of the Shropshire planning portal confirmed that there was three live or consented planning applications within the local area. These are the following and are located off Kingswood Avenue circa 1.3km east of the proposed development:
- Consented Application 23/00870/FUL for 43 dwellings (Millfields Phase 3)
 - Consented Application 23/02095/OUT for 90 dwellings (Millfield Phase 4)
 - Live Application 24/02662/OUT for 150 dwellings (land east of Millfields)
- 9.7 A review of the planning documents submitted for these applications has been undertaken, with the committed development traffic for all three sites assigned to the road network utilising the distribution diagrams in the TA produced in support of the 24/02662/OUT application, and the residential trip rates agreed in the TA produced in support of the 23/02095/OUT application. As such the subsequent agreed distribution pattern and traffic assignment for the development is contained at **TF Figures 6 to 8** contained at **Appendix D** of this Note.

TECHNICAL NOTE 4 (TN04)

Sensitivity Development

- 9.8 As set out in the TA, a review of the Draft Shropshire Local Plan Review draft allocations was undertaken for the Albrighton area which highlighted that there is an area of land safeguarded for residential development located to the south of Cross Road and west of Newhouse Lane on the northwestern boundary of the application site.
- 9.9 This safeguarded land has been assessed in a 'sensitivity scenario' for up to 200 dwellings in order to assess the additional off-site impact of this development if a live application was to come forward. For the purpose of this assessment, the residential trip generation set out in **Table 1** and the residential distribution pattern has been applied, with **TF Figures 11 to 12** contained at **Appendix D** of this Note showing the vehicle trips. It should be noted that this scenario would be undertaken as the final scenario after the development for information only, and should not be used as a basis for assessing mitigation given there is no surety the development would ever come forward.

Modelling Scenarios

- 9.10 In line with the strategy that was set out in the TA, the following scenarios have been assessed, with reference to the respective **TF Figures** provided that are contained within **Appendix D**:
- 2024 Base (TF Figure 13 & 14)
 - 2029 Base (TF Figure 15 & 16)
 - 2029 Base + Committed Development (TF Figure 17 & 18)
 - 2029 Base + Com Dev + Proposed Development (TF Figure 19 & 20)
 - 2029 Base + Com Dev + Prop Dev + Sensitivity (TF Figure 21 & 22)
 - 2034 Base (TF Figure 23 & 24)
 - 2034 Base + Com Dev (TF Figure 25 & 26)
 - 2034 Base + Com Dev + Prop Dev (TF Figure 27 & 28)
 - 2034 Base + Com Dev + Prop Dev + Sensitivity (TF Figure 29 & 30)

Modelling Overview

- 9.11 To inform this Note, undated junction capacity analysis has been undertaken at the site access junctions and a series of off-site junctions in the Albrighton area using the Junctions 9 software suite. Junctions 9 includes PICADY and ARCADY, whereby PICADY is industry standard software for assessing priority junctions and ARCADY is industry standard software for assessing roundabouts.
- 9.12 One of the main measures in assessing priority junctions is 'Ratio of Flow to Capacity' (RFC). RFC is an indicator of the likely performance of a junction, with RFC values between 0.00 and 0.85 representing stable operation conditions with queues unlikely to occur. RFC values between 0.85 – 1 represent variable operation conditions with probable queuing at junctions during some of the assessment period. RFC > 1.00 represent overloading conditions at the junction with queues likely during most of the assessment period.
- 9.13 All of the junctions have been assessed using a 'One Hour' traffic profile. When using this mode, the Junctions 9 software synthesises a peak within the assessment period with a 15 minute warm-

TECHNICAL NOTE 4 (TN04)

up and run-down either side of the assessment period. By pre-loading the junction with traffic and synthesising a peak, within the peak hour, this forms a robust assessment scenario.

- 9.14 The full capacity assessment output reports and junction geometries (covering all of the scenarios outlined above) are contained at **Appendix E**. In summary, the capacity assessment work has found that all of the junctions work well within capacity across all of the scenarios, as a result, this Note will set out the junction capacity assessment for only the worst case assessment scenario in the 2034 future year.

SAJ1 - Proposed A464 Holyhead Road / Spine Road Ghost Island Right Turn Junction

- 9.15 The proposed A464 Holyhead Road / Spine Road ghost island right turn junction has been assessed using the PICADY element of the Junctions 9 programme. The junction model output files are provided at **Appendix E** and the results are summarised at **Table 2**.

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
Spine Road Left Turn	0.5	8.71	0.32	0.2	6.82	0.13
Spine Road Right Turn	0.1	10.90	0.08	0.0	10.87	0.04
A464 Right Turn	0.1	6.22	0.13	0.3	7.23	0.24

Table 2. A464 Holyhead Road / Spine Road Ghost Island Junction Results

- 9.16 From this it can be seen that the A464 Holyhead Road / Spine Road ghost island site access junction will operate well within capacity on all arms during the worst case assessment scenario.

SAJ2 - Proposed A464 Holyhead Road / Spine Road Roundabout

- 9.17 The proposed A464 Holyhead Road / Spine Road roundabout has been assessed using the ARCADY element of the Junctions 9 programme. The junction model output files are provided at **Appendix E** and the results are summarised at **Table 3**.

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
A464 (East)	0.3	2.91	0.21	0.2	2.78	0.17
A464 (West)	0.4	2.88	0.28	0.4	2.97	0.29
Spine Road	0.3	3.31	0.20	0.3	3.54	0.24

Table 3. A464 Holyhead Road / Spine Road Roundabout Results

- 9.18 From this it can be seen that the A464 Holyhead Road / Spine Road roundabout will operate well within capacity on all arms during the worst case assessment scenario.

TECHNICAL NOTE 4 (TN04)

SAJ3 - Proposed Cross Road / Elm Road Priority Junction

- 9.19 The proposed conversion of the Cross Road / Elm Road / Patshull Road mini roundabout to a priority T-junction by stopping up Patshull Road has been assessed using the PICADY element of the Junctions 9 programme. The junction model output files are provided at **Appendix E** and the results are summarised at **Table 4**.

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
Elm Road	0.4	12.12	0.28	0.2	10.55	0.18
Cross Road	0.0	4.87	0.00	0.0	4.82	0.02

Table 4. Cross Road / Elm Road Priority Junction Results

- 9.20 From this it can be seen that the Cross Road / Elm Road Priority Junction will operate well within capacity on all arms during the worst case assessment scenario.

J1 - M54 Junction 3 Tong Interchange

- 9.21 The existing M54 Junction 3 Tong Interchange roundabout has been assessed using the ARCADY element of the Junctions 9 programme, noting that the large roundabout tab was selected for this. The junction model output files are provided at **Appendix E** and the results are summarised at **Table 5**.

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
M54 (East)	0.6	3.68	0.38	1.1	4.31	0.52
A41 (South)	1.1	3.32	0.52	1.5	4.22	0.59
M54 (West)	0.6	3.24	0.37	1.1	5.20	0.53
A41 (North)	1.0	3.52	0.50	0.5	2.68	0.33

Table 5. M54 Junction 3 Tong Interchange Results

- 9.22 From this it can be seen that the M54 Junction 3 Tong Interchange roundabout will operate well within capacity on all arms during the worst case assessment scenario.

J2 - A41 Albrighton-By-Pass / Newport Road Ghost Island Right Turn Junction

- 9.23 The existing A41 Albrighton-By-Pass / Newport Road Ghost Island Right Turn Junction has been assessed using the PICADY element of the Junctions 9 programme. The junction model output files are provided at **Appendix E** and the results are summarised at **Table 6**.

TECHNICAL NOTE 4 (TN04)

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
Newport Road Left Turn	2.8	22.58	0.75	0.7	8.83	0.40
Newport Road Right Turn	0.0	23.57	0.02	0.1	26.67	0.09
A41 Right Turn	1.0	13.48	0.50	3.0	24.19	0.76

Table 6. A41 Albrighton-By-Pass / Newport Road Ghost Island Junction Results

- 9.24 From this it can be seen that the A41 Albrighton-By-Pass / Newport Road Ghost Island Right Turn Junction will operate well within capacity on all arms during the worst case assessment scenario.

J3 - Station Road / High Street / Cross Road Staggered Crossroads

- 9.25 The existing Station Road / High Street / Cross Road Staggered Crossroads has been assessed using the PICADY element of the Junctions 9 programme. The junction model output files are provided at **Appendix E** and the results are summarised at **Table 7**.

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
Cross Road (West)	1.3	15.03	0.58	0.9	13.25	0.48
High Street (South)	0.3	5.71	0.16	0.3	5.99	0.15
Station Road (East)	0.2	8.69	0.15	0.3	9.97	0.24
High Street (North)	0.6	8.47	0.34	0.7	8.61	0.37

Table 7. Station Road / High Street / Cross Road Staggered Crossroads Results

- 9.26 From this it can be seen that the Station Road / High Street / Cross Road Staggered Crossroads will operate well within capacity on all arms during the worst case assessment scenario.

J4 - Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road Roundabout

- 9.27 The existing Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road roundabout has been assessed using the ARCADY element of the Junctions 9 programme. The model output files are provided at **Appendix E** and the results are summarised at **Table 8**.

TECHNICAL NOTE 4 (TN04)

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
Shrewsbury Road	0.8	10.36	0.46	0.4	8.32	0.30
Victoria Road	1.4	9.98	0.58	0.7	6.29	0.40
Innage Road	3.7	21.73	0.80	3.6	18.33	0.79
Priorslee Road	1.0	8.62	0.51	3.9	22.06	0.81
Haughton Lane	0.7	16.49	0.40	0.5	20.53	0.34

Table 8. Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road Roundabout Results

- 9.28 From this it can be seen that the Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road roundabout will operate well within capacity on all arms during the worst case assessment scenario.

J5 - Cross Road / Newhouse Lane Priority Junction

- 9.29 The existing Cross Road / Newhouse Lane priority junction has been assessed using PICADY element of the Junctions 9 programme. The model output files are provided at **Appendix E** and the results are summarised at **Table 9**.

2034 Base + Com Dev + Prop Dev + Sensitivity	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	AM			PM		
Newhouse Lane Left Turn	0.0	6.61	0.01	0.0	6.54	0.04
Newhouse Lane Right Turn	0.1	10.12	0.09	0.1	9.22	0.08
Cross Road Right Turn	0.1	4.86	0.06	0.0	4.99	0.02

Table 9. Cross Road / Newhouse Lane Priority Junction Results

- 9.30 From this it can be seen that the Cross Road / Newhouse Lane Priority junction will operate well within capacity on all arms during the worst case assessment scenario.

J6 - M54 J4 / Castle Farm Road / Priorslee Road / A464 roundabout

- 9.31 Junction 4 of the M54 is located circa 10km to the northwest of the Albrighton South site. The existing queue data recorded at the junction as part of the manual classified counts undertaken confirmed an average maximum queue of 4.9 vehicles on the A464 entry arm in the AM peak and 0.4 vehicles in the PM peak.
- 9.32 Based on the agreed trip generation, distribution and traffic assignment (contained at **TF Figure 2-5**), the proposed development would generate the following additional movements through the junction:

TECHNICAL NOTE 4 (TN04)

- AM Peak: 77 movements through the junction.
- PM Peak: 68 movements through the junction.

9.33 When understanding the impact an uplift in flows could have on a junction, the 'Institute of Environmental Management and Assessment's' (IEMA) - 'Environmental Assessment of Traffic and Movement' (July 2023) document sets out that:

"It should also be noted that the day-to-day variation of traffic on a road is frequently at least + or -10%. At a basic level, it should therefore be assumed that projected changes in traffic of less than 10% create no discernible environmental impact."

9.34 When considering that Junction 4 of the M54 accommodates 4,345 movements across the morning peak hour and 4,396 movements across the evening peak hour, the proposed development would have an impact of 1.8% and 1.5% in the morning and evening peak hours respectively. This is considered negligible.

9.35 Overall, when considering the queue data obtained from the survey, this confirms there is very little queuing on the key A464 arm of the M54 J4 junction, and the proposed development would only increase overall traffic flows by just 1.8% and 1.5% in the peak periods. As such, it is not considered that a full capacity assessment should be required as there is sufficient evidence to demonstrate there would not be a severe or material impact at the junction and it is concluded that the proposed development would not fundamentally affect how the junction current operates.

J7 - A41 / A464 signal junction

9.36 The A41 / A464 signal junction is located circa 3.4km to the east of the Albrighton South site and it contained within the local authority of South Staffordshire and is within the jurisdiction of Staffordshire County Council (SCC) who act as the LHA For simplicity purposes, a separate 'Staffordshire County Council Response Note Technical Note 05' (TN05, December 2024) has been prepared which specifically addresses the impact of the proposed development at this junction which includes the modelling output and mitigation. However, for completeness, an executive summary has been provided below.

9.37 The existing A41 / A464 signal junction has been assessed in the LinSig 3 programme in line with industry best practice with the output measures by its Degree of Saturation (DoS), noting that a DoS of less than 80% means the junction operates with plenty of spare capacity, between 80% to 90% means the junction is operating efficiently and DoS greater than 90% means that the junction is close to capacity. The model has been prepared using the signal timing information provided by SCC to ensure accuracy with operation on the ground and assessed using the **TF Figures** contained at **Appendix D**, as well as additional committed developments contained within the South Staffordshire area.

9.38 The results demonstrate that the junction would operate at a Degree of Saturation (DoS) of 82.5% and 79.5% during the morning and evening peak periods respectively in the '2034 Base + Com Dev' scenario. The DoS at the junction increase to 91.2% and 81.4% respectively once the proposed development flows were added to the model in this scenario.

9.39 Due to the proposed developments impact at the A41 / A464 junction which results in the junction

TECHNICAL NOTE 4 (TN04)

changing from operating efficiently to close to capacity in the morning peak period, a mitigation scheme has been identified to ensure the proposed development impact at the junction is not classified as 'severe' in accordance with Paragraph 115 of the NPPF.

- 9.40 The scheme and modelling results are contained within TN05 (which is submitted separately to respond to the SCC Highways comments). As part of this, a mitigation strategy has been assessed which includes widening the A464 carriageway to create a two-lane entry to the junction with amendments to the A41 (E) exit to create a two-lane exit with a 100m filter lane. The mitigation scheme modelling results confirm with the proposed improvements, the junction would operate with a DoS of 82.5% and 68.6% during the morning and evening peak periods respectively in the '2034 Base + Com Dev + Prop Dev' scenario. This would result in a 'nil detriment' change in the morning peak whilst significantly improving the operation of the junction in the evening peak, therefore meaning the proposed development would not have a severe impact.

J8 - A41 / Heath House Lane / Wrottesley Park Road signal junction

- 9.41 The A41 / Heath House Lane / Wrottesley Park Road signal junction is located circa 5.8km to the east of the Albrighton South site and is also contained within the local authority of South Staffordshire and is within the jurisdiction of Staffordshire County Council (SCC) who act as the LHA. For simplicity, a separate 'Staffordshire County Council Response Note Technical Note 05' (TN05, December 2024) has been prepared which specifically addresses the impact of the proposed development at this junction. This Note includes full modelling outputs as well as a proposed improvement scheme to mitigate the impact of the proposed development. Notwithstanding this, for completeness, an executive summary of the work undertaken to address the SCC Highways comments has been provided below.
- 9.42 The existing A41 / Heath House Lane / Wrottesley Park Road signal junction has been assessed in the LinSig 3 programme in line with industry best practice. The model has been prepared using the signal timing information provided by SCC to ensure accuracy with operation on the ground and assessed using the **TF Figures** contained at **Appendix D**, as well as additional committed developments contained within the South Staffordshire area.
- 9.43 The results demonstrate that the junction would operate at a Degree of Saturation (DoS) of 105.0% and 108.9% during the morning and evening peak periods respectively in the '2034 Base + Com Dev' scenario. The DoS at the junction increases to 113.7% and 119.7% respectively once the proposed development flows were added to the model in this scenario.
- 9.44 Whilst the A41 / Heath House Lane / Wrottesley Park Road junction operates over capacity in the baseline scenario, the addition of development traffic further exacerbates this. As such a mitigation scheme has been identified to ensure the proposed developments impact at the junction is not classified as 'severe' in accordance with Paragraph 115 of the NPPF.
- 9.45 The scheme and modelling results are contained within TN05 (which is submitted separately to respond to the SCC Highways comments). As part of this, a mitigation strategy has been assessed which includes carriageway and island amendments to the A41 (E to W) to create a two-lane entry and exit to the junction and widening of Wrottesley Park Road to create additional two-lane entry storage capacity. The mitigation scheme modelling results confirm a DoS of

TECHNICAL NOTE 4 (TN04)

105.7% and 95.1% during the morning and evening peak periods respectively in the '2034 Base + Com Dev + Prop Dev' scenario. As shown, with the mitigation strategy in place, the addition of development traffic would result in a fractional increase in the DoS in the morning peak whilst significantly improve the operation of the junction in the evening peak, therefore overall it is clear that with the mitigation scheme in place, the proposed development would not have a severe impact at the junction.

10.0 SUSTAINABLE TRAVEL PROMOTION / ACCESSIBILITY IMPROVEMENT

10.1 Paragraph 1 of the LHA sustainable travel promotion / accessibility improvement element of the response states that:

*"Section 8 of the TA sets out how the development might promote accessibility by all modes of travel, with an emphasis on active travel and public transport. **Further consideration is required in terms of the promotion of sustainable travel to and from the site**".*

- 10.2 In line with the comments of the LHA and the ATE responses to the application, further sustainable and active travel improvements have been proposed as part of the post application work in addition to those already proposed as part of the TA and TP submitted with the application. These are detailed in the ATE Response Note Technical Note 01 (TN01, October 2024) and ATE Response Note Technical Note 03 (TN03, November 2024) that are available on the SC planning application planning portal.
- 10.3 Following receipt of TN03, ATE provided a further response on the updated proposals in December 2024 which confirms that they are content with the updated proposals and recommend the application for 'conditional approval' subject to appropriate planning conditions/obligations.
- 10.4 The latest package of off-site active travel improvements which as set out above, have been agreed as appropriate by ATE and subsequently updated to reflect the results of the RSA are shown at **Drawing Numbers SH534-4PD-010 Revision B** which are provided at **RSA Appendix B**.
- 10.5 In summary, these proposals include speed reducing measures on Cross Road, a signalised pedestrian crossing over High Street and wider tactile/drop kerb pedestrian improvements on the key walking links between the site and the wider Albrighton village facilities and rail station.
- 10.6 In addition to this, in line with the ATE requests, additional multi modal travel information and mode split targets for each specific land use have also been prepared and are included in the SDD Team ATE responses. These specific land use mode split travel targets can be appended to the Framework Travel Plan which could in turn be secured by way of a suitably worded Planning Condition.
- 10.7 Given the additional sustainable and active travel improvements that have been put forward as part of the post application discussions, it is concluded that appropriate 'further consideration' has been given to promoting sustainable travel to and from the site and as such, this point raised in the LHA response has been appropriately addressed. This assertion is confirmed by the agreement of ATE to the updated information and active travel measures proposed.

TECHNICAL NOTE 4 (TN04)

11.0 STAGE 1 ROAD SAFETY AUDIT (RSA)

- 11.1 As set out, the SDD Team commissioned Midlands Road Safety Limited to undertake a Stage 1 RSA of the site access proposals and the off-site active travel and walking/cycling improvements that were proposed as part of the TA and subsequently updated following the ATE comments on the application.
- 11.2 In summary, whilst the RSA raised a number of matters, it is considered that all of the matters can be addressed either through the provision of additional information as set out in the Designer's Response, as part of the limited changes included in the updated drawing package or as part of the S278 detailed design process following the granting of any planning consent.
- 11.3 A full copy of the RSA and the associated Designer's Response is provided at **Appendix B** to this Note. As set out in this Note, following the receipt of the RSA, the site access and off-site improvement drawing package has been updated to reflect the comments from the RSA Team. This updated drawing package is provided at **RSA Appendix B**.

TECHNICAL NOTE 4 (TN04)

Appendix A Shropshire Council Highways Consultation Comments (15th October 2024)

Application Number: 24/02108/OUT

Site location: Patshull Road, Albrighton, Shropshire.

Proposal: Outline application to include access for a mixed-use development comprising up to 800 no dwellings, a care home of up to 80 units, a secondary school and local centre with associated access, infrastructure, landscaping, and drainage.

Scope of Response

This is a review of the following documents associated with the above planning application:

- Sustainable Development and Delivery, DLP Planning Ltd, South Albrighton, Shropshire, Transport Assessment (TA), May 2024.

Executive Summary

The key outstanding concerns are as follows and are provided in more detail within this response note:

- Further information requested regarding internal layout when this becomes available
- Further information requested regarding refuse and recycling arrangements when this becomes available
- Trip generation numbers to be checked and confirmed in relation to arrivals and departures not adding up to the two-way trips in all instances
- Further information requested regarding the additional seven junction capacity assessment locations, in terms of providing the results of these assessments as these become available to inform the appraisal process.
- Further information with regard to timing of development in terms of allocation within Local Plan review and assessment of other allocations within the Local Plan that may have a material impact.

Review of Transport Assessment

Existing Conditions

Highway Network

Paragraph 3.1 states the site lies on land 1km to the southwest of the centre of the village of Albrighton, bound by Cross Roads to the west; The A464 to the south; and Newhouse Lane to the east. **It is noted that four key roads outline the existing context for the site: A464 Holyhead Road; Cross Road; Patshull Road; and Newhouse Lane.**

Paragraph 3.7 states the A464 Holyhead Road running along the southern edge of the site is subject to the nation speed limit; is approximately 6.7m wide; has a single footway extending west from the northern side of the road from the A464/Cross Road junction; and features no street lighting. **It is noted that the footway stretching along the A464 to the Cross Road junction terminates at this site to recommence on the northern side of the carriageway at the A464/Patshull Road junction running adjacent to the southern boundary of the site. Along the northern edge of the A464 there is a grass verge ranging in width from 2 to 12 metres.**

Paragraph 3.10 states Cross Road runs northeast from the A464/Cross Road junction and is 5 to 6 metres wide with no provision of footways. **It is noted that the majority of Cross Road is subject to the national speed limit however this is reduced to 40mph 600 metres northeast of the A464/Cross Road junction and 30mph 700 metres northeast of the A464/Cross Road junction. The street lighting along Cross Road runs from 40 metres east of the national limit, continuing throughout the village. There is also a grass verge running adjacent to the southern and northern edges of the carriageway ranging from 0.5 to 4 metres wide.**

Paragraph 3.18 states Patshull Road is an unclassified road forming the southern arm of the Cross Road/Elm Road junction. Patshull Road is between 4.5 and 5 metres wide and is subject to a 30mph speed limit increasing to the national speed limit 140 metres south of the Cross Road/Elm Road junction inception of the road. **It is noted that there is no provision for footways along Patshull Road except for a 25m long section located at the A464/Patshull Road junction.**

Paragraph 3.21 states Newhouse Lane is an unclassified road forming the southern arm of the Cross Road/Newhouse Lane priority junction on the north eastern boundary of the site with a width ranging from 3 to 3.7 metres for the majority of its length with a small northern section widening to 4.5 metres between Cross Road junction and the southern boundary of the Albrighton Primary School site. **It is noted that Newhouse Lane is subject to the national speed limit from Newhouse Lane/A464 junction, changing to a 30mph speed limit 315 metres south of the Newhouse Lane/Cross junction. There is a 1.5 to 2 metres wide footway on the east side of Newhouse Lane running from Cross Road/Newhouse Lane junction to the southern Albrighton Primary School vehicular access set back from the carriageway by a 2-metre-wide grass verge. Streetlighting is present along the entirety of the footway with no other section of Newhouse Lane having a footway or streetlighting.**

Accessibility

Pedestrian Accessibility

Paragraph 3.29 outlines the 14 services that are accessible within the 2,000 metre maximum walking distance from the town centre. **Shropshire Council as Local Highway Authority have reviewed the information and considers acceptable.**

Paragraph 3.30 states there is a dropped kerb and tactile paving crossing on the northern arm of the Cross Road/Elm Road/ Patshull Road Mini-Roundabout connecting the footway on the western side of Elm Road to the footway eastwards on Cross Road. **It is noted that between the Cross Road/Elm Road/ Patshull Road mini-roundabout and the Cross Road/Albert Road mini-roundabout there is a 2m wide footway along the northern side of Cross Road separated from the carriageway by a 1 – 2-metre-wide grass verge. There is also an existing footway on the southern wide of Cross Road between Patshull Road and the Albert Road mini roundabout however this has been almost entirely overgrown.**

Paragraph 3.32 outlines the dropped kerb and tactile paving crossing provided on the northern arm of the Albert Road mini roundabout providing a link to the footway on the eastern side of the junction. **It is further noted that a Zebra crossing is provided to the east of the Cross Road/Newhouse Lane junction providing a crossing point to and from Albrighton Primary School from Newhouse Lane.**

Paragraph 3.35 states there are dropped kerbs and tactile paving crossings at the Cross Road/Whiston Close; Cross Road/Ash Grove; Cross Road; Manor Gardens junction and the Cross Road/The Orchard mini roundabout running towards the High Street. **There is also a dropped kerb and tactile paving crossing at the Newhouse Lane/Garridge Close junction.**

Paragraph 3.40 outlines the Public Rights of Way (PROWs) located within the area. PROW 0111/4/1 runs through the south eastern edge of the site. A further three PROWs connect to Newhouse Lane at the eastern boundary of the site, PROW 0102/9/1. PROW 0111/3/1, and PROW 0111/4/1. **Shropshire Council as Local Highway Authority have reviewed the information and considers acceptable subject to any consideration by Shropshire Council outdoor recreation team.**

Cycle Accessibility

Paragraph 3.49 states NCN Route 81 passes through Albrighton along the high street. Observation is noted.

Audit of Active Travel Routes

Paragraph 3.53 lists the audited routes highlighting three key active travel routes and desire lines between the site and key local facilities.

The audit of Route 1, between the site and Albrighton Road via Cross Road, in Paragraph 3.55 states that the footways are provided along the full length of the route with widths varying between 1.2 and 2 metres. Most of the footway provision along the route is set back from the carriageway by a grass verge. There is a 30mph speed limit along the carriageway. Paragraph 3.56 outlines the provision of a footway along the southern side of Cross Road and paragraph 3.58 notes the provision of a zebra pedestrian crossing across Cross Road north east of Newhouse Lane Junction. Paragraph 3.59 states that the audit has concluded the only necessary measure to provide pedestrian improvements to the route is clearing the vegetation encroaching onto the southern footway.

Paragraph 3.62 states, the audit of Route 2, between the site and local facilities on Albrighton High Street via Cross Road, assess the quality of the route between the Zebra pedestrian crossing on Cross Road and Highstreet. Paragraph 3.63 states, the audit confirmed the provision of footways along both sides of the carriageway the full length of the route with width ranging from 1.2 to 2 metres. The carriageway is also subject to a 30mph speed limit making it an “appropriate walking route between the site and local facilities”.

Paragraph 3.65 states dropped kerb tactile paving crossings are provided at the majority of existing junctions along the route. However, paragraph 3.66 sites: the Cross Road junction with The Courts/Albrighton Table Tennis Club; The Cross Road junction with High Steet; and The Ashfields access road junction with High Street as sites without dropped kerb or tactile paving crossings, requiring these improvements. Paragraph 3.68 states no further pedestrian deficiencies were noted.

Paragraph 3.70 states the audit of Route 3, Site to St Mary’s Church of England Primary School and Albrighton Station via Station Road, confirmed the provision of footways along both sides of the carriageway the full length of this route with width varying between 1.2 to 2 metres with the entirety of the carriageway subject to a 30mph speed limit making the route “an appropriate walking route between the site and the facilities to the north east”.

Paragraph 3.72 the audit has concluded a number of junctions were dropped kerbs and tactile paving is not provided, requiring improvements to the provision of them. These sites include: The Cross Road junction with Station Road; The Station Road junction with Bushfield Road; The Station Road junction with Fairlawn; Station Road – 2 dropped kerb crossings to facilitate crossing movements; The Station Road junction with Redford Drive; The Station Road junction with Cotswold Drive; The Station Road junction with Windsor Road; The Station Road junction with Brooklands Road; and The Station Road junction with Shaw Lane.

Paragraph 3.73 states no further pedestrian deficiencies were noted along Route 3.

SC has reviewed the audit of active travel routes presented and considers this acceptable at this stage subject to further review and identification of infrastructure.

Bus Accessibility

Paragraph 3.76 states that the nearest bus stops are located to the northeast of the site on High Street in the centre of Albrighton. The bus stops are located 750 metres walking distance from the northern corner of the site 1.2 kilometres walking distance from the centre of the site. Paragraph 3.77 notes that these bus stops would be accessible via a combination of the proposed and existing footways and crossing. **It is noted that both the eastbound and westbound bus stops consist of shelter and seating in addition to the flag pole with timetable being located within the shelter. Furthermore, the service 891 runs every 60 minutes on weekdays between 06:38-17:03 westbound and 07:50-18:07 eastbound. The Saturday 891 service runs every 2 hours from 07:48-15:58 westbound and 08:55-17:06 eastbound. There is no Sunday service running to or from either of the bus stops.**

Paragraph 3.81 states the improvements to existing public transport services inclusive of bus routes and bus infrastructure include the ability for new or re-routed bus services to travel through the site and link with key facilities in Albrighton. There is also a proposed shuttle service facilitating mass transport movements between the site and Albrighton Village and the Rail Station. **SC notes this and considers it acceptable in principle if the application is taken forward this will require further consideration in terms of likely infrastructure required and level of contributions to be secured through a Section 106 agreement.**

Rail Accessibility

Paragraph 3.83 states the nearest railway station to the site is Albrighton Railway Station located 1.5km walking distance from the northern corner of the site and 1.9km from the centre of the site. It is noted that access to the station is via existing footway infrastructure and crossing points.

Paragraph 3.85 notes the station is operated by West Midland Railway featuring two platforms, a 17-space car park and 32 cycle store spaces monitored by CCTV. It is noted that Albrighton Railway Station provides an hourly express service in east and westbound directions operating between Shrewsbury and Telford to the west and Wolverhampton and Birmingham New Street to the east, passing through and stopping at a number of smaller stations. The weekday service to Birmingham New Street operates twice hourly between 06:00-09:00 and 17:00-18:00 with an hourly service in the remaining part of the day. On the weekend there is an hourly service

running to Birmingham New Street. The weekday service to Shrewsbury operates twice hourly between 06:00-09:00 and 17:00-19:00 with an hourly service running in the remainder of the day. There is also an hourly service running on the weekend.

Personal Injury Accident Data

Paragraph 3.94 states there has been 5 Personal Injury Accidents (PIA) within the 5 year period 2018-2022. Three of these PIAs were recorded as slight and two as serious with no PIAs recorded as involving a fatality. **It is noted that none of the 5 PIAs involved a pedestrian or pedal cycle casualty, additionally with five collisions recorded over the 5 year period the average rate of one collision per year means the study area is not considered to have a high collision rate.**

Paragraph 3.96 states 2 PIAs have been recorded near the A464/Newhouse Lane Junction with one being slight and one serious. Both PIAs at this location occurred in 2020 with the slight PIA involving one vehicle resulting in two casualties and the serious PIA involving two vehicles resulting in one casualty. **SC has reviewed and considers acceptable.**

Paragraph 3.97 states one serious PIA has been recorded near the A464/Patshull Road junction occurring in 2020 involving two vehicles resulting in two casualties. One slight PIA was recorded near the A464/Cross Road junction occurring in 2019 involving two vehicles resulting in two casualties. One slight PIA was recorded at an unknown date along the stretch of road between the A464/Cross Road and A464/Patshull Road junctions involving two vehicles, one car and one motorcycle, resulting in a motorcyclist casualty. **It is further noted that a wider PIA assessment was also undertaken for the wider Albrighton Road network in the same 5-year period from 2018-2022 with no recorded PIAs occurring in that stretch.**

Paragraph 3.101 concludes the PIA review suggests there are no material PIA safety concerns that could be exacerbated by the development proposals. **SC has reviewed and considers acceptable in principle based on current vehicle movements and travel behaviour. As part of any application further consideration will need to be given to ensure the number of PIA where possible remains minimal.**

Existing Traffic Flows

Paragraph 3.102 states Automatic Traffic Surveys (ATCs) and Manual Classified Counts (MCCs) were undertaken on key road links and junctions on the site. The ATCs were undertaken over a seven-day period starting on Thursday 14th March 2024 while the MCCs were undertaken on Tuesday 19th March 2024. The surveys were undertaken in a period with no significant roadworks or constraints to traffic flows that could materially impact the results meaning the surveys are considered as

providing appropriate traffic data of vehicle speed and quantum assessments. **SC notes this and considers it acceptable in principle.**

Paragraph 3.105 notes both ATCs located along the A464 Holyhead Road counted 85th percentile speeds of less than the 60mph speed limited. ATC 1 posted an eastbound 85th percentile speed of 56.3mph while westbound 85th percentile speed was 59.9mph. ATC 3 posted an eastbound 85th percentile speed of 54.5mph and a westbound 85th percentile speed of 55.4mph.

Paragraph 3.106 notes ATC 2, placed along the A464 Holyhead Road between ATC 1 and ATC 3, was located at a site where speed limits changed from 40mph to 60mph with the ATC 2 northbound recording an 85th percentile speed of 43.7mph where vehicles are decelerating from a 60mph zone to a 40mph zone. The ATC 2 Southbound recorded an 85th percentile speed of 46.7mph where vehicles were accelerating from a 40mph zone to a 60mph zone.

It is noted that these 85th percentile speeds are in line with what would be anticipated with ATCs located at a speed limit change of 40-60 mph.

Development Proposals

Overview of Proposals

Paragraph 4.1 outlines the development proposals comprising of: up to 800 residential dwellings; an 80 bed care home facility; a 2FE Secondary School (up to 750 students); a retail/food store (up to 1,700 sqm); a GP and Pharmacy (circa 950 sqm); a flexible E Class space for community uses (circa;150 sqm); a shuttle bus service; and associated car and cycle parking, landscaping and open space. **It is noted that, in accordance with the Shropshire Local Plan, the residential element of the development will be a mixture of market and affordable dwellings of varying sizes.**

Paragraph 4.5 outlines further detail of the development proposals. The proposed secondary school would be located towards the northeastern boundary of the site to be close to the main population centre of Albrighton. The care facility, doctors' surgery and retail/employment facilities are to be provided more centrally within the site with access to a new walking/cycling 'greenroute' provided on Patshull Road and the new pedestrian provision on Cross Road to the west of the Patshull Road junction, two new junctions are proposed into the site from the A464 Holyhead Road. A spine road is to be provided between the two new access junctions on to the A464 Holyhead Road crossing Patshull Road and Newhouse Lane. **SC notes this and considers it acceptable in principle. However, it is unclear from the masterplan layout submitted how the school will be accessed.**

Bus stops would be provided along the spine road subject to discussions with the local bus companies to provide a new route or divert an existing route. A new north/south spine road link would be provided between the main east/west spine

road to link with Cross Road to the north. **SC notes this and considers it acceptable in principle.**

Both Patshull Road and Newhouse Lane would be downgraded to 'access only.' **Further consideration should be given to this proposals, specifically Patshull Road as vehicular access to residential properties needs to be maintained and it is unclear how the proposed secondary school will be accessed.**

And the speed limit on the A464 along the frontage of the site would also be reduced from 60mph to 40mph. **SC notes this and considers it acceptable in principle subject to further assessment and details being submitted.**

Proposed Access

Paragraph 4.14 outlines the overall access strategy for the area, removing vehicle through movements from Patshull Road and Newhouse Lane and improving existing vehicle routes on Cross Road. Paragraph 4.16 states, the overall access strategy includes the provision of a new north/south spine road extending from Cross Road to the east/west spine road connecting into the A464 Holyhead Road to the southwest. **SC has reviewed and considers information acceptable subject to further detailed design and road safety audits.**

Paragraph 4.23 describes the proposed southwestern site access for A464 Holyhead Road Roundabout, stating it was designed in accordance with the Design Manual for Roads and Bridges CD 116, comprising of an inscribed circle diameter of 40 metres, a circulatory carriageway of 8 metres with all three approach arms comprising a single lane approach that widen to a two-lane entry. **It is further noted the spine road arm of the roundabout entering the site would comprise of a carriageway width of 6.5 metres bound by 0.5 metres wide verges and a 2-metre-wide footway at the western edge, a 3-metre-wide shared footway/cycleway at the eastern edge that reduces to 2 metres wide extending south to the A464 Holyhead Road. The roundabout provides a stopping sight distance of 120 metres and a speed limit of 40mph along the A464 Holyhead Road. This reduces to 43 metres of visibility and a 30mph speed limit along the spine road. It is recommended that visibility is maximised where possible.**

Paragraph 4.29 describes the proposed southeastern site access for A464 Holyhead Road Ghost Island, comprising of a 3 metre wide right turn with three metre wide through lanes with the ghost-island deceleration length in accordance with Design Manual for Roads and Bridges CD 123 Document. **It is noted that the spine road of the roundabout entering the site comprises of a carriageway width of 6.5 metres bound by a 3.5 metre wide verge at the western edge and 0.5 metre wide verge followed by a 2 metre wide footway at the eastern edge. The T junction has a dropped kerb and tactile paving crossings on the minor arm. The roundabout has a stopping distance of 120 metres and a speed limit of 40 mph along the A464 Holyhead Road**

Paragraph 4.34 outlines the proposed speed limit reduction measures along the A464 Holyhead Road to create a new 1.6km stretch with a 40mph speed limit, speed limit repeaters, lining to visually reduce the width of the A464 through carriageway, lighting at either side of the junction, carriageway treatments on the approach to the proposed access junctions, and advance junction warning signage. **SC has reviewed and considers information acceptable subject to further detailed design and road safety audits.**

Paragraph 4.37 outlines the proposed improvements to the Cross Road/Patshull Road/Elm Road roundabout. **It is noted, to the east of the junction with Elm Road the carriageway width would be 6.5 metres, bound by existing footways on both edges. There is a proposed zebra crossing 70 metres east of the junction with Elm Road and a widening of the existing footway on the northern side of Cross Road to three metres to become a shared footway/cycleway for 280 metres to the junction with Albert Road. To the west of the junction with Elm Road, Cross Road's carriageway width would be increased to 6.5 metres bound by 0.5 metres wide verges followed by a 2 metre wide footway at the western edge and a 3 metre wide shared footway/cycleway at the eastern edge. There is also a stopping distance of 43 metres and a 30mph speed limit. It is recommended that visibility is maximised where possible and an assessment is undertaken that a zebra crossing is suitable intervention at this location.**

Paragraph 4.43 outlines the proposed 6.5 metre carriageway to facilitate two way movements by busses along Spine Road including a 3 metre footway/cycleway at one edge and a 2 metre footway on the other edge, traffic calming measures, limited frontage access, bus stops, internal junctions designed in accordance with Manual for Streets, and regular pedestrian and cycle crossings. **SC has reviewed and considers information acceptable at this stage.**

Paragraph 4.44 outlines the proposals for the stopping up of Patshull Road, Cross Road and Newhouse Lane. Paragraph 4.45 states Cross Road to the west is proposed to be stopped up for 170 metres between 90 and 260 metres northeast of the A464 Holyhead Road/Cross Road junction retaining pedestrian and cyclist access. **It is noted that Newhouse Lane would be stopped up for 340 metres between 160 and 500 metres north of the A464 Holyhead Road/Newhouse Lane junction.**

Swept Path Analysis

Swept path analysis has been undertaken for the proposed accesses, confirming large vehicles such as a 16.5 metres articulated lorry passing a 7.5 tonnes box van, or two single deck buses, could suitably pass each other. **SC has reviewed and considers information acceptable.**

Internal Layout

Paragraph 4.43 of the TA notes that the spine road throughout the site is not for determination currently, yet some expected features are presented including carriageway width, the inclusion of footways/cycleways alongside the road, traffic calming, limited frontage access and provision of bus stops. **SC has reviewed and considers information acceptable, and requests further information as and when this is available for consideration. Similarly, further information is requested regarding refuse and recycling arrangements for the proposed development.**

Trip Generation

Residential

Vehicle trip rates have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 358 with the arrivals being 87 and the departures being 271. The reviewed 17:00-18:00 two-way PM trip generation was 388 with the arrivals being 262 and the departures being 126. **WSP have reviewed trip rates on Shropshire Councils behalf against those derived from the latest version of TRICS (7.11.2) which considered more recent survey sites and site-specific selection with regards to population and car ownership. There was a slight discrepancy between these results and table 4 as the reviewed 08:00-09:00 two-way AM trip generation was 450 with the arrivals being 134 and the departures being 316. The reviewed 17:00-18:00 two-way PM trip generation was 411 with the arrivals being 282 and the departures being 129. The AM Trip Generation numbers are unlikely to be robust and acceptable, however the PM numbers are likely robust and acceptable.**

Care Facility

Vehicle trip rates for the care home have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 12 with the arrivals being 7 and the departures being 4. The reviewed 17:00-18:00 two-way PM trip generation was 6 with the arrivals being 2 and the departures being 5. These numbers include a 15% internalisation factor, which is proposed as there are opportunities for staff and visitors to live within the development. **SC notes the information provided. Please may the developer confirm why the arrivals and departures do not match the two-way trips. Trips and internalisation are otherwise at an acceptable level, based on methodology used.**

Secondary School

Vehicle trip rates for the secondary school have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 172 with the arrivals being 92 and the departures being 80. The reviewed 17:00-18:00 two-way PM trip generation was 30 with the arrivals being 17 and the departures being 13. A 15:00-16:00 two-way trip generation was also presented, with 69 trips comprising 24 arrivals and 45 departures. **SC notes the information provided and considers acceptable.**

GP Surgery / Pharmacy

Vehicle trip rates for the GP / pharmacy have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 29 with the arrivals being 19 and the departures being 11. The reviewed 17:00-18:00 two-way PM trip generation was 23 with the arrivals being 14 and the departures being 9. These numbers include a 25% internalisation factor, which is proposed as there will be patients and potentially staff associated with this element. **SC notes the information provided. Please may the developer confirm why the arrivals and departures do not match the two-way trips. Trips and internalisation are otherwise at an acceptable level, based on methodology used.**

Supermarket

Vehicle trip rates for the supermarket have been delivered using TRICS. The 08:00-09:00 two-way AM trip generation was 34 with the arrivals being 17 and the departures being 17. The reviewed 17:00-18:00 two-way PM trip generation was 78 with the arrivals being 40 and the departures being 38. These numbers include a 25% internalisation factor, which is proposed as there will be customers and potentially staff associated with this element **SC notes the information provided and considers acceptable.**

Trip Distribution and Assignment

Paragraphs 6.1 to 6.3 set out the methodology used for trip distribution and assignment, rooted in Census 2011 journey to work data using the Shropshire 027 Middle Super Output Area (MSOA). Whilst the census suggests that 36.7% of all future residents would work within the Shropshire area, the Planning Statement and Economic Benefit Assessment prepared in support of the planning application identified this will be lower, and that a reassignment to larger neighbouring areas of employment is required. It concluded that of the current Shropshire dataset, only 13% would be retained within the Shopshire area, with the 87% travelling external to Wolverhampton (67%), Telford and Wrekin (12%), Walsall (4%), and Dudley (4%). **SC notes the information provided and considers acceptable**

A separate exercise has been undertaken for school traffic distribution, as set out across paragraphs 6.5 to 6.8. This examines nearby settlements and existing secondary schools, and concludes that “75% of future pupils located outside the development would arrive in the morning and depart in the evening from the north via the northern access at the Cross Road junction. The remaining 25% of future pupils located outside the development would arrive in the morning and depart in the evening from the south via the southwestern access at the A464 junction.” **SC notes the information provided and considers acceptable, however would raise the issue with regard to timing of the development coming forward. We would seek further clarification from the applicant with regard to whether the site is being promoted within the Local Plan Review, and on that basis needs to take into account proposed allocations with the Local Plan review to include proposed development in Shifnal place plan area.**

Junction Capacity Assessments

Paragraph 7.1 sets out that a future design year five years post-registration of application is to be considered, and a further ten year future design year sensitivity test is considered. TEMPRO factors have been presented in relation to this and are as follows:

- 2024 to 2029 AM Peak = 1.0407
- 2024 to 2029 PM Peak = 1.0397
- 2024 to 2034 AM Peak = 1.0760
- 2024 to 2034 PM Peak = 1.0740

SC notes the information provided on assessment years and TEMPRO factors and considers these acceptable.

A464 Holyhead Road / Spine Road Ghost Island Right Turn Junction

The results presented in the main body of the TA, and detailed at Appendix P of the TA, show that this junction operates within capacity on all arms for the 2029 and 2034 ‘Base + Development’ scenarios and for the 2029 and 2034 ‘Base + Development + Sensitivity’ scenarios. **SC has reviewed these junction capacity assessment scenarios and considers these acceptable.**

A464 Holyhead Road / Spine Road Roundabout

The results presented in the main body of the TA, and detailed at Appendix P of the TA, show that this junction operates within capacity on all arms for the 2029 and 2034 ‘Base + Development’ scenarios and for the 2029 and 2034 ‘Base + Development + Sensitivity’ scenarios. **SC has reviewed these junction capacity assessment scenarios and considers these acceptable in principle based on**

the information submitted but would be subject to further assessment in relation to the timing of the development.

Cross Road / Elm Road priority junction

The results presented in the main body of the TA, and detailed at Appendix P of the TA, show that this junction operates within capacity on all arms for the 2029 and 2034 'Base + Development' scenarios and for the 2029 and 2034 'Base + Development + Sensitivity' scenarios. **SC has reviewed these junction capacity assessment scenarios and considers these acceptable in principle based on the information submitted but would be subject to further assessment in relation to the timing of the development.**

Additional Locations

Further junction capacity assessments will be undertaken at seven junctions around the site location, following submission of the TA, for the following location specifically:

- J1 – M54 J3 / A41 Newport Road roundabout;
- J2 – A41 Albrighton-By-Pass / Newport Road priority junction;
- J3 – A41 Albrighton-By-Pass / Station Road / Cordy Lane priority junction;
- J4 – Station Road / High Street / Cross Road priority junction;
- J5 - A464 Holyhead Road / A41 Newport Road signal junction;
- J6 – Haughton Lane / Shrewsbury Road / Victoria Road / Innage Road / Priorslee Road Roundabout; and
- J7 – M54 J4 / Castle Farm Road / Priorslee Road / A464 roundabout.

SC notes the information provided on assessment locations and considers this acceptable, and requests these results are presented to inform further appraisal of the transport impacts of the development.

Sustainable Travel Promotion / Accessibility Improvement

Section 8 of the TA sets out how the development might promote accessibility by all modes of travel, with an emphasis on active travel and public transport. **Further consideration is required in terms of the promotion of sustainable travel to and from the site.**

TECHNICAL NOTE 4 (TN04)

Appendix C Residential TRICS Output Data

Calculation Reference: AUDIT-631801-241106-1117

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	SC SURREY	1 days
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 790 to 1146 (units:)
 Range Selected by User: 550 to 1200 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 22/09/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday 2 days
 Wednesday 1 days
 Thursday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 4 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town 4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 3 days - Selected
 Servicing vehicles Excluded 2 days - Selected

Secondary Filtering selection:**Use Class:**

C3 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	4 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	NF-03-A-09	MIXED HOUSES & FLATS	NORFOLK
	ROUND HOUSE WAY		
	NORWICH		
	CRINGLEFORD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	984	
	Survey date: TUESDAY	24/09/19	Survey Type: MANUAL
2	NF-03-A-28	MIXED HOUSES & FLATS	NORFOLK
	ATLANTIC AVENUE		
	NORWICH		
	SPROWSTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	1146	
	Survey date: THURSDAY	22/09/22	Survey Type: MANUAL
3	SC-03-A-08	MIXED HOUSES	SURREY
	REIGATE ROAD		
	HORLEY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	790	
	Survey date: WEDNESDAY	04/05/22	Survey Type: MANUAL
4	WS-03-A-11	MIXED HOUSES	WEST SUSSEX
	ELLIS ROAD		
	WEST HORSHAM		
	S BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	918	
	Survey date: TUESDAY	02/04/19	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 800 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.62

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	960	0.073	58.364	4	960	0.298	238.458	4	960	0.371	296.822
08:00 - 09:00	4	960	0.155	123.814	4	960	0.376	300.990	4	960	0.531	424.804
09:00 - 10:00	4	960	0.126	100.886	4	960	0.142	113.809	4	960	0.268	214.695
10:00 - 11:00	4	960	0.095	75.664	4	960	0.114	91.089	4	960	0.209	166.753
11:00 - 12:00	4	960	0.103	82.126	4	960	0.103	82.335	4	960	0.206	164.461
12:00 - 13:00	4	960	0.128	102.762	4	960	0.130	104.013	4	960	0.258	206.775
13:00 - 14:00	4	960	0.126	100.886	4	960	0.116	92.757	4	960	0.242	193.643
14:00 - 15:00	4	960	0.132	105.888	4	960	0.145	115.685	4	960	0.277	221.573
15:00 - 16:00	4	960	0.207	165.711	4	960	0.145	116.311	4	960	0.352	282.022
16:00 - 17:00	4	960	0.234	187.389	4	960	0.142	113.809	4	960	0.376	301.198
17:00 - 18:00	4	960	0.334	267.014	4	960	0.151	120.896	4	960	0.485	387.910
18:00 - 19:00	4	960	0.292	233.455	4	960	0.135	108.390	4	960	0.427	341.845
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.005	1603.959			1.997	1598.542			4.002	3202.501

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 790 - 1146 (units:)
 Survey date range: 01/01/16 - 22/09/22
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 1
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 800 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	960	0.002	1.876	4	960	0.004	3.544	4	960	0.006	5.420
08:00 - 09:00	4	960	0.003	2.293	4	960	0.017	13.757	4	960	0.020	16.050
09:00 - 10:00	4	960	0.003	2.293	4	960	0.004	3.127	4	960	0.007	5.420
10:00 - 11:00	4	960	0.001	0.417	4	960	0.001	0.625	4	960	0.002	1.042
11:00 - 12:00	4	960	0.001	0.625	4	960	0.001	0.625	4	960	0.002	1.250
12:00 - 13:00	4	960	0.001	1.042	4	960	0.001	1.042	4	960	0.002	2.084
13:00 - 14:00	4	960	0.002	1.251	4	960	0.001	0.417	4	960	0.003	1.668
14:00 - 15:00	4	960	0.002	1.459	4	960	0.003	2.501	4	960	0.005	3.960
15:00 - 16:00	4	960	0.008	6.045	4	960	0.001	0.417	4	960	0.009	6.462
16:00 - 17:00	4	960	0.008	6.670	4	960	0.004	3.335	4	960	0.012	10.005
17:00 - 18:00	4	960	0.007	5.628	4	960	0.004	2.918	4	960	0.011	8.546
18:00 - 19:00	4	960	0.006	4.794	4	960	0.004	3.127	4	960	0.010	7.921
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.044	34.393			0.045	35.435			0.089	69.828

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 800 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	960	0.009	7.504	4	960	0.034	27.097	4	960	0.043	34.601
08:00 - 09:00	4	960	0.022	17.509	4	960	0.097	77.332	4	960	0.119	94.841
09:00 - 10:00	4	960	0.017	13.549	4	960	0.018	14.591	4	960	0.035	28.140
10:00 - 11:00	4	960	0.014	11.047	4	960	0.016	13.132	4	960	0.030	24.179
11:00 - 12:00	4	960	0.014	11.464	4	960	0.012	9.380	4	960	0.026	20.844
12:00 - 13:00	4	960	0.015	12.090	4	960	0.013	10.631	4	960	0.028	22.721
13:00 - 14:00	4	960	0.019	15.008	4	960	0.018	14.174	4	960	0.037	29.182
14:00 - 15:00	4	960	0.022	17.926	4	960	0.018	14.591	4	960	0.040	32.517
15:00 - 16:00	4	960	0.063	50.443	4	960	0.023	18.343	4	960	0.086	68.786
16:00 - 17:00	4	960	0.034	27.514	4	960	0.009	6.879	4	960	0.043	34.393
17:00 - 18:00	4	960	0.031	24.805	4	960	0.026	20.636	4	960	0.057	45.441
18:00 - 19:00	4	960	0.030	24.388	4	960	0.016	13.132	4	960	0.046	37.520
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.290	233.247			0.300	239.918			0.590	473.165

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 800 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	960	0.000	0.000	4	960	0.003	2.293	4	960	0.003	2.293
08:00 - 09:00	4	960	0.000	0.000	4	960	0.002	1.459	4	960	0.002	1.459
09:00 - 10:00	4	960	0.000	0.000	4	960	0.001	0.625	4	960	0.001	0.625
10:00 - 11:00	4	960	0.000	0.000	4	960	0.000	0.000	4	960	0.000	0.000
11:00 - 12:00	4	960	0.000	0.000	4	960	0.000	0.000	4	960	0.000	0.000
12:00 - 13:00	4	960	0.000	0.208	4	960	0.001	0.417	4	960	0.001	0.625
13:00 - 14:00	4	960	0.000	0.000	4	960	0.001	0.834	4	960	0.001	0.834
14:00 - 15:00	4	960	0.000	0.208	4	960	0.000	0.000	4	960	0.000	0.208
15:00 - 16:00	4	960	0.001	0.417	4	960	0.000	0.000	4	960	0.001	0.417
16:00 - 17:00	4	960	0.000	0.208	4	960	0.000	0.000	4	960	0.000	0.208
17:00 - 18:00	4	960	0.002	1.251	4	960	0.000	0.208	4	960	0.002	1.459
18:00 - 19:00	4	960	0.003	2.084	4	960	0.000	0.000	4	960	0.003	2.084
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.006	4.376			0.008	5.836			0.014	10.212

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 800 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	960	0.002	1.251	4	960	0.031	25.013	4	960	0.033	26.264
08:00 - 09:00	4	960	0.002	1.876	4	960	0.033	26.264	4	960	0.035	28.140
09:00 - 10:00	4	960	0.005	3.960	4	960	0.011	8.546	4	960	0.016	12.506
10:00 - 11:00	4	960	0.005	3.752	4	960	0.009	6.879	4	960	0.014	10.631
11:00 - 12:00	4	960	0.005	4.169	4	960	0.011	8.546	4	960	0.016	12.715
12:00 - 13:00	4	960	0.007	5.211	4	960	0.007	5.419	4	960	0.014	10.630
13:00 - 14:00	4	960	0.004	3.544	4	960	0.006	4.794	4	960	0.010	8.338
14:00 - 15:00	4	960	0.011	9.171	4	960	0.007	5.628	4	960	0.018	14.799
15:00 - 16:00	4	960	0.020	16.050	4	960	0.005	4.377	4	960	0.025	20.427
16:00 - 17:00	4	960	0.029	23.345	4	960	0.003	2.501	4	960	0.032	25.846
17:00 - 18:00	4	960	0.023	18.551	4	960	0.004	3.335	4	960	0.027	21.886
18:00 - 19:00	4	960	0.016	13.132	4	960	0.003	2.710	4	960	0.019	15.842
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.129	104.012			0.130	104.012			0.259	208.024

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 800 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.62

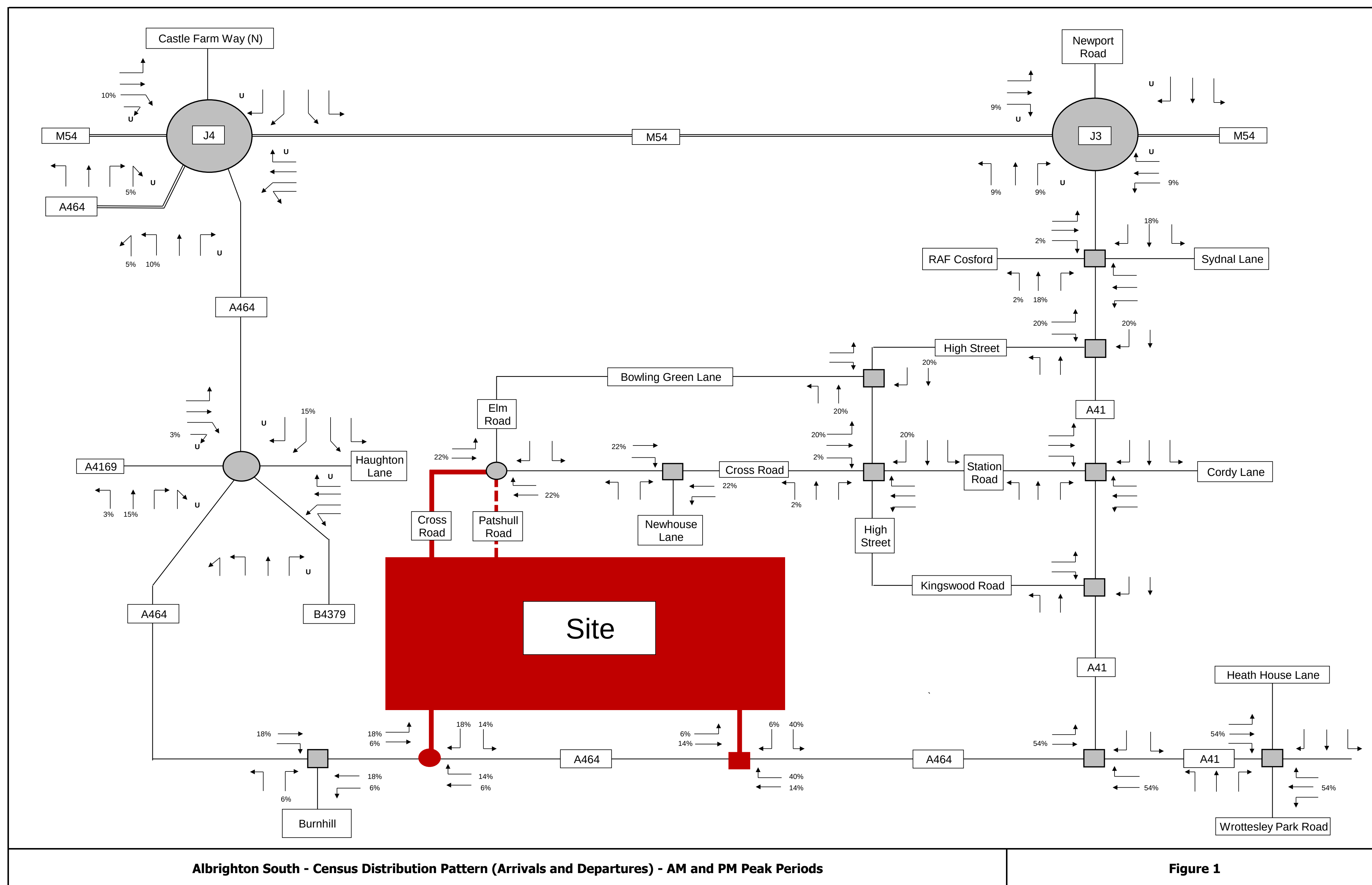
Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	960	0.103	82.543	4	960	0.460	368.317	4	960	0.563	450.860
08:00 - 09:00	4	960	0.219	175.300	4	960	0.730	583.846	4	960	0.949	759.146
09:00 - 10:00	4	960	0.189	151.120	4	960	0.219	174.883	4	960	0.408	326.003
10:00 - 11:00	4	960	0.150	119.646	4	960	0.181	144.450	4	960	0.331	264.096
11:00 - 12:00	4	960	0.168	134.237	4	960	0.161	128.817	4	960	0.329	263.054
12:00 - 13:00	4	960	0.191	152.996	4	960	0.187	149.870	4	960	0.378	302.866
13:00 - 14:00	4	960	0.190	152.163	4	960	0.164	131.527	4	960	0.354	283.690
14:00 - 15:00	4	960	0.216	172.590	4	960	0.213	170.089	4	960	0.429	342.679
15:00 - 16:00	4	960	0.443	354.768	4	960	0.222	177.384	4	960	0.665	532.152
16:00 - 17:00	4	960	0.422	337.884	4	960	0.214	171.548	4	960	0.636	509.432
17:00 - 18:00	4	960	0.510	407.712	4	960	0.247	197.394	4	960	0.757	605.106
18:00 - 19:00	4	960	0.451	360.813	4	960	0.223	178.009	4	960	0.674	538.822
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			3.252	2601.772			3.221	2576.134			6.473	5177.906

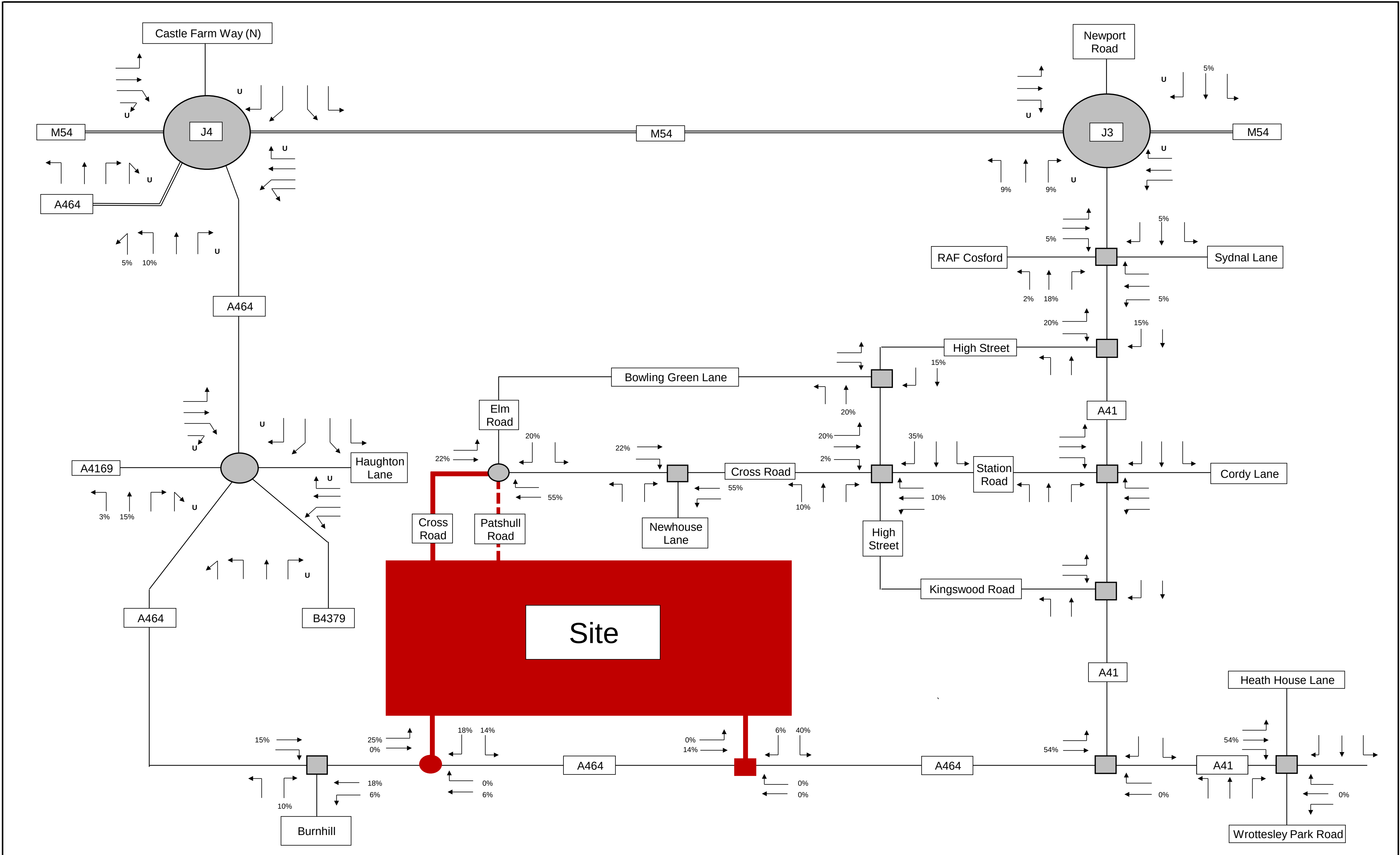
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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TECHNICAL NOTE 4 (TN04)

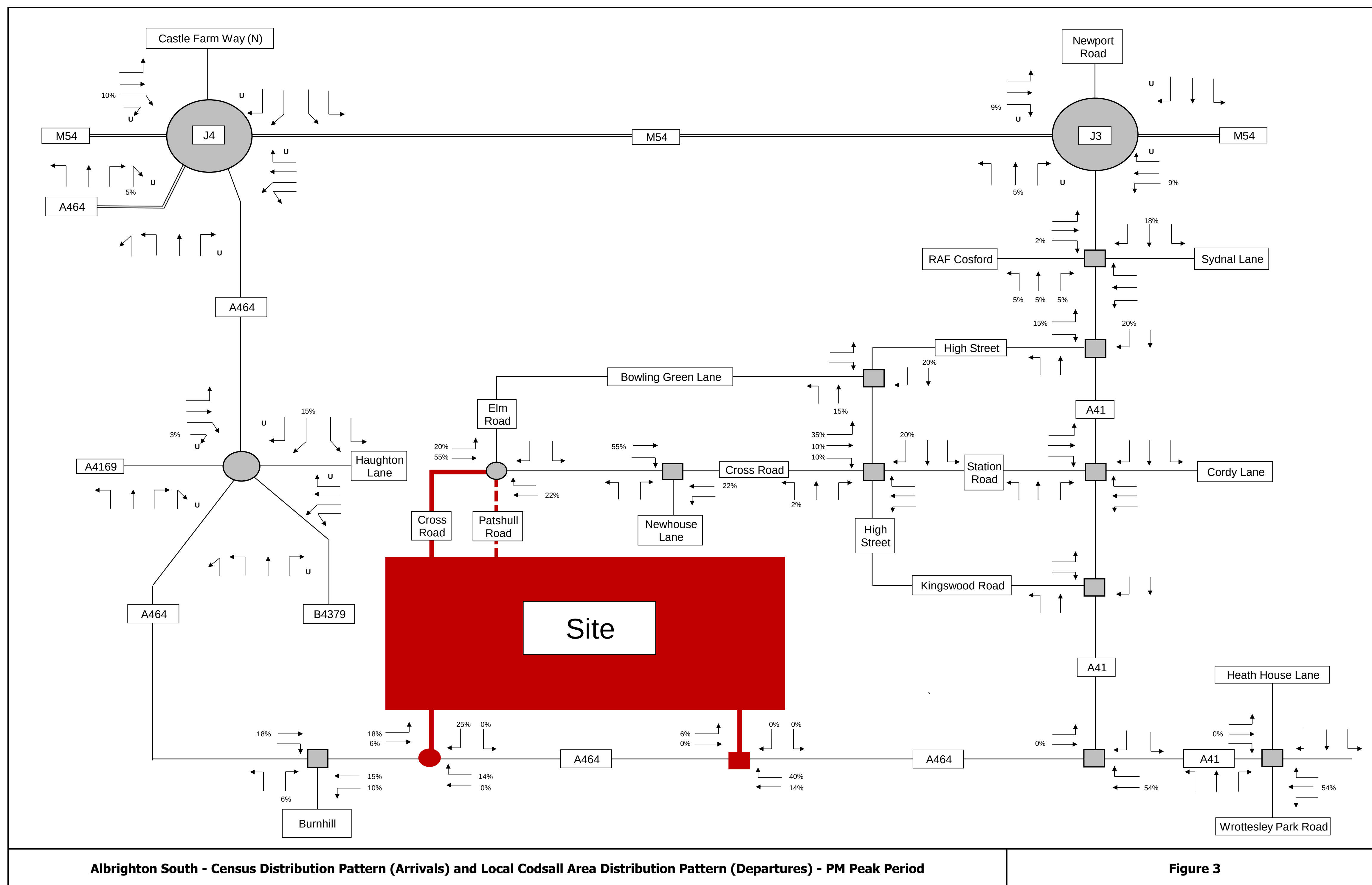
Appendix D Traffic Flows

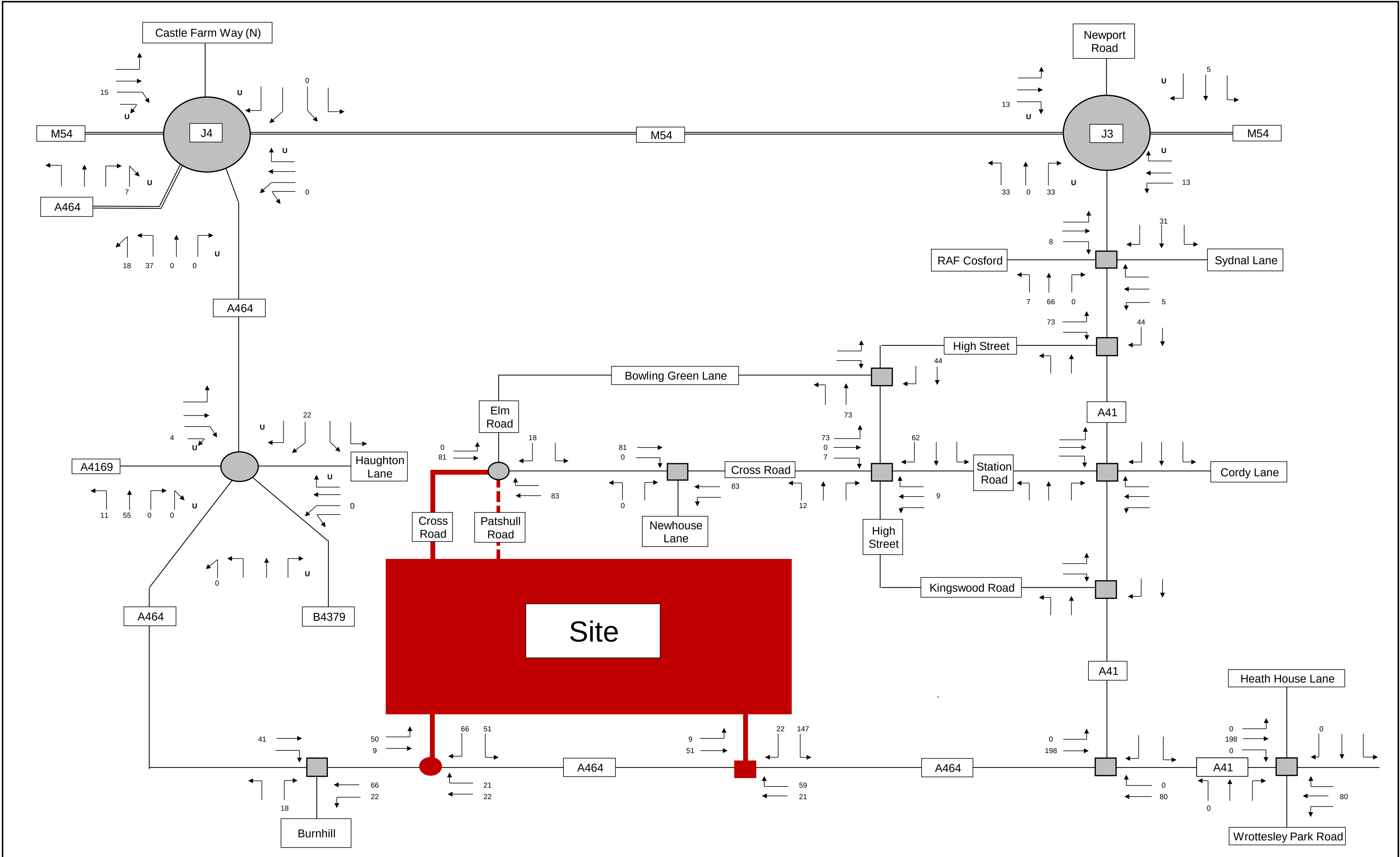




Albrighton South - Local Codsall Area Distribution Pattern (Arrival) and Census Distribution Pattern (Departures) - AM Peak Period

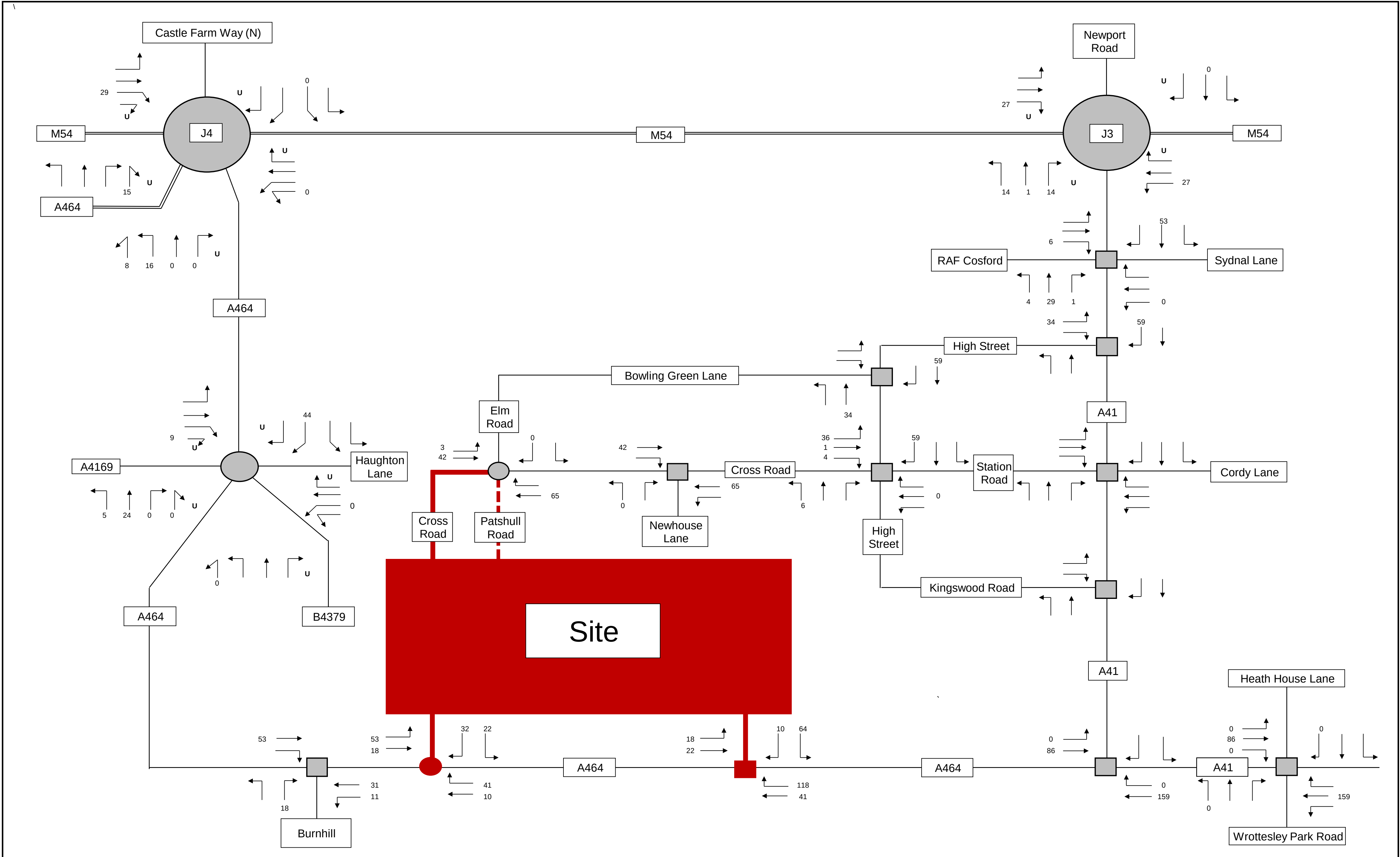
Figure 2





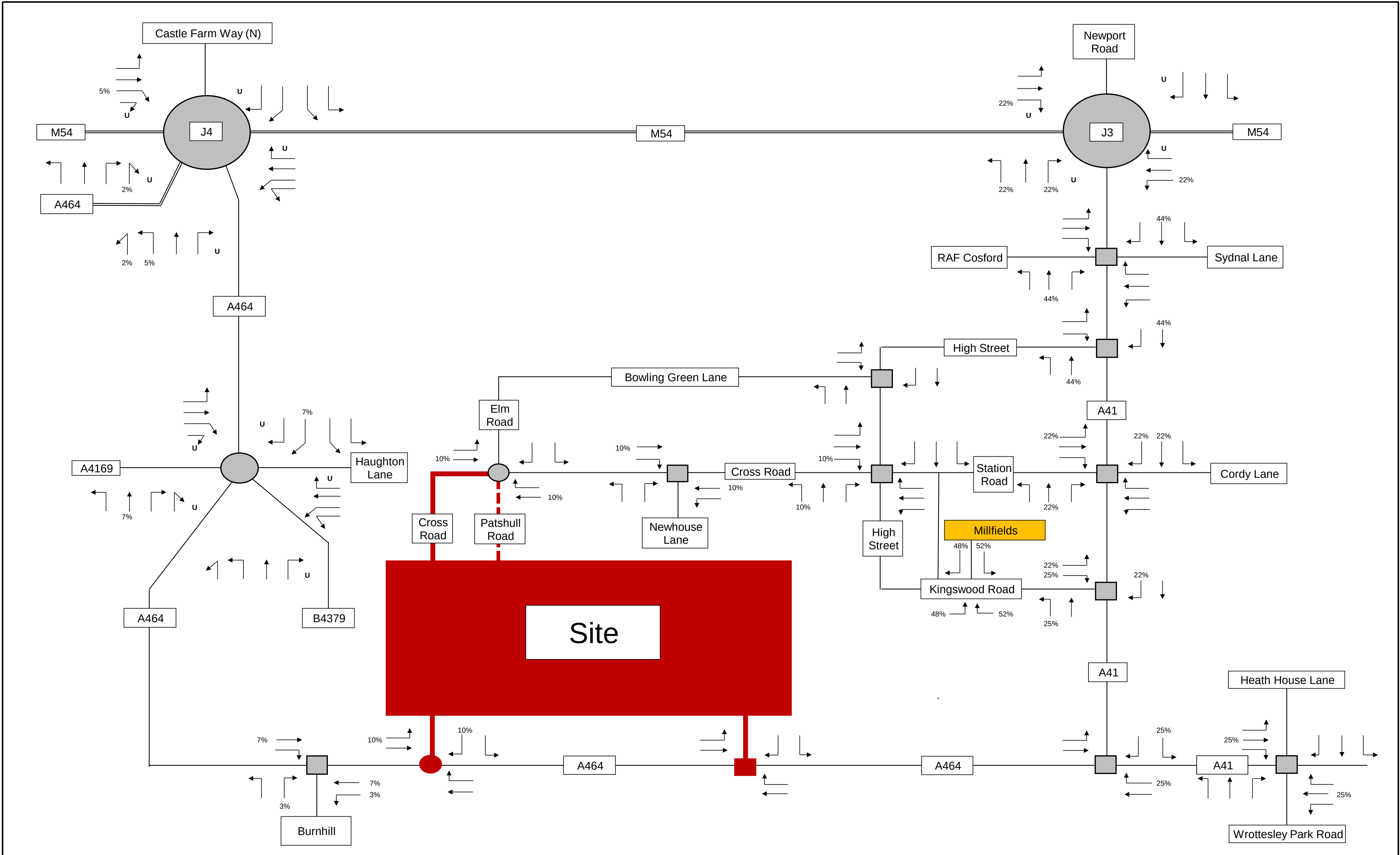
Albrighton South - Proposed Development Traffic Flows - AM Peak Period

Figure 4



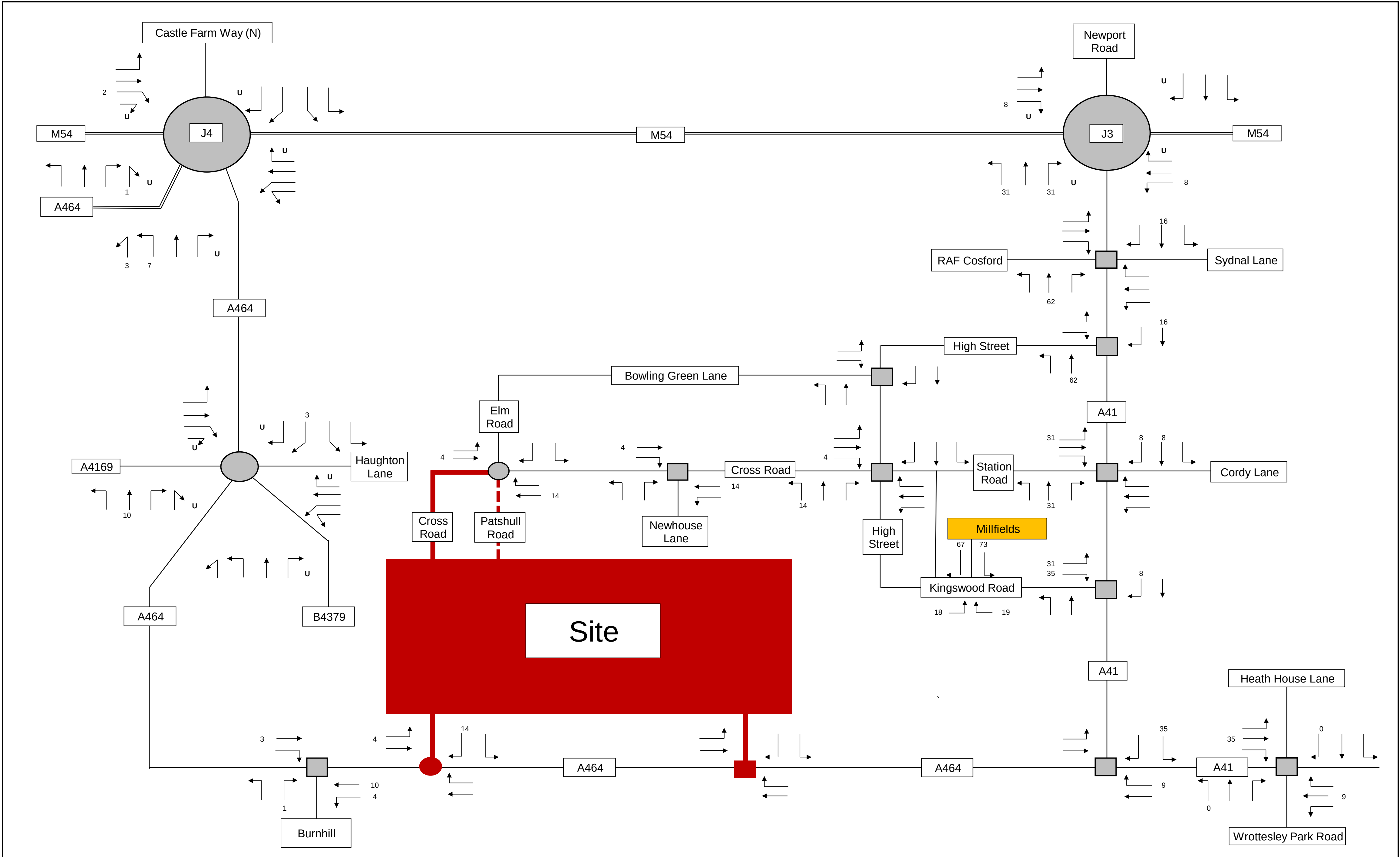
Albrighton South - Proposed Development Traffic Flows - PM Peak Period

Figure 5



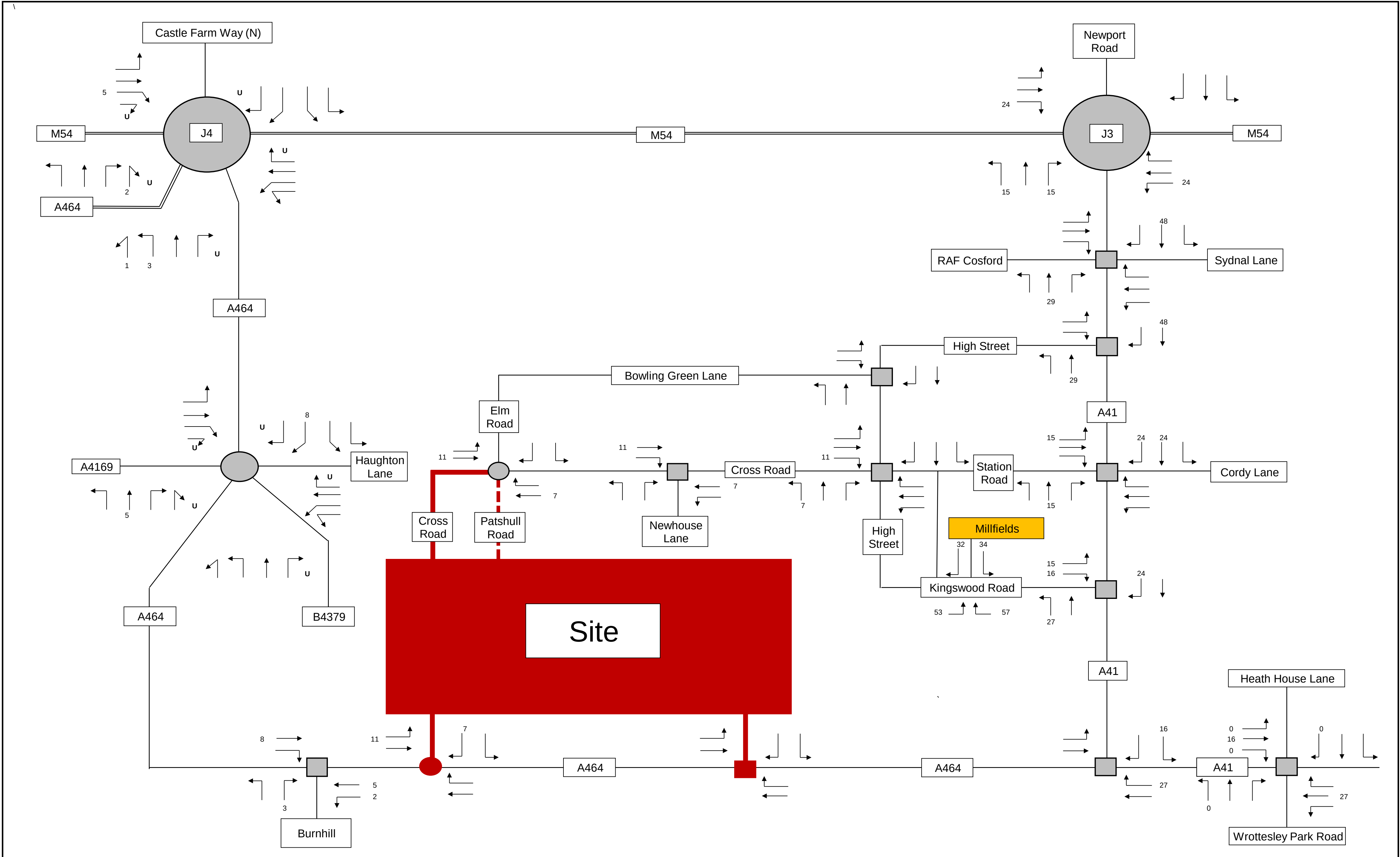
Committed Developments (Millfields Applications - 283 Dwellings) - Census Distribution Pattern (Arrivals and Departures) - AM and PM Peak Periods

Figure 6



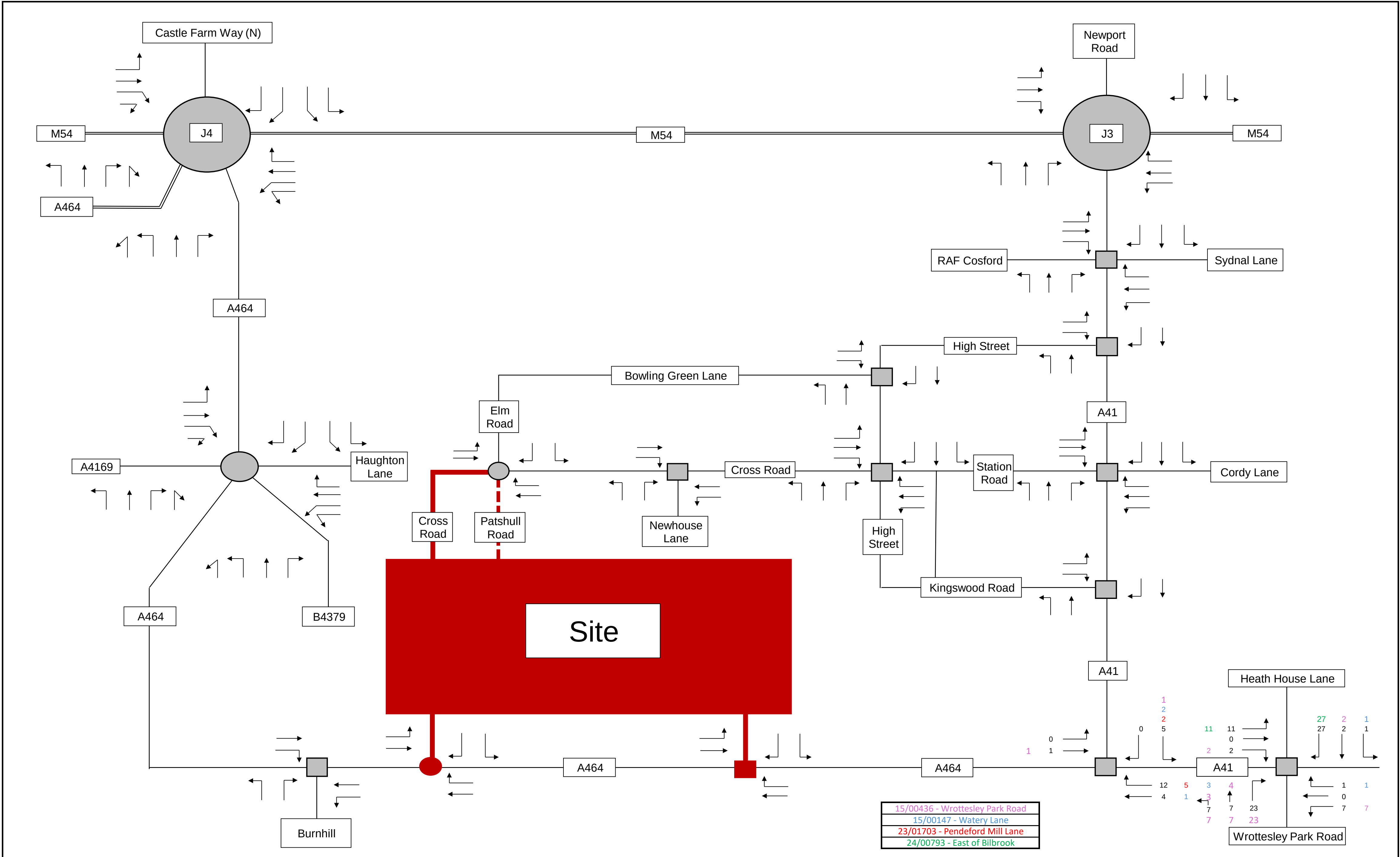
Committed Developments (Millfields Applications - 283 Dwellings) - Committed Development Traffic Flows - AM Peak Period

Figure 7



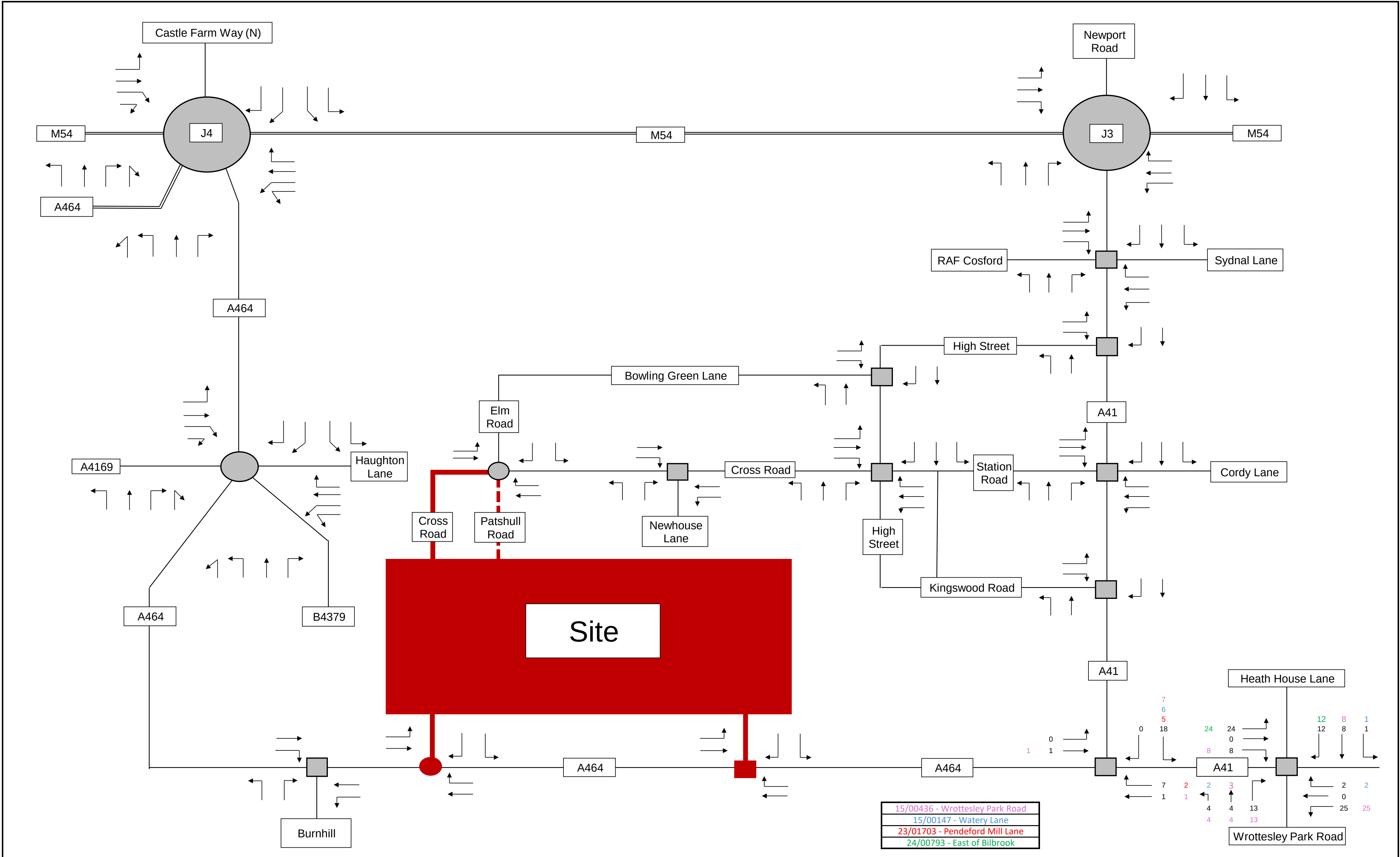
Committed Developments (Millfields Applications - 283 Dwellings) - Committed Development Traffic Flows - PM Peak Period

Figure 8



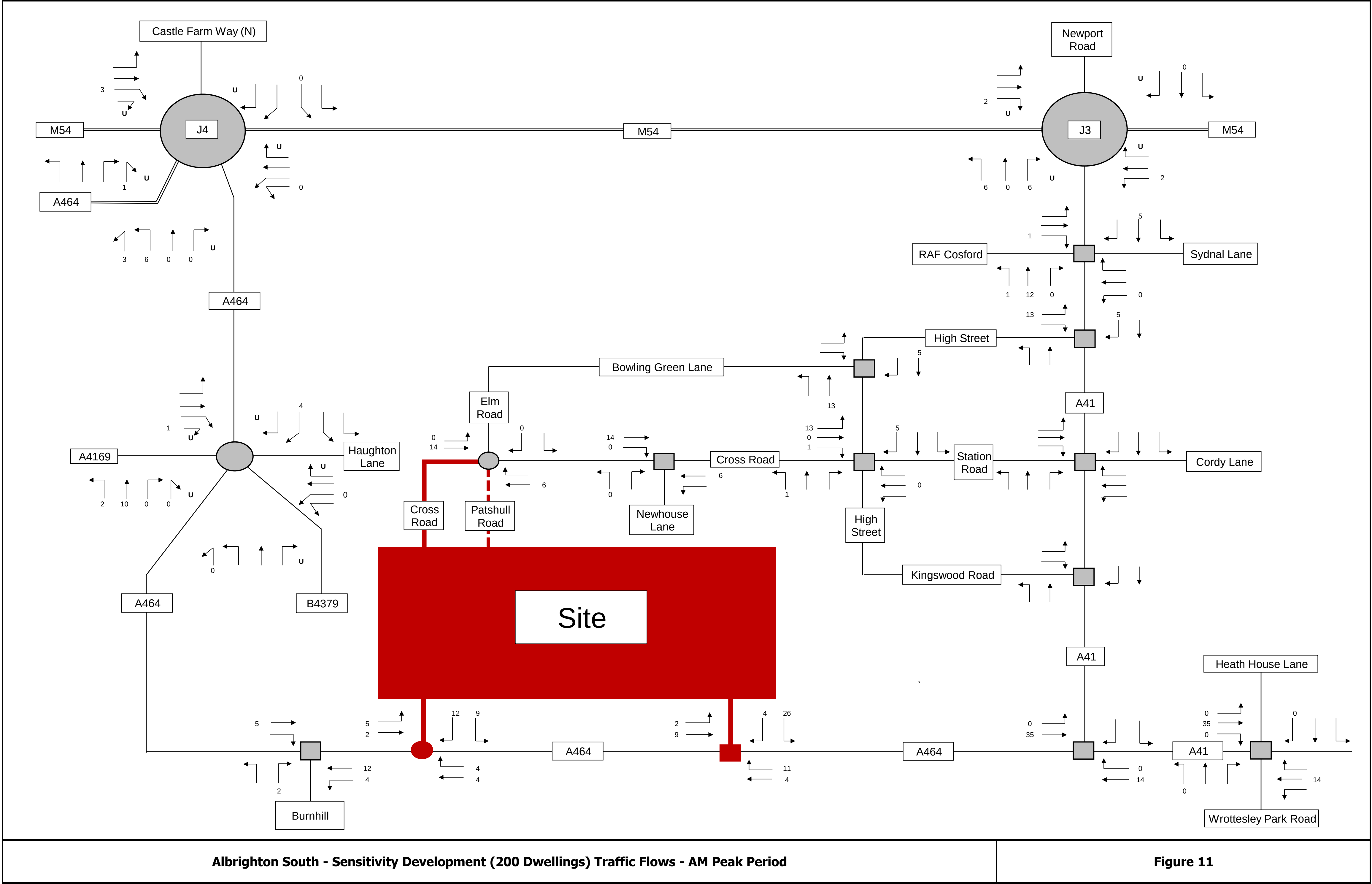
Committed Developments (South Staffordshire Developments) - Committed Development Traffic Flows - AM Peak Period

Figure 9



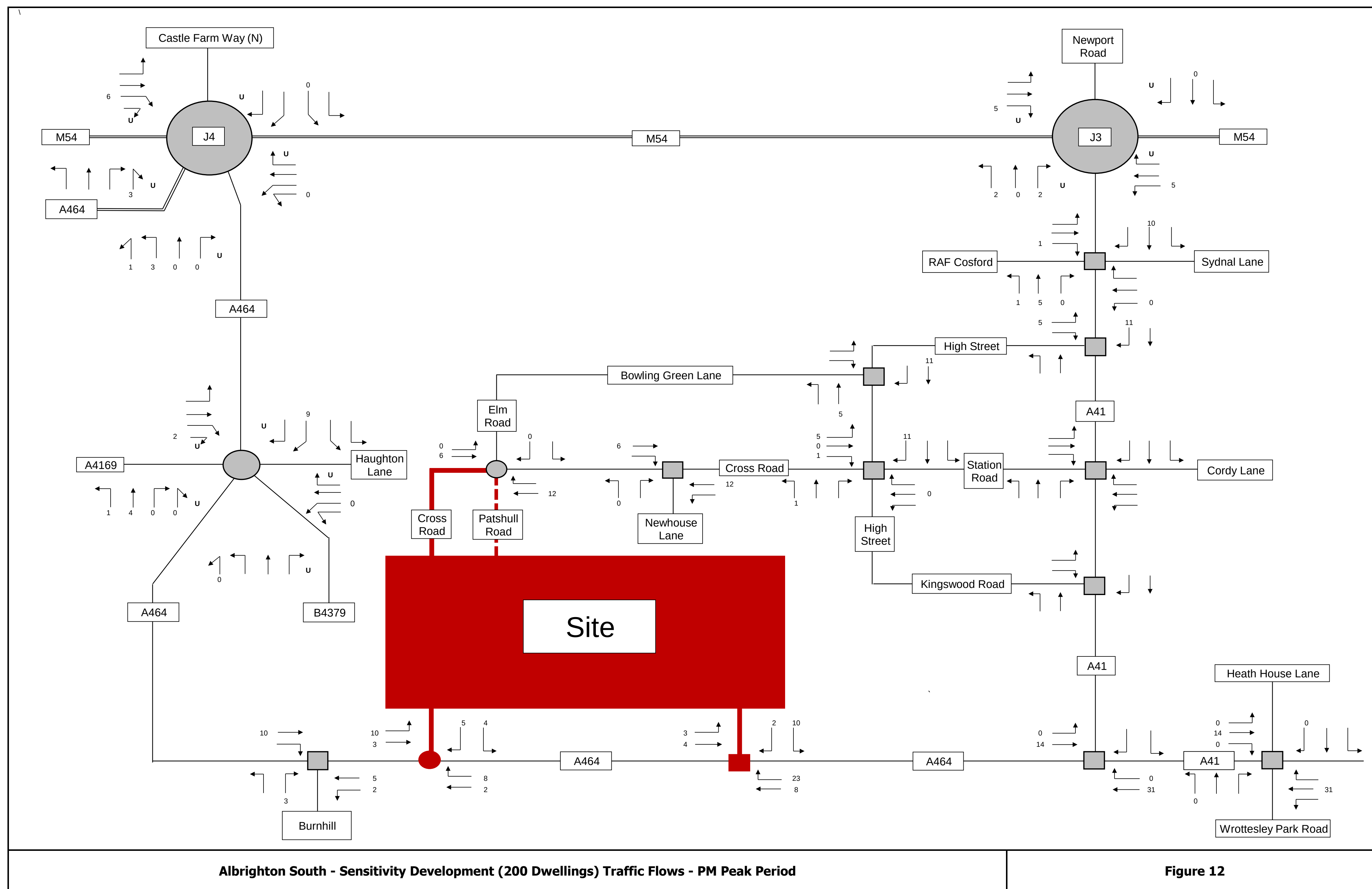
Committed Developments (South Staffordshire Developments) - Committed Development Traffic Flows - PM Peak Period

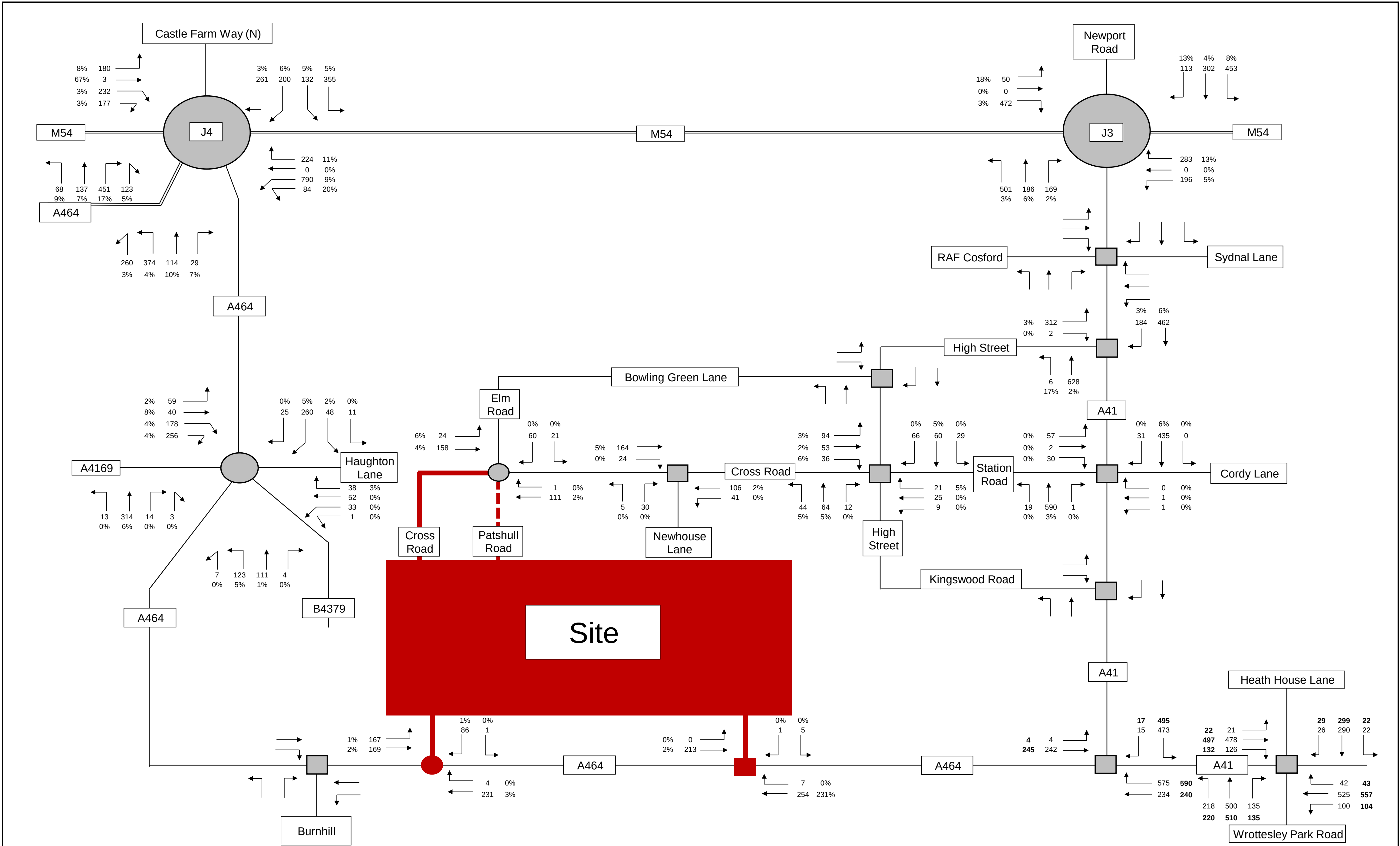
Figure 10



Albrighton South - Sensitivity Development (200 Dwellings) Traffic Flows - AM Peak Period

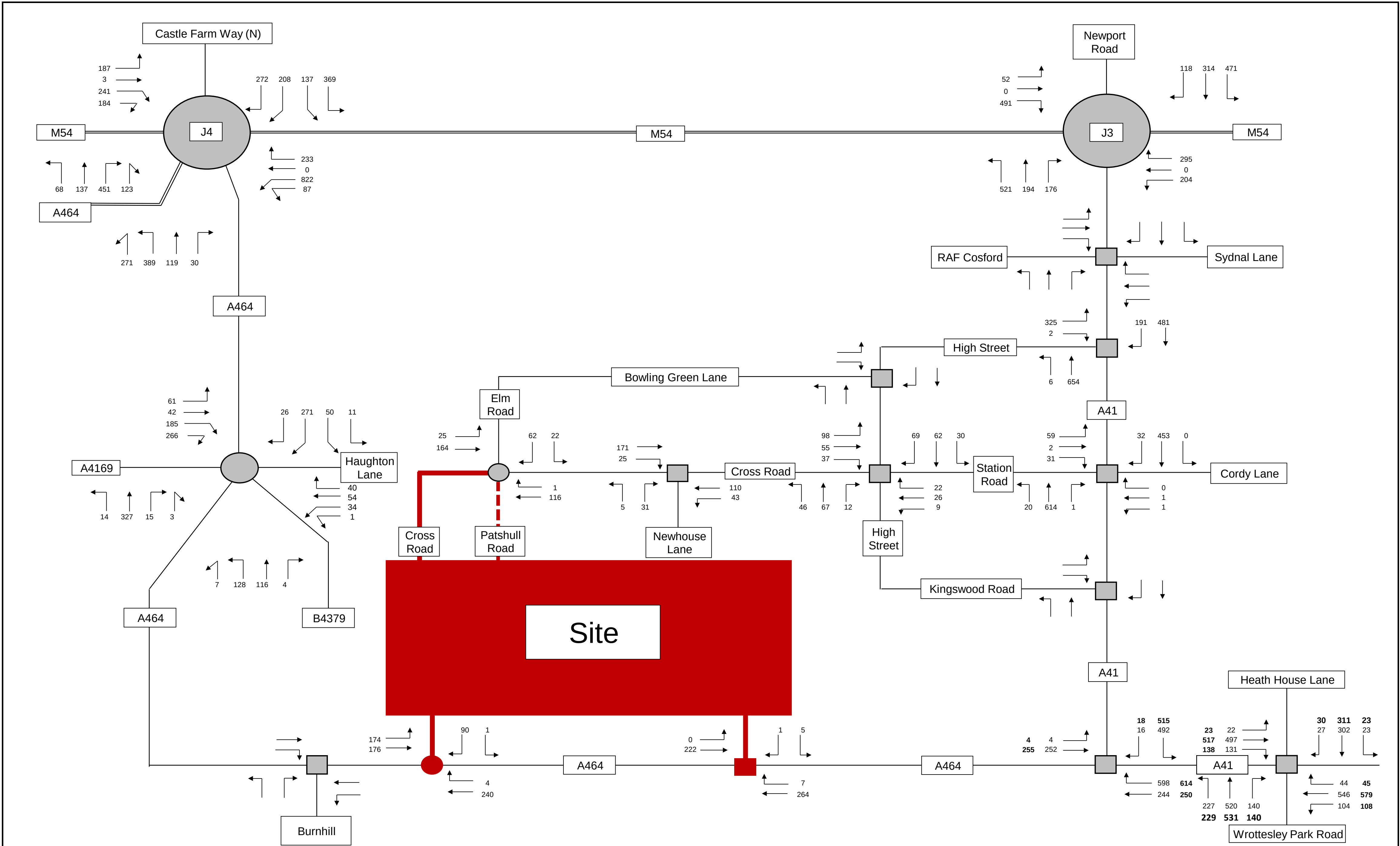
Figure 11





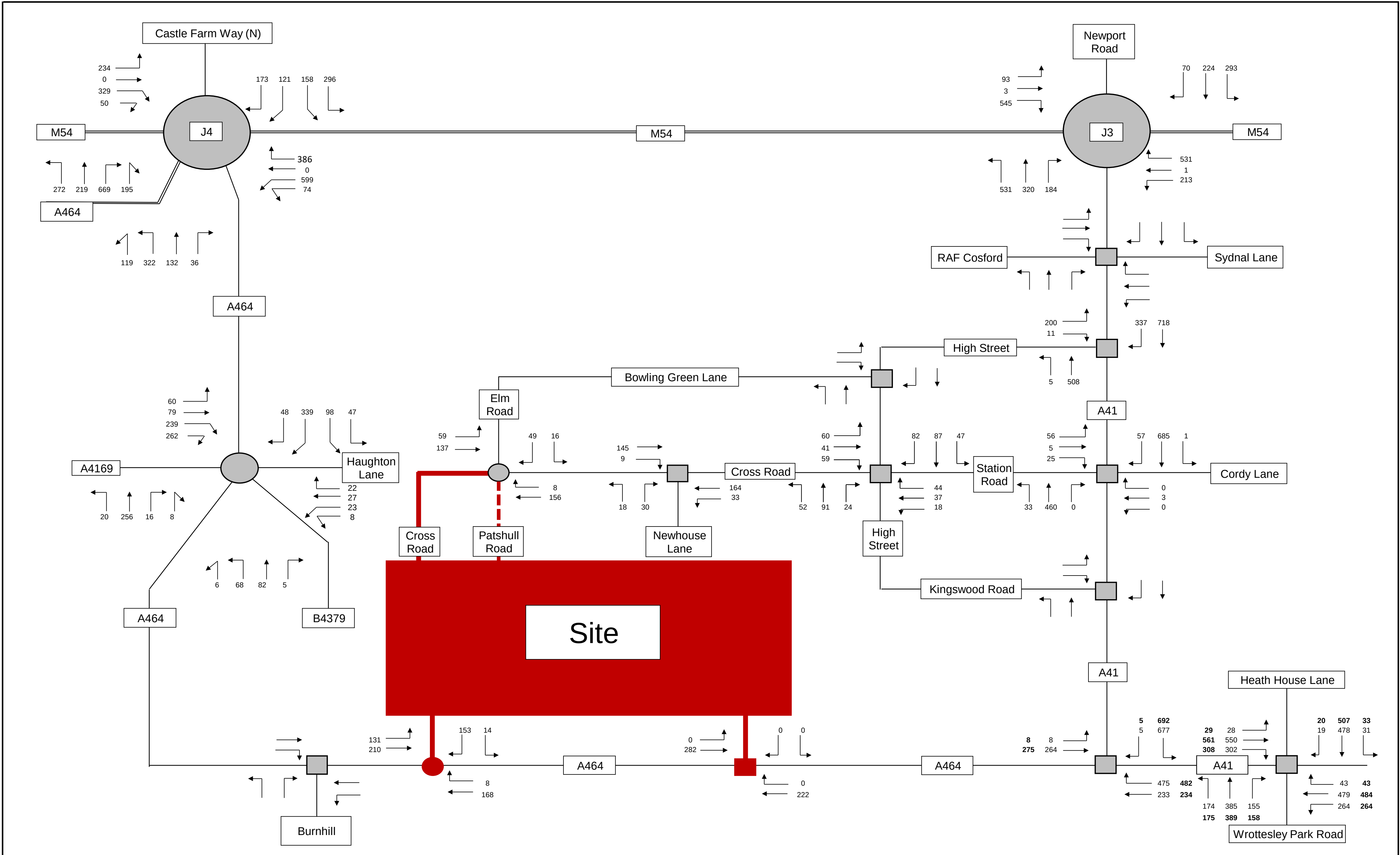
Albrighton South - 2024 Base Traffic Count Surveys - AM Peak (0730 to 0830)

Figure 13



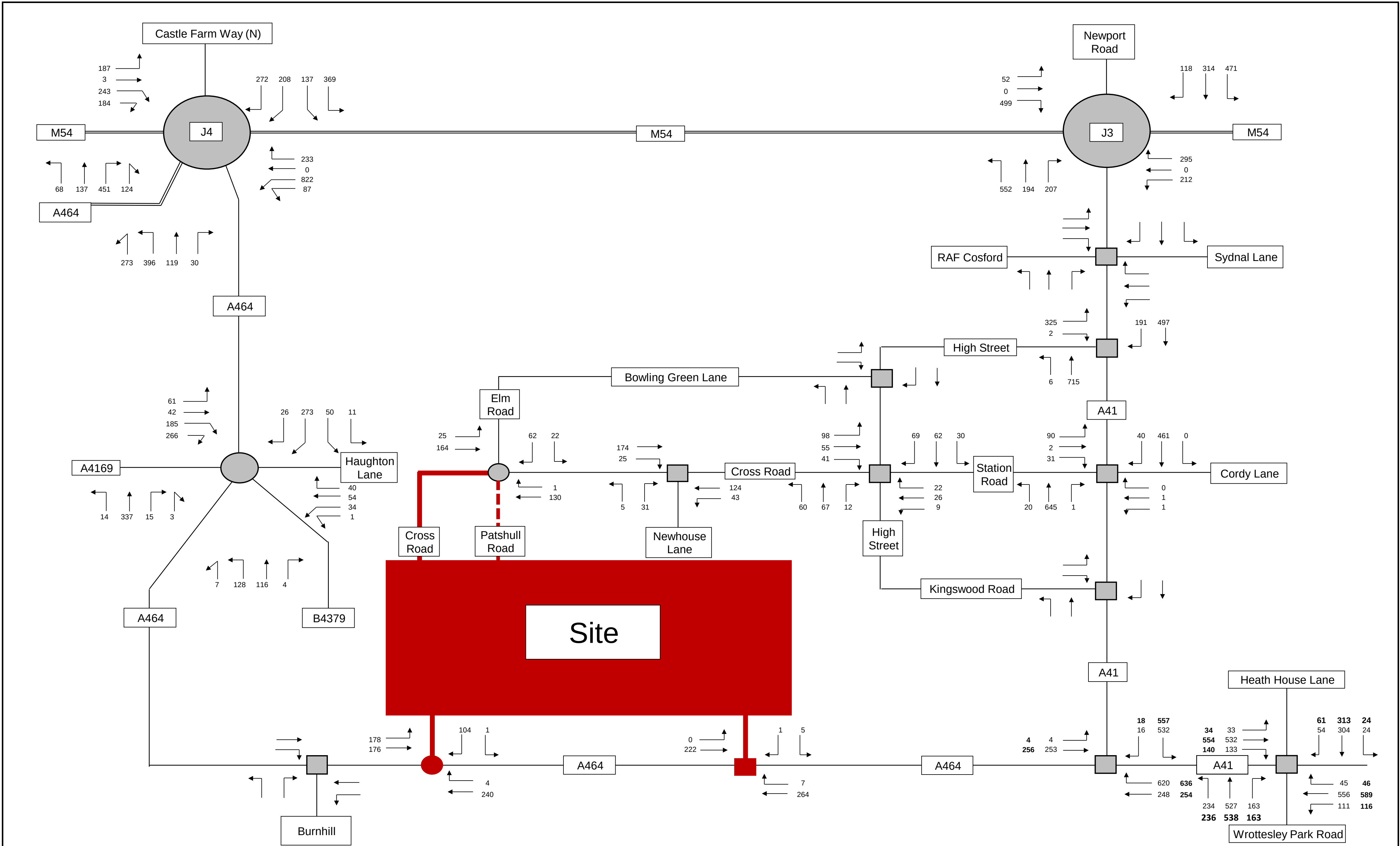
Albrighton South - 2029 Design Year Traffic Flows - AM Peak (0730 to 0830)

Figure 15



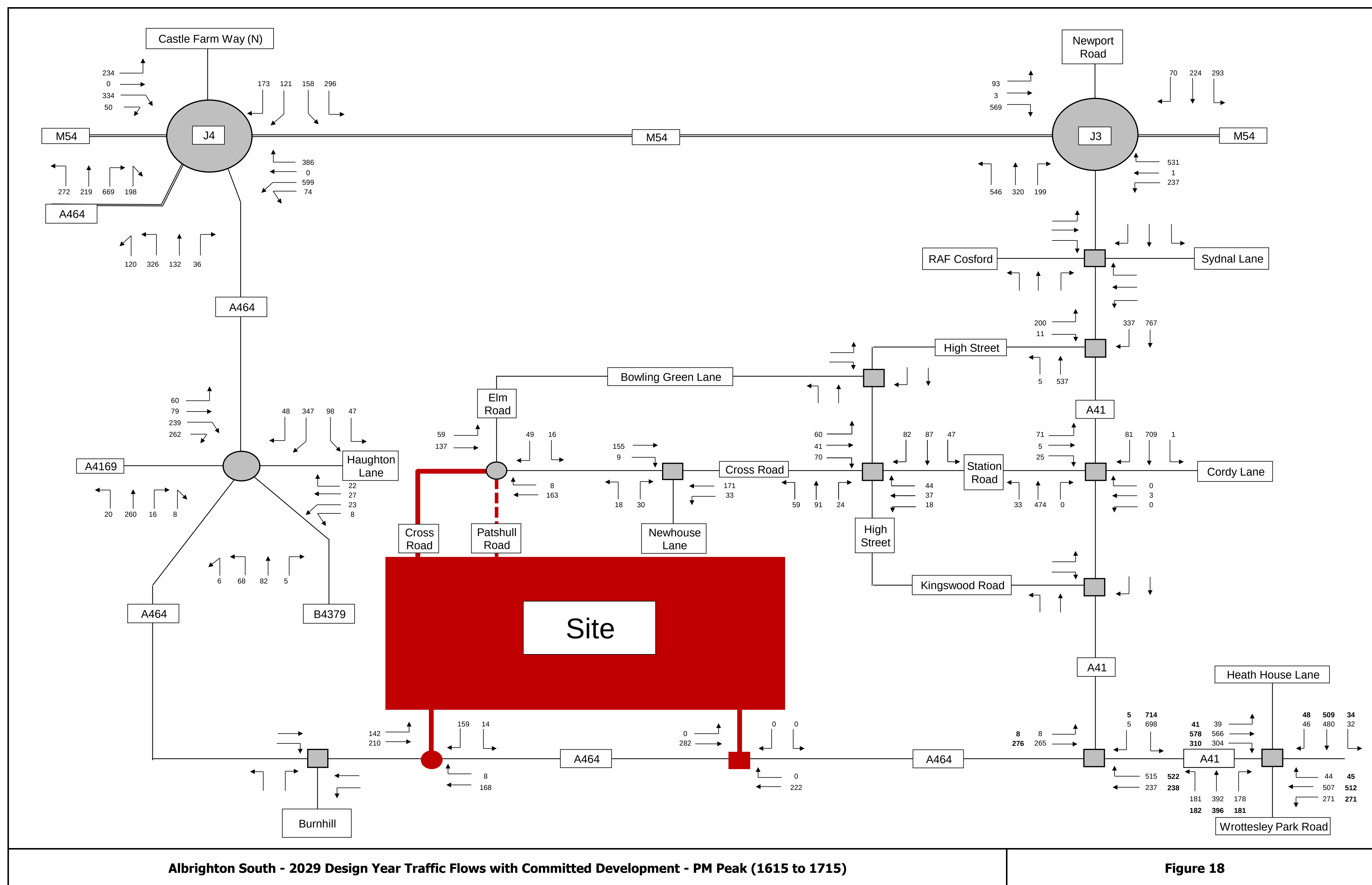
Albrighton South - 2029 Design Year Traffic Flows - PM Peak (1615 to 1715)

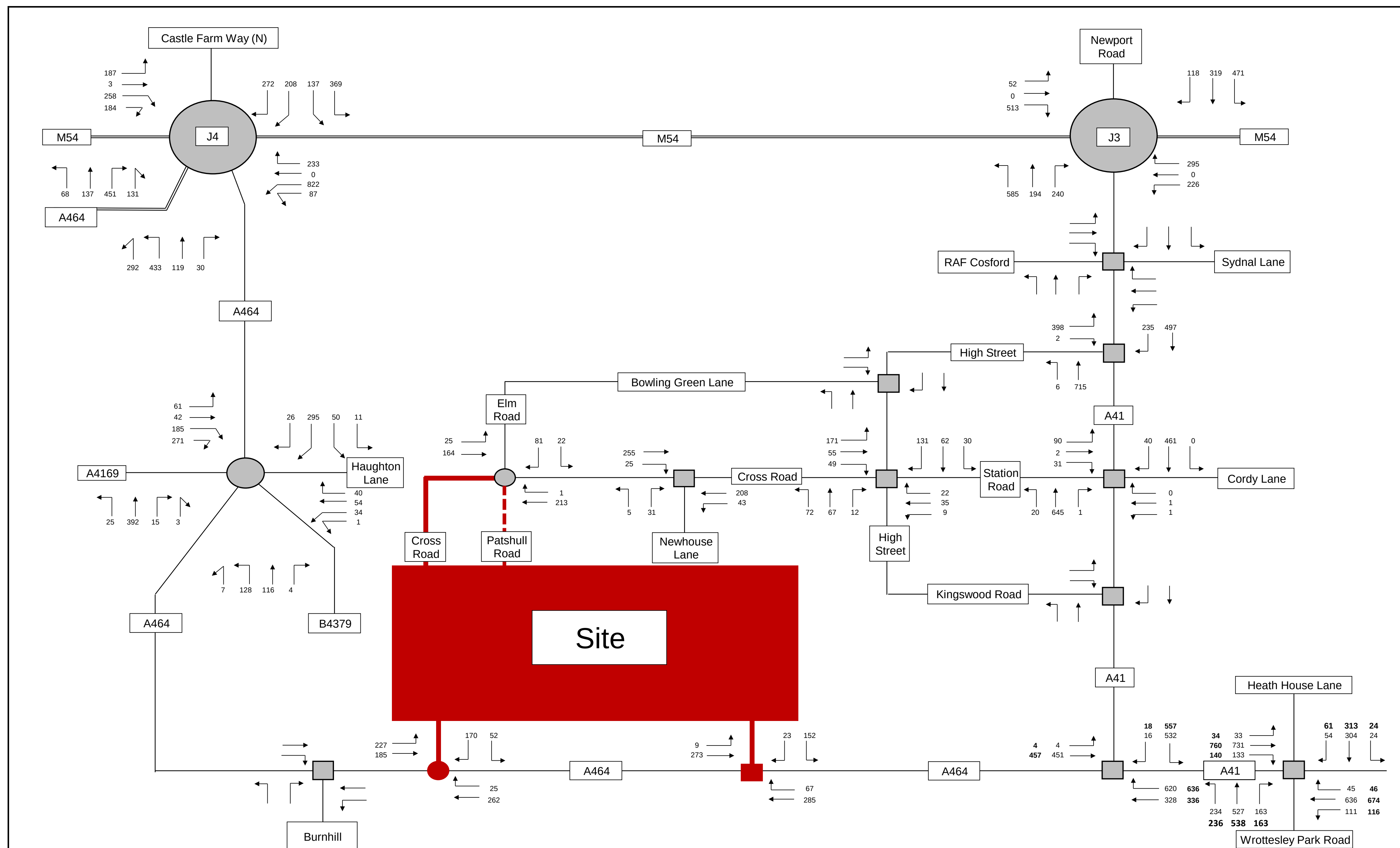
Figure 16



Albrighton South - 2029 Design Year Traffic Flows with Committed Development - AM Peak (0730 to 0830)

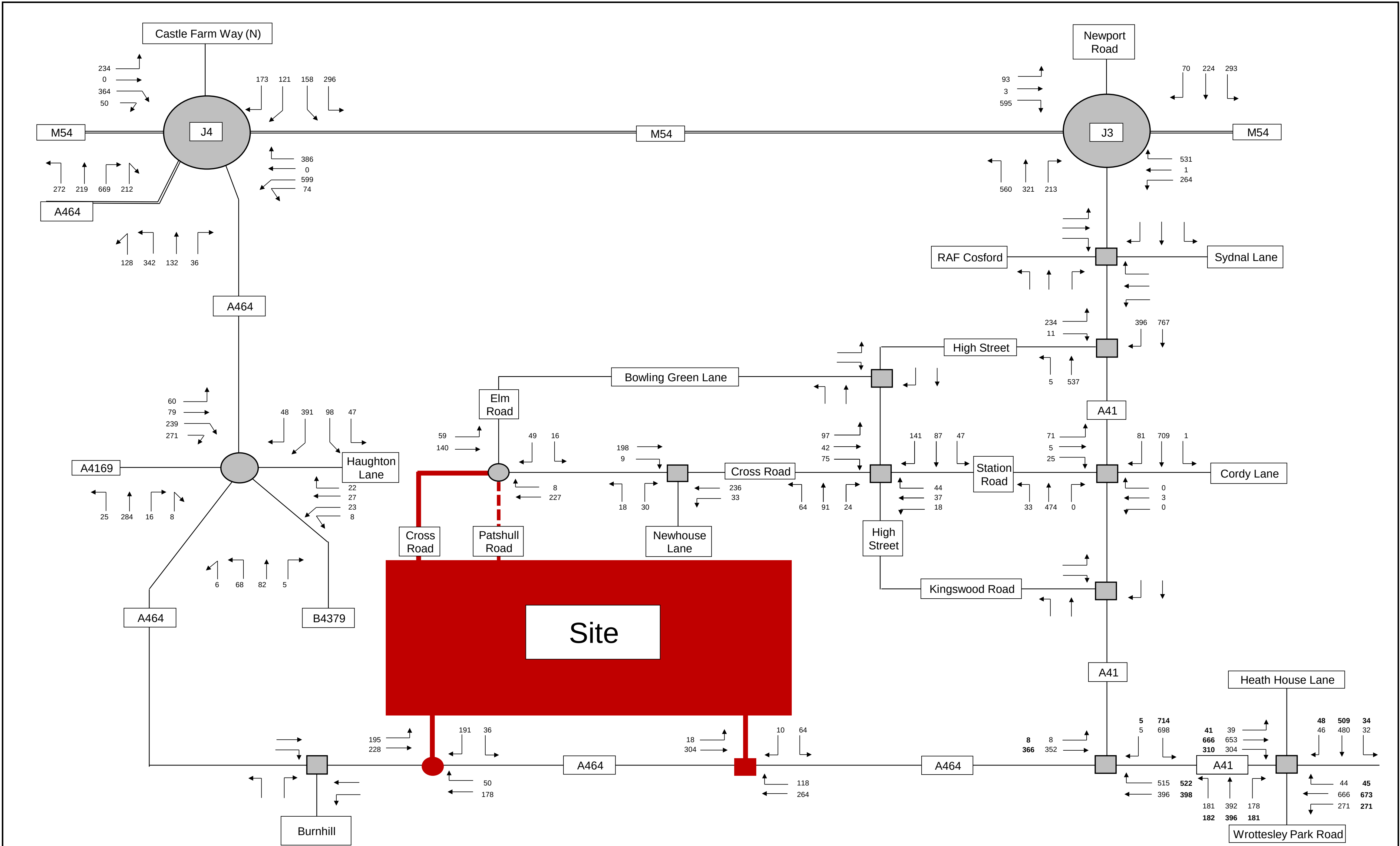
Figure 17





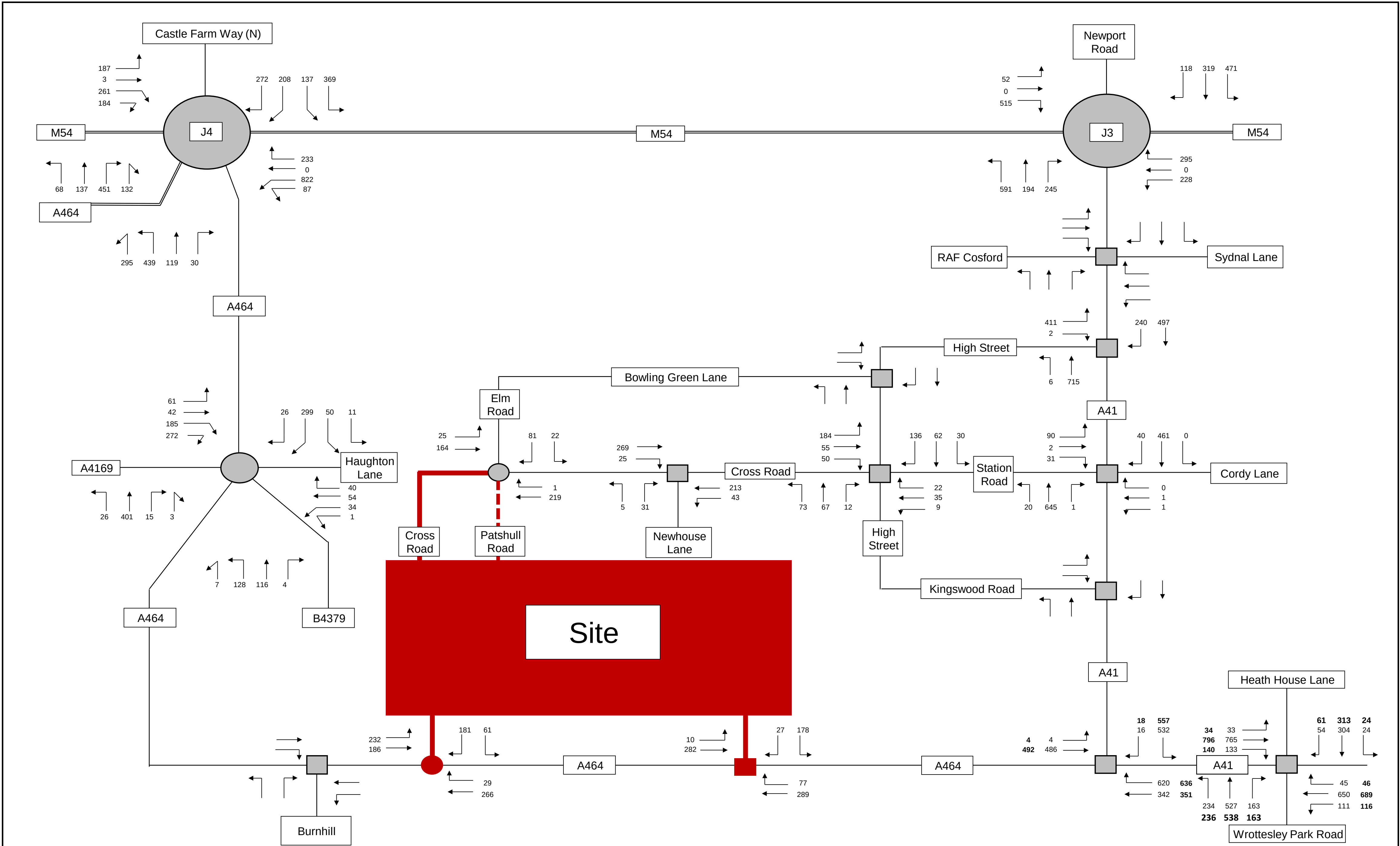
Albrighton South - 2029 Design Year Traffic Flows with Committed Development & Proposed Development - AM Peak (0730 to 0830)

Figure 19



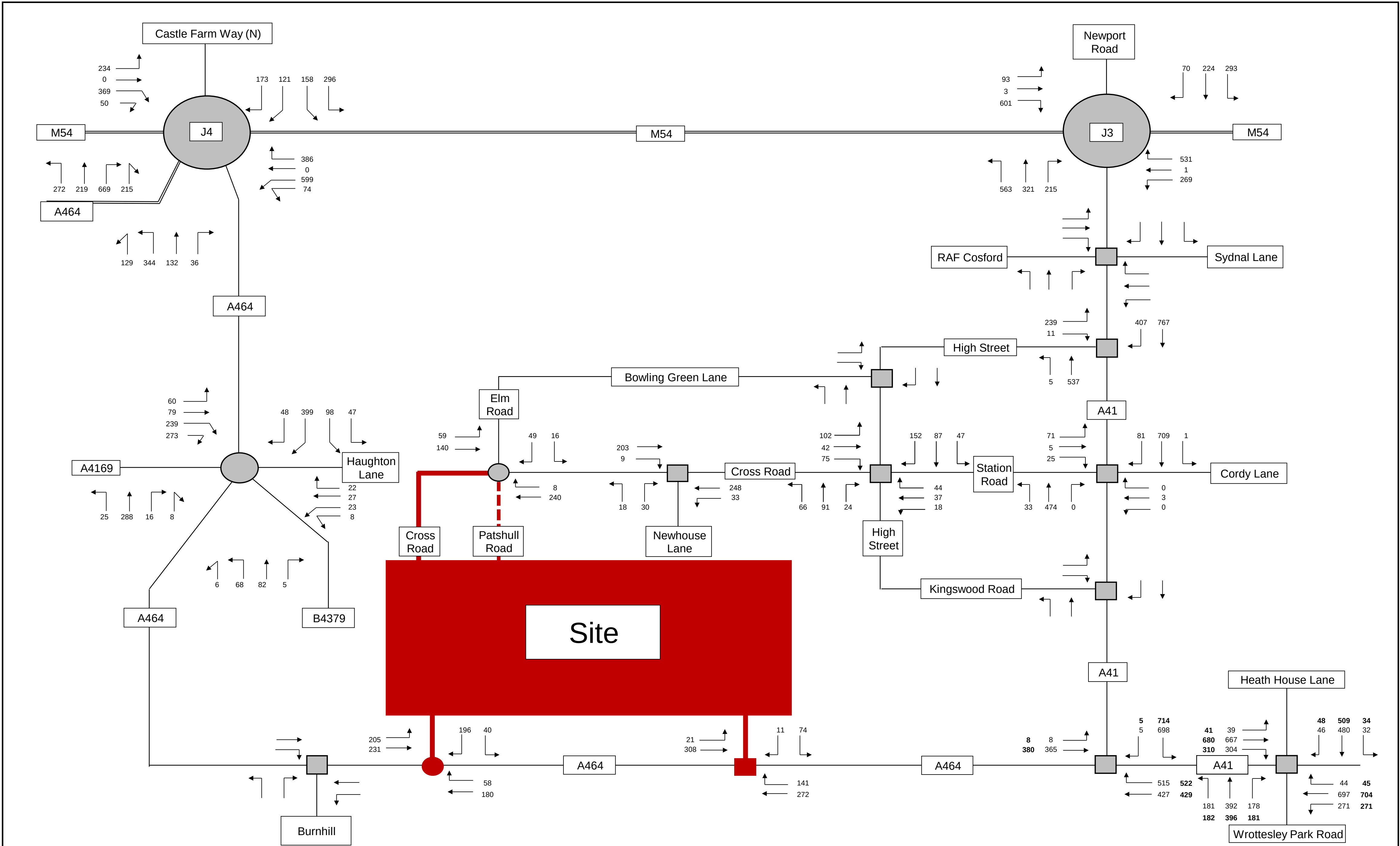
Albrighton South - 2029 Design Year Traffic Flows with Committed Development & Proposed Development - PM Peak (1615 to 1715)

Figure 20



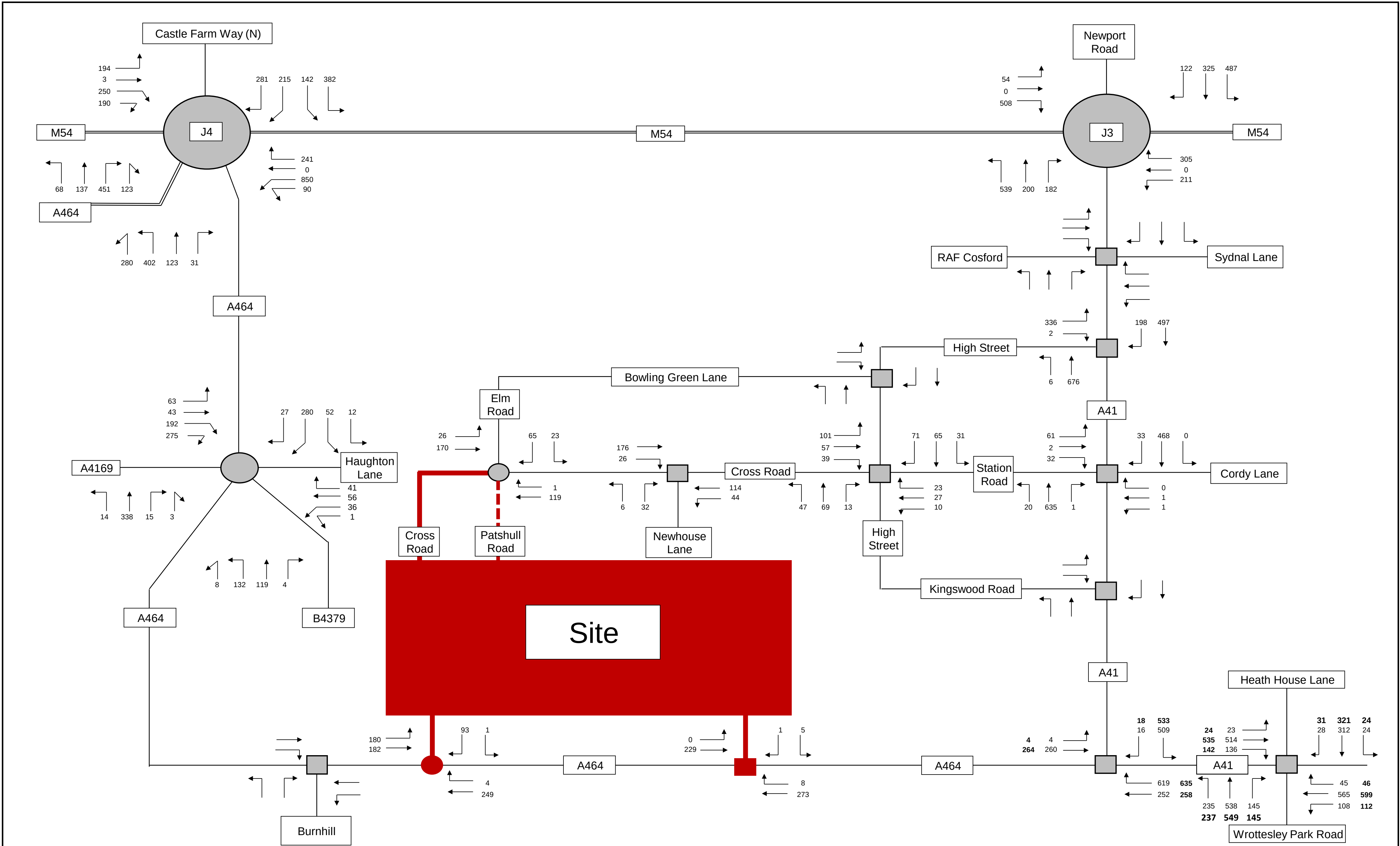
Albrighton South - 2029 Design Year Traffic Flows with Development, Committed Development & Sensitivity - AM Peak (0730 to 0830)

Figure 21



Albrighton South - 2029 Design Year Traffic Flows with Development, Committed Development & Sensitivity - PM Peak (1615 to 1715)

Figure 22



Albrighton South - 2034 Design Year Traffic Flows - AM Peak (0730 to 0830)

Figure 23

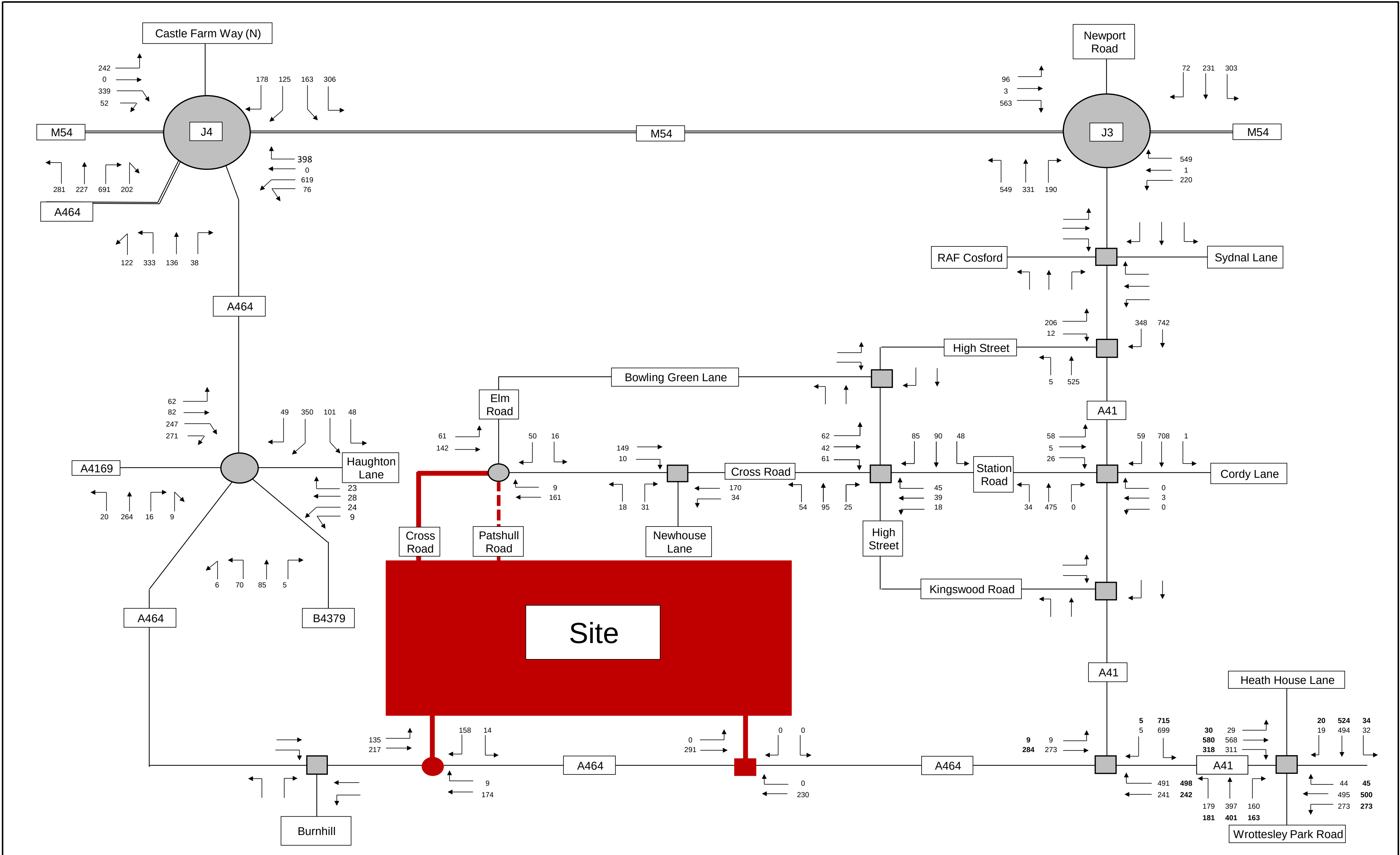
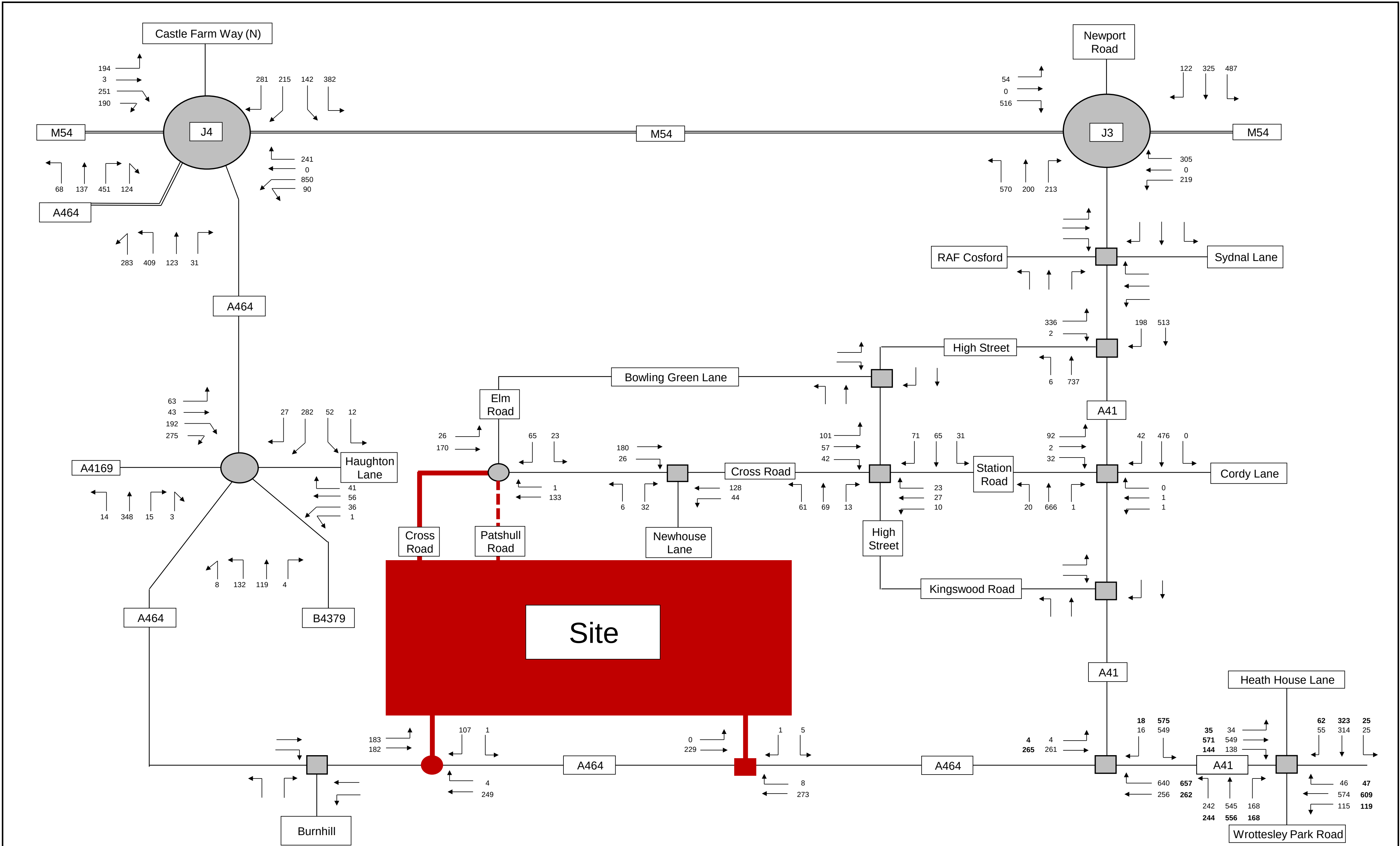
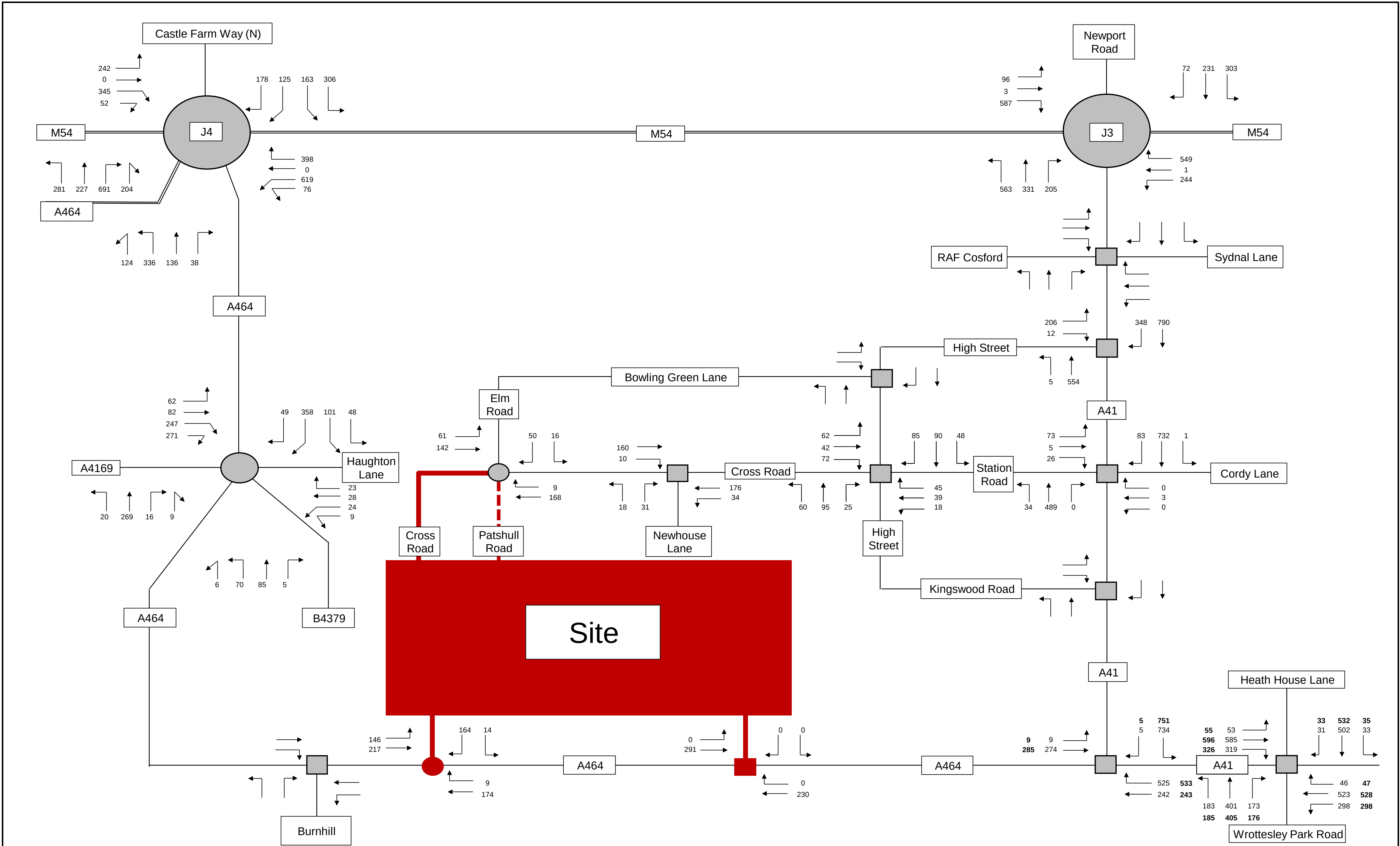


Figure 24



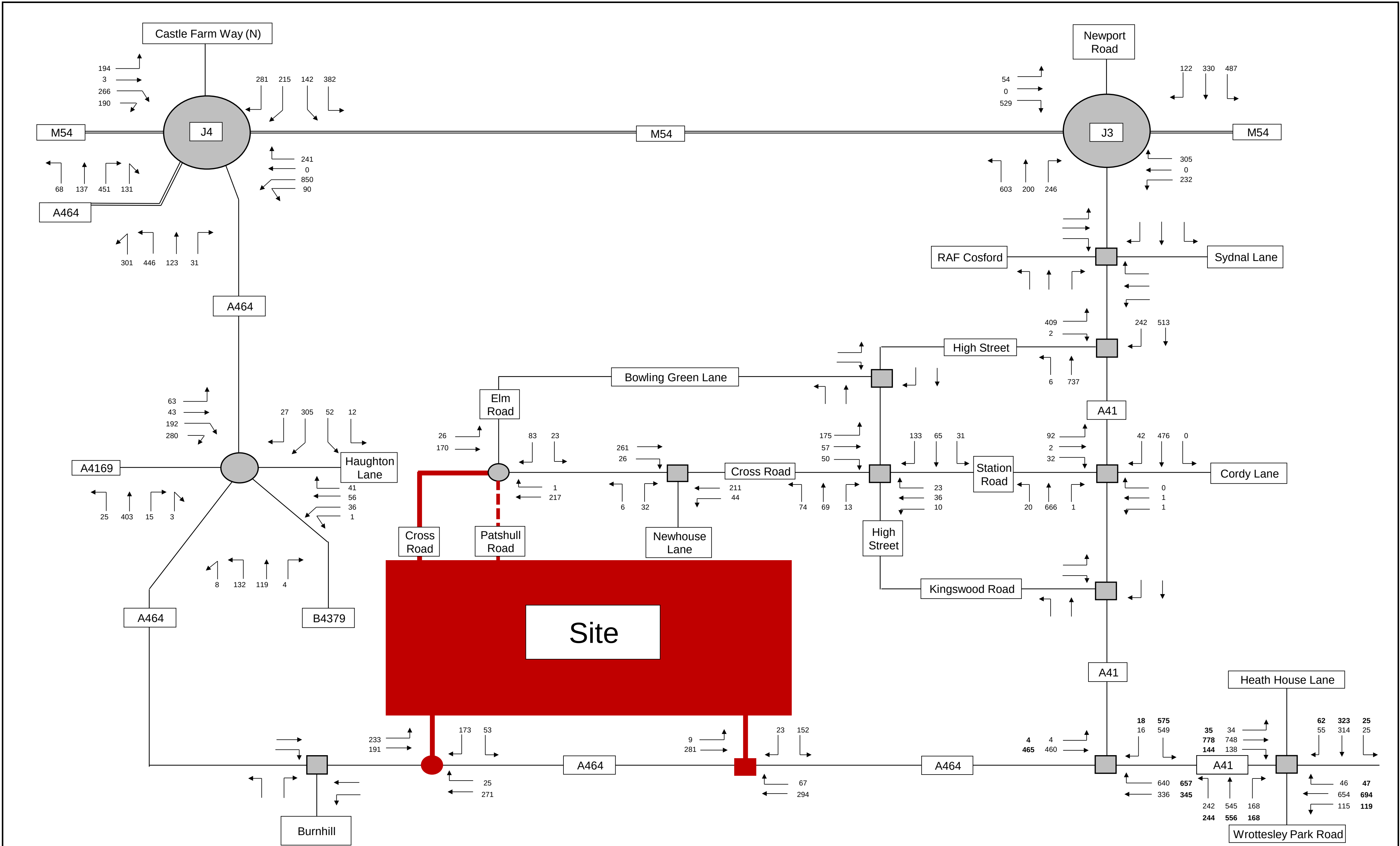
Albrighton South - 2034 Design Year Traffic Flows with Committed Development - AM Peak (0730 to 0830)

Figure 25



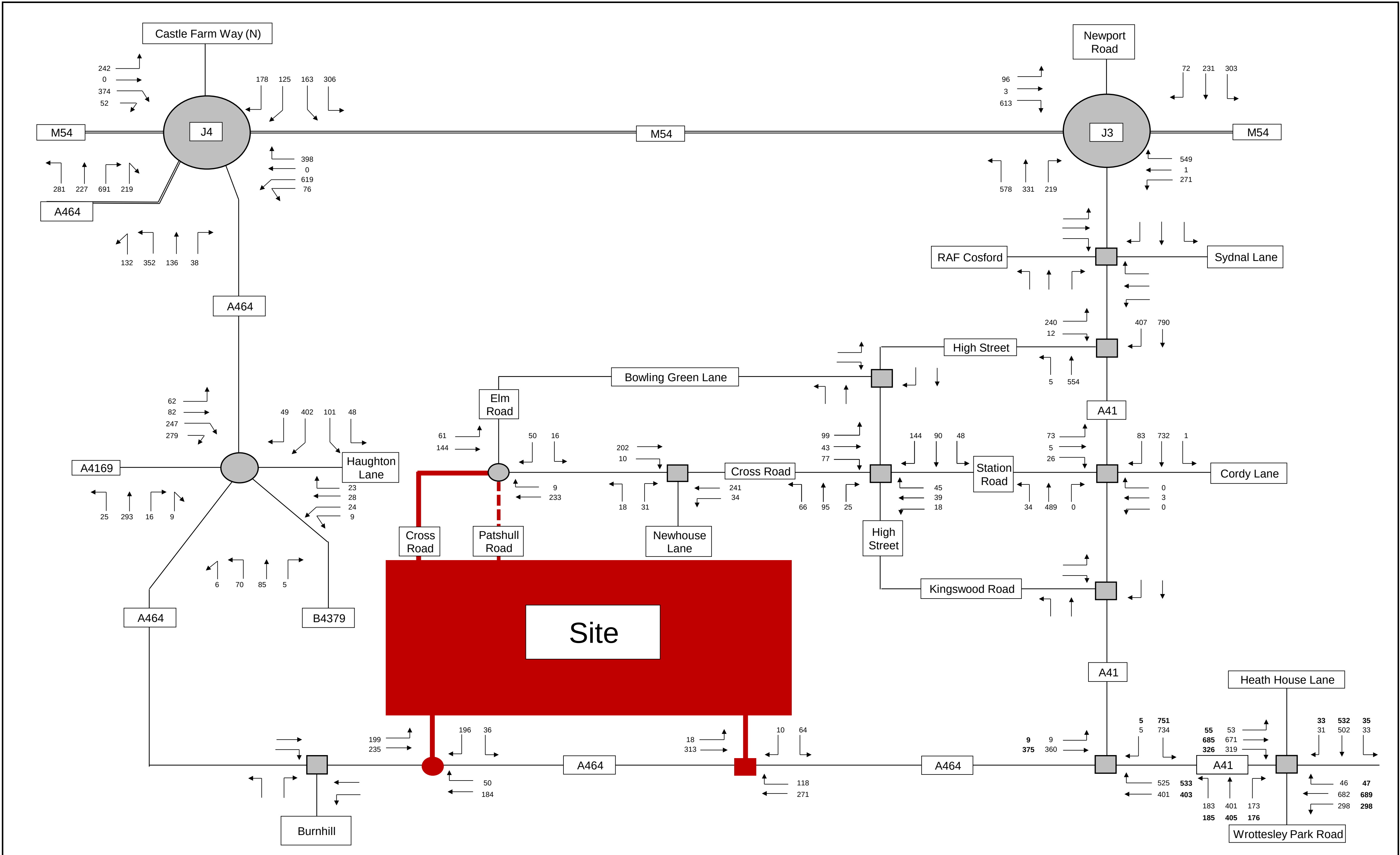
Albrighton South - 2034 Design Year Traffic Flows with Committed Development - PM Peak (1615 to 1715)

Figure 26



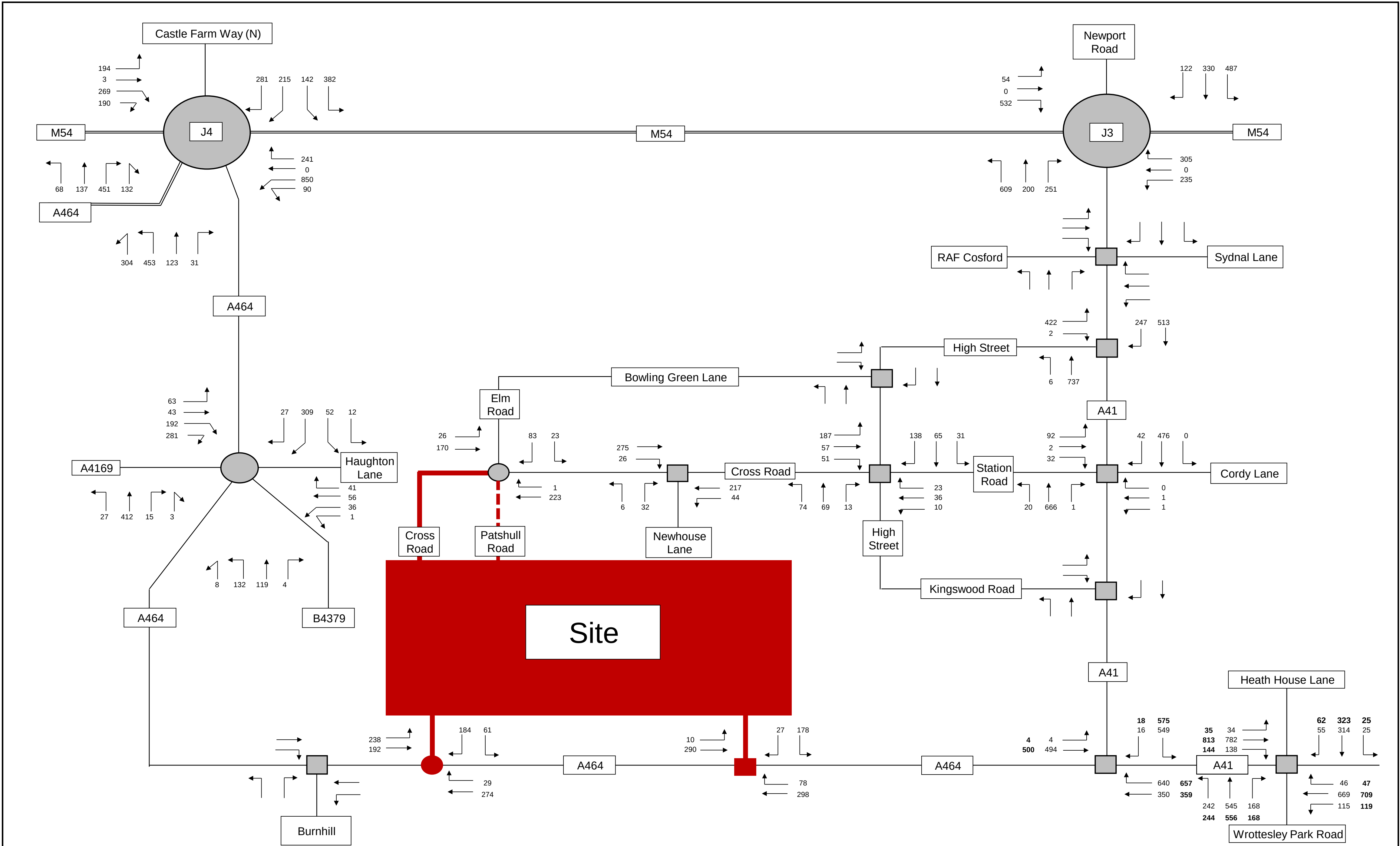
Albrighton South - 2034 Design Year Traffic Flows with Development & Committed Development - AM Peak (0730 to 0830)

Figure 27



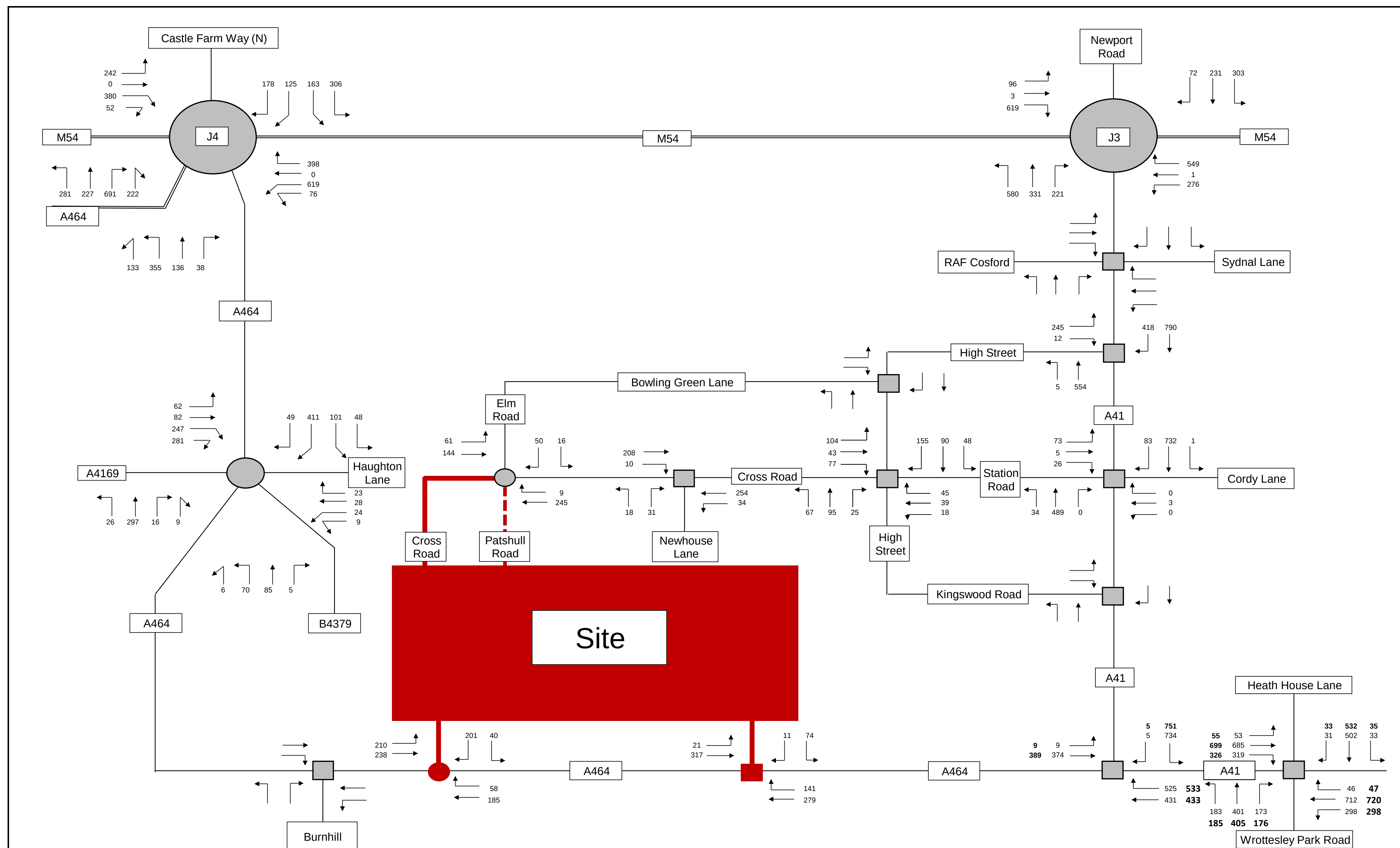
Albrighton South - 2034 Design Year Traffic Flows with Development & Committed Development - PM Peak (1615 to 1715)

Figure 28



Albrighton South - 2034 Design Year Traffic Flows with Development, Committed Development & Sensitivity - AM Peak (0730 to 0830)

Figure 29



Albrighton South - 2034 Design Year Traffic Flows with Development, Committed Development & Sensitivity - PM Peak (1615 to 1715)

Figure 30

TECHNICAL NOTE 4 (TN04)

Appendix E Junction Modelling Output Files

Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.5.2.1013			
© Copyright TRL Limited, 2019			
For sales and distribution information, program advice and maintenance, contact TRL:			
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: A464 Holyhead Road GRT.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\1 A464 Holyhead Road GRT

Report generation date: 04/12/2024 16:37:08

- »A464 / GRT Access - 2029 + Proposed, AM
- »A464 / GRT Access - 2029 + Proposed, PM
- »A464 / GRT Access - 2029 + Proposed + Sensitivity, AM
- »A464 / GRT Access - 2029 + Proposed + Sensitivity, PM
- »A464 / GRT Access - 2034 + Proposed, AM
- »A464 / GRT Access - 2034 + Proposed, PM
- »A464 / GRT Access - 2034 + Proposed + Sensitivity, AM
- »A464 / GRT Access - 2034 + Proposed + Sensitivity, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
A464 / GRT Access - 2029 + Proposed								
Stream B-C	0.4	8.00	0.27	A	0.1	6.62	0.11	A
Stream B-A	0.1	10.29	0.07	B	0.0	10.33	0.03	B
Stream C-AB	0.1	6.03	0.11	A	0.2	6.82	0.20	A
A464 / GRT Access - 2029 + Proposed + Sensitivity								
Stream B-C	0.5	8.66	0.32	A	0.2	6.79	0.13	A
Stream B-A	0.1	10.78	0.08	B	0.0	10.75	0.04	B
Stream C-AB	0.1	6.19	0.13	A	0.3	7.19	0.24	A
A464 / GRT Access - 2034 + Proposed								
Stream B-C	0.4	8.05	0.27	A	0.1	6.65	0.12	A
Stream B-A	0.1	10.40	0.07	B	0.0	10.44	0.03	B
Stream C-AB	0.1	6.06	0.11	A	0.2	6.85	0.20	A
A464 / GRT Access - 2034 + Proposed + Sensitivity								
Stream B-C	0.5	8.71	0.32	A	0.2	6.82	0.13	A
Stream B-A	0.1	10.90	0.08	B	0.0	10.87	0.04	B
Stream C-AB	0.1	6.22	0.13	A	0.3	7.23	0.24	A

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

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

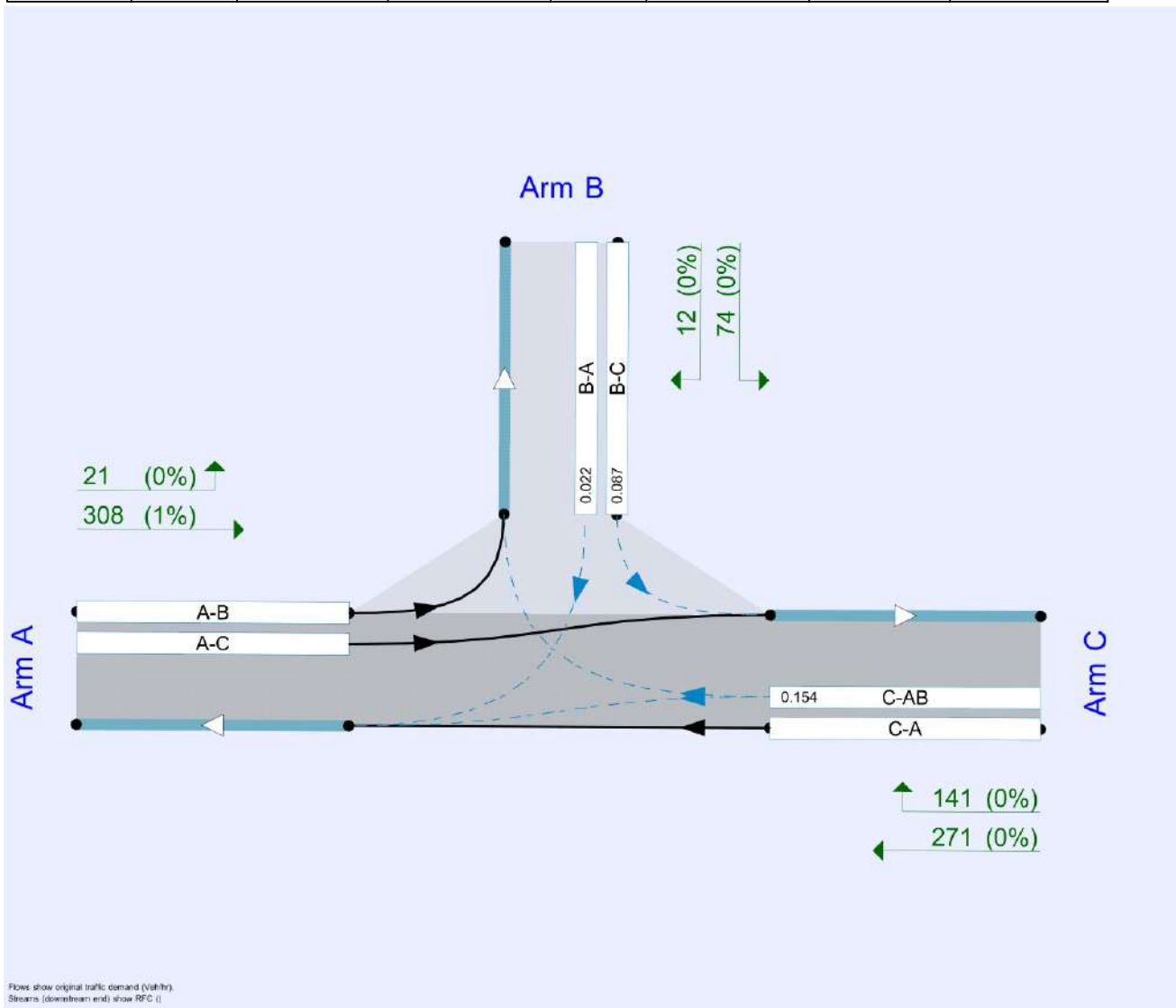
File summary

File Description

Title	Albrighton South
Location	A464 / GRT Access
Site number	SH5034-13PD
Date	13/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	WL
Description	

Units

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



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15			
D2	2024 Base	PM	ONE HOUR	16:00	17:30	15			
D3	Proposed Development	AM	ONE HOUR	07:15	08:45	15			
D4	Proposed Development	PM	ONE HOUR	16:00	17:30	15			
D5	Sensitivity	AM	ONE HOUR	07:15	08:45	15			
D6	Sensitivity	PM	ONE HOUR	16:00	17:30	15			
D7	2029 + Proposed	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G1) + D3
D8	2029 + Proposed	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G2) + D4
D9	2029 + Proposed + Sensitivity	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D7 + D5
D10	2029 + Proposed + Sensitivity	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D8 + D6
D11	2034 + Proposed	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D3
D12	2034 + Proposed	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G4) + D4
D13	2034 + Proposed + Sensitivity	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D5
D14	2034 + Proposed + Sensitivity	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 PM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A464 / GRT Access	✓	100.000	100.000

A464 / GRT Access - 2029 + Proposed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Profile Type	D7 - 2029 + Proposed, AM	'O-D data varies over time' option has been selected but all arms use ONE HOUR profile type, which shapes the flows over time automatically. Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A464 Holyhead Road (W)		Major
B	Spine Road		Minor
C	A464 Holyhead Road (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.85		✓	3.00	215.0	✓	8.00

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	6.90	3.80	3.30	3.30	✓	1.00	40	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	527	0.092	0.234	0.147	0.334
B-C	711	0.105	0.265	-	-
C-B	759	0.283	0.283	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D7	2029 + Proposed	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G1) + D3

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	282	100.000
B		ONE HOUR	✓	175	100.000
C		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

07:15 - 07:30

	To			
		A	B	C
From	A	0	9	273
	B	23	0	152
	C	285	66	0

Demand (Veh/hr)

07:30 - 07:45

	To			
		A	B	C
From	A	0	9	273
	B	23	0	152
	C	285	66	0

Demand (Veh/hr)

07:45 - 08:00

	To			
		A	B	C
From	A	0	9	273
	B	23	0	152
	C	285	66	0

Demand (Veh/hr)

08:00 - 08:15

	To			
		A	B	C
From	A	0	9	273
	B	23	0	152
	C	285	66	0

Demand (Veh/hr)

08:15 - 08:30

	To			
		A	B	C
From	A	0	9	273
	B	23	0	152
	C	285	66	0

Demand (Veh/hr)

08:30 - 08:45

	To			
		A	B	C
From	A	0	9	273
	B	23	0	152
	C	285	66	0

Vehicle Mix

Heavy Vehicle Percentages

07:15 - 07:30

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

07:30 - 07:45

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

07:45 - 08:00

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:00 - 08:15

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:15 - 08:30

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:30 - 08:45

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.00	0.4	A	140	209
B-A	0.07	10.29	0.1	B	21	32
C-AB	0.11	6.03	0.1	A	61	91
C-A					262	393
A-B					8	12
A-C					250	375

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	648	0.177	114	0.0	0.2	6.728	A
B-A	17	4	426	0.041	17	0.0	0.0	8.804	A
C-AB	50	12	698	0.071	50	0.0	0.1	5.549	A
C-A	215	54			215				
A-B	7	2			7				
A-C	205	51			205				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	137	34	635	0.215	137	0.2	0.3	7.216	A
B-A	21	5	405	0.051	21	0.0	0.1	9.366	A
C-AB	60	15	686	0.087	60	0.1	0.1	5.744	A
C-A	257	64			257				
A-B	8	2			8				
A-C	245	61			245				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	617	0.271	167	0.3	0.4	7.989	A
B-A	25	6	375	0.068	25	0.1	0.1	10.286	B
C-AB	73	18	670	0.109	73	0.1	0.1	6.032	A
C-A	314	79			314				
A-B	10	2			10				
A-C	300	75			300				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	617	0.271	168	0.4	0.4	8.002	A
B-A	25	6	375	0.068	25	0.1	0.1	10.292	B
C-AB	73	18	670	0.109	73	0.1	0.1	6.032	A
C-A	314	79			314				
A-B	10	2			10				
A-C	300	75			300				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	137	34	635	0.215	137	0.4	0.3	7.233	A
B-A	21	5	405	0.051	21	0.1	0.1	9.374	A
C-AB	60	15	686	0.087	60	0.1	0.1	5.746	A
C-A	257	64			257				
A-B	8	2			8				
A-C	245	61			245				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	648	0.177	115	0.3	0.2	6.759	A
B-A	17	4	426	0.041	17	0.1	0.0	8.817	A
C-AB	50	12	698	0.071	50	0.1	0.1	5.555	A
C-A	215	54			215				
A-B	7	2			7				
A-C	205	51			205				

A464 / GRT Access - 2029 + Proposed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D8	2029 + Proposed	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G2) + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	322	100.000
B		ONE HOUR	✓	74	100.000
C		ONE HOUR	✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	18	304
	B	10	0	64
	C	263	118	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	6.62	0.1	A	59	88
B-A	0.03	10.33	0.0	B	9	14
C-AB	0.20	6.82	0.2	A	108	162
C-A					242	363
A-B					17	25
A-C					279	418

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	645	0.075	48	0.0	0.1	6.023	A
B-A	8	2	413	0.018	7	0.0	0.0	8.879	A
C-AB	89	22	690	0.129	88	0.0	0.1	5.978	A
C-A	198	50			198				
A-B	14	3			14				
A-C	229	57			229				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	14	632	0.091	57	0.1	0.1	6.262	A
B-A	9	2	390	0.023	9	0.0	0.0	9.438	A
C-AB	106	27	677	0.157	106	0.1	0.2	6.307	A
C-A	237	59			237				
A-B	16	4			16				
A-C	273	68			273				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	614	0.115	70	0.1	0.1	6.614	A
B-A	11	3	360	0.031	11	0.0	0.0	10.328	B
C-AB	130	32	658	0.197	130	0.2	0.2	6.811	A
C-A	290	73			290				
A-B	20	5			20				
A-C	334	84			334				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	614	0.115	70	0.1	0.1	6.617	A
B-A	11	3	359	0.031	11	0.0	0.0	10.331	B
C-AB	130	32	658	0.197	130	0.2	0.2	6.816	A
C-A	290	73			290				
A-B	20	5			20				
A-C	334	84			334				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	14	632	0.091	58	0.1	0.1	6.267	A
B-A	9	2	390	0.023	9	0.0	0.0	9.443	A
C-AB	106	27	677	0.157	106	0.2	0.2	6.317	A
C-A	237	59			237				
A-B	16	4			16				
A-C	273	68			273				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	645	0.075	48	0.1	0.1	6.030	A
B-A	8	2	413	0.018	8	0.0	0.0	8.889	A
C-AB	89	22	690	0.129	89	0.2	0.1	5.993	A
C-A	198	50			198				
A-B	14	3			14				
A-C	229	57			229				

A464 / GRT Access - 2029 + Proposed + Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Profile Type	D9 - 2029 + Proposed + Sensitivity, AM	'O-D data varies over time' option has been selected but all arms use ONE HOUR profile type, which shapes the flows over time automatically. Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2029 + Proposed + Sensitivity	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D7 + D5

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	293	100.000
B		ONE HOUR	✓	205	100.000
C		ONE HOUR	✓	367	100.000

Origin-Destination Data

Demand (Veh/hr)

07:15 - 07:30

	To			
		A	B	C
	A	0	11	282
	B	27	0	178
From	C	289	77	0

Demand (Veh/hr)

07:30 - 07:45

	To			
		A	B	C
	A	0	11	282
	B	27	0	178
From	C	289	77	0

Demand (Veh/hr)

07:45 - 08:00

		To			
From		A	B	C	
	A	0	11	282	
	B	27	0	178	
	C	289	77	0	

Demand (Veh/hr)

08:00 - 08:15

		To			
From		A	B	C	
	A	0	11	282	
	B	27	0	178	
	C	289	77	0	

Demand (Veh/hr)

08:15 - 08:30

		To			
From		A	B	C	
	A	0	11	282	
	B	27	0	178	
	C	289	77	0	

Demand (Veh/hr)

08:30 - 08:45

		To			
From		A	B	C	
	A	0	11	282	
	B	27	0	178	
	C	289	77	0	

Vehicle Mix

Heavy Vehicle Percentages

07:15 - 07:30

		To			
From		A	B	C	
	A	0	0	2	
	B	0	0	0	
	C	4	0	0	

Heavy Vehicle Percentages

07:30 - 07:45

		To			
From		A	B	C	
	A	0	0	2	
	B	0	0	0	
	C	4	0	0	

Heavy Vehicle Percentages

07:45 - 08:00

		To			
From		A	B	C	
	A	0	0	2	
	B	0	0	0	
	C	4	0	0	

Heavy Vehicle Percentages

08:00 - 08:15

		To			
From		A	B	C	
	A	0	0	2	
	B	0	0	0	
	C	4	0	0	

Heavy Vehicle Percentages

08:15 - 08:30

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	4	0	0

Heavy Vehicle Percentages

08:30 - 08:45

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	8.66	0.5	A	164	245
B-A	0.08	10.78	0.1	B	25	37
C-AB	0.13	6.19	0.1	A	71	106
C-A					266	398
A-B					10	15
A-C					258	388

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	645	0.208	133	0.0	0.3	7.024	A
B-A	20	5	420	0.049	20	0.0	0.1	9.007	A
C-AB	58	15	696	0.084	58	0.0	0.1	5.642	A
C-A	218	54			218				
A-B	8	2			8				
A-C	212	53			212				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	160	40	631	0.254	160	0.3	0.3	7.635	A
B-A	24	6	397	0.061	24	0.1	0.1	9.663	A
C-AB	69	17	683	0.102	69	0.1	0.1	5.864	A
C-A	260	65			260				
A-B	10	2			10				
A-C	253	63			253				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	196	49	612	0.321	196	0.3	0.5	8.635	A
B-A	30	7	364	0.082	30	0.1	0.1	10.776	B
C-AB	85	21	666	0.128	85	0.1	0.1	6.191	A
C-A	319	80			319				
A-B	12	3			12				
A-C	310	78			310				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	196	49	612	0.321	196	0.5	0.5	8.656	A
B-A	30	7	364	0.082	30	0.1	0.1	10.784	B
C-AB	85	21	666	0.128	85	0.1	0.1	6.193	A
C-A	319	80			319				
A-B	12	3			12				
A-C	310	78			310				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	160	40	631	0.254	161	0.5	0.3	7.664	A
B-A	24	6	397	0.061	24	0.1	0.1	9.675	A
C-AB	69	17	683	0.102	70	0.1	0.1	5.868	A
C-A	260	65			260				
A-B	10	2			10				
A-C	253	63			253				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	644	0.208	134	0.3	0.3	7.065	A
B-A	20	5	419	0.049	20	0.1	0.1	9.026	A
C-AB	58	15	696	0.084	58	0.1	0.1	5.648	A
C-A	218	54			218				
A-B	8	2			8				
A-C	212	53			212				

A464 / GRT Access - 2029 + Proposed + Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2029 + Proposed + Sensitivity	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D8 + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	329	100.000
B		ONE HOUR	✓	86	100.000
C		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	21	308
	B	12	0	74
	C	271	141	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A	B	C
	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.13	6.79	0.2	A	68	102
B-A	0.04	10.75	0.0	B	11	17
C-AB	0.24	7.19	0.3	A	129	194
C-A					249	374
A-B					19	29
A-C					282	424

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	644	0.087	55	0.0	0.1	6.116	A
B-A	9	2	405	0.022	9	0.0	0.0	9.083	A
C-AB	106	27	689	0.154	105	0.0	0.2	6.166	A
C-A	204	51			204				
A-B	16	4			16				
A-C	232	58			232				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	630	0.106	66	0.1	0.1	6.385	A
B-A	11	3	381	0.028	11	0.0	0.0	9.719	A
C-AB	127	32	675	0.188	127	0.2	0.2	6.565	A
C-A	244	61			244				
A-B	19	5			19				
A-C	277	69			277				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	612	0.133	81	0.1	0.2	6.785	A
B-A	13	3	348	0.038	13	0.0	0.0	10.746	B
C-AB	155	39	656	0.237	155	0.2	0.3	7.182	A
C-A	299	75			299				
A-B	23	6			23				
A-C	339	85			339				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	612	0.133	81	0.2	0.2	6.788	A
B-A	13	3	348	0.038	13	0.0	0.0	10.752	B
C-AB	155	39	656	0.237	155	0.3	0.3	7.191	A
C-A	299	75			299				
A-B	23	6			23				
A-C	339	85			339				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	630	0.106	67	0.2	0.1	6.388	A
B-A	11	3	381	0.028	11	0.0	0.0	9.728	A
C-AB	127	32	675	0.188	127	0.3	0.2	6.578	A
C-A	244	61			244				
A-B	19	5			19				
A-C	277	69			277				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	644	0.087	56	0.1	0.1	6.128	A
B-A	9	2	405	0.022	9	0.0	0.0	9.097	A
C-AB	106	27	689	0.154	106	0.2	0.2	6.185	A
C-A	204	51			204				
A-B	16	4			16				
A-C	232	58			232				

A464 / GRT Access - 2034 + Proposed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Profile Type	D11 - 2034 + Proposed, AM	'O-D data varies over time' option has been selected but all arms use ONE HOUR profile type, which shapes the flows over time automatically. Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2034 + Proposed	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D3

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	289	100.000
B		ONE HOUR	✓	175	100.000
C		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (Veh/hr)

07:15 - 07:30

	To			
From		A	B	C
	A	0	9	280
	B	23	0	152
	C	294	67	0

Demand (Veh/hr)

07:30 - 07:45

	To			
From		A	B	C
	A	0	9	280
	B	23	0	152
	C	294	67	0

Demand (Veh/hr)

07:45 - 08:00

		To		
From		A	B	C
	A	0	9	280
	B	23	0	152
	C	294	67	0

Demand (Veh/hr)

08:00 - 08:15

		To		
From		A	B	C
	A	0	9	280
	B	23	0	152
	C	294	67	0

Demand (Veh/hr)

08:15 - 08:30

		To		
From		A	B	C
	A	0	9	280
	B	23	0	152
	C	294	67	0

Demand (Veh/hr)

08:30 - 08:45

		To		
From		A	B	C
	A	0	9	280
	B	23	0	152
	C	294	67	0

Vehicle Mix

Heavy Vehicle Percentages

07:15 - 07:30

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

07:30 - 07:45

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

07:45 - 08:00

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:00 - 08:15

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:15 - 08:30

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	4	0	0

Heavy Vehicle Percentages

08:30 - 08:45

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
From	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.05	0.4	A	140	210
B-A	0.07	10.40	0.1	B	21	32
C-AB	0.11	6.06	0.1	A	61	92
C-A					270	405
A-B					8	12
A-C					257	386

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	646	0.178	114	0.0	0.2	6.750	A
B-A	17	4	423	0.041	17	0.0	0.0	8.858	A
C-AB	50	13	696	0.072	50	0.0	0.1	5.565	A
C-A	222	55			222				
A-B	7	2			7				
A-C	211	53			211				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	137	34	633	0.216	137	0.2	0.3	7.246	A
B-A	21	5	402	0.052	21	0.0	0.1	9.439	A
C-AB	60	15	684	0.087	60	0.1	0.1	5.764	A
C-A	265	66			265				
A-B	8	2			8				
A-C	252	63			252				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	615	0.273	167	0.3	0.4	8.032	A
B-A	25	6	372	0.068	25	0.1	0.1	10.394	B
C-AB	73	18	667	0.110	73	0.1	0.1	6.059	A
C-A	324	81			324				
A-B	10	2			10				
A-C	308	77			308				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	615	0.273	168	0.4	0.4	8.047	A
B-A	25	6	372	0.068	25	0.1	0.1	10.401	B
C-AB	73	18	667	0.110	73	0.1	0.1	6.059	A
C-A	324	81			324				
A-B	10	2			10				
A-C	308	77			308				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	137	34	633	0.216	137	0.4	0.3	7.266	A
B-A	21	5	402	0.052	21	0.1	0.1	9.447	A
C-AB	60	15	684	0.087	60	0.1	0.1	5.769	A
C-A	265	66			265				
A-B	8	2			8				
A-C	252	63			252				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	115	29	646	0.178	115	0.3	0.2	6.781	A
B-A	17	4	423	0.041	17	0.1	0.0	8.873	A
C-AB	50	13	696	0.072	50	0.1	0.1	5.572	A
C-A	222	55			222				
A-B	7	2			7				
A-C	211	53			211				

A464 / GRT Access - 2034 + Proposed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2034 + Proposed	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G4) + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	331	100.000
B		ONE HOUR	✓	74	100.000
C		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	18	313
	B	10	0	64
	C	271	118	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.12	6.65	0.1	A	59	88
B-A	0.03	10.44	0.0	B	9	14
C-AB	0.20	6.85	0.2	A	108	162
C-A					249	373
A-B					17	25
A-C					287	431

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	643	0.075	48	0.0	0.1	6.042	A
B-A	8	2	410	0.018	7	0.0	0.0	8.934	A
C-AB	89	22	688	0.129	88	0.0	0.1	5.998	A
C-A	204	51			204				
A-B	14	3			14				
A-C	236	59			236				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	14	630	0.091	57	0.1	0.1	6.286	A
B-A	9	2	387	0.023	9	0.0	0.0	9.511	A
C-AB	106	27	674	0.157	106	0.1	0.2	6.333	A
C-A	243	61			243				
A-B	16	4			16				
A-C	281	70			281				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	612	0.115	70	0.1	0.1	6.648	A
B-A	11	3	356	0.031	11	0.0	0.0	10.436	B
C-AB	130	32	655	0.198	130	0.2	0.2	6.849	A
C-A	298	75			298				
A-B	20	5			20				
A-C	345	86			345				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	70	18	612	0.115	70	0.1	0.1	6.651	A
B-A	11	3	356	0.031	11	0.0	0.0	10.439	B
C-AB	130	32	655	0.198	130	0.2	0.2	6.854	A
C-A	298	75			298				
A-B	20	5			20				
A-C	345	86			345				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	14	630	0.091	58	0.1	0.1	6.291	A
B-A	9	2	387	0.023	9	0.0	0.0	9.518	A
C-AB	106	27	674	0.157	106	0.2	0.2	6.343	A
C-A	243	61			243				
A-B	16	4			16				
A-C	281	70			281				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	643	0.075	48	0.1	0.1	6.049	A
B-A	8	2	410	0.018	8	0.0	0.0	8.942	A
C-AB	89	22	688	0.129	89	0.2	0.1	6.010	A
C-A	204	51			204				
A-B	14	3			14				
A-C	236	59			236				

A464 / GRT Access - 2034 + Proposed + Sensitivity, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Profile Type	D13 - 2034 + Proposed + Sensitivity, AM	'O-D data varies over time' option has been selected but all arms use ONE HOUR profile type, which shapes the flows over time automatically. Are you sure this is correct?

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2034 + Proposed + Sensitivity	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D5

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	300	100.000
B		ONE HOUR	✓	205	100.000
C		ONE HOUR	✓	376	100.000

Origin-Destination Data

Demand (Veh/hr)

07:15 - 07:30

	To			
From		A	B	C
	A	0	11	289
	B	27	0	178
	C	298	78	0

Demand (Veh/hr)

07:30 - 07:45

		To		
From		A	B	C
	A	0	11	289
	B	27	0	178
	C	298	78	0

Demand (Veh/hr)

07:45 - 08:00

		To		
From		A	B	C
	A	0	11	289
	B	27	0	178
	C	298	78	0

Demand (Veh/hr)

08:00 - 08:15

		To		
From		A	B	C
	A	0	11	289
	B	27	0	178
	C	298	78	0

Demand (Veh/hr)

08:15 - 08:30

		To		
From		A	B	C
	A	0	11	289
	B	27	0	178
	C	298	78	0

Demand (Veh/hr)

08:30 - 08:45

		To		
From		A	B	C
	A	0	11	289
	B	27	0	178
	C	298	78	0

Vehicle Mix

Heavy Vehicle Percentages

07:15 - 07:30

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

07:30 - 07:45

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

07:45 - 08:00

		To		
From		A	B	C
	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:00 - 08:15

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:15 - 08:30

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Heavy Vehicle Percentages

08:30 - 08:45

	To			
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	8.71	0.5	A	164	246
B-A	0.08	10.90	0.1	B	25	37
C-AB	0.13	6.22	0.1	A	71	107
C-A					274	411
A-B					10	15
A-C					265	398

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	643	0.209	133	0.0	0.3	7.048	A
B-A	20	5	417	0.049	20	0.0	0.1	9.063	A
C-AB	58	15	694	0.084	58	0.0	0.1	5.658	A
C-A	225	56			225				
A-B	8	2			8				
A-C	218	54			218				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	160	40	629	0.255	160	0.3	0.3	7.668	A
B-A	24	6	394	0.062	24	0.1	0.1	9.740	A
C-AB	70	17	681	0.102	70	0.1	0.1	5.884	A
C-A	268	67			268				
A-B	10	2			10				
A-C	260	65			260				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	196	49	610	0.322	196	0.3	0.5	8.687	A
B-A	30	7	360	0.083	30	0.1	0.1	10.893	B
C-AB	85	21	664	0.129	85	0.1	0.1	6.220	A
C-A	328	82			328				
A-B	12	3			12				
A-C	318	80			318				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	196	49	610	0.322	196	0.5	0.5	8.710	A
B-A	30	7	360	0.083	30	0.1	0.1	10.904	B
C-AB	85	21	664	0.129	85	0.1	0.1	6.222	A
C-A	328	82			328				
A-B	12	3			12				
A-C	318	80			318				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	160	40	629	0.255	161	0.5	0.3	7.696	A
B-A	24	6	394	0.062	24	0.1	0.1	9.754	A
C-AB	70	17	681	0.102	70	0.1	0.1	5.889	A
C-A	268	67			268				
A-B	10	2			10				
A-C	260	65			260				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	643	0.209	135	0.3	0.3	7.086	A
B-A	20	5	417	0.049	20	0.1	0.1	9.082	A
C-AB	58	15	694	0.084	58	0.1	0.1	5.664	A
C-A	225	56			225				
A-B	8	2			8				
A-C	218	54			218				

A464 / GRT Access - 2034 + Proposed + Sensitivity, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D9 - 2029 + Proposed + Sensitivity, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2034 + Proposed + Sensitivity	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	338	100.000
B		ONE HOUR	✓	86	100.000
C		ONE HOUR	✓	420	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
	0	21	317	
	12	0	74	
From	279	141	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	1	
	0	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.13	6.82	0.2	A	68	102
B-A	0.04	10.87	0.0	B	11	17
C-AB	0.24	7.23	0.3	A	129	194
C-A					256	384
AB					19	29
AC					291	436

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	642	0.087	55	0.0	0.1	6.135	A
B-A	9	2	403	0.022	9	0.0	0.0	9.140	A
C-AB	106	27	687	0.155	105	0.0	0.2	6.187	A
C-A	210	52			210				
AB	16	4			16				
AC	239	60			239				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	628	0.106	66	0.1	0.1	6.410	A
B-A	11	3	378	0.029	11	0.0	0.0	9.797	A
C-AB	127	32	672	0.189	127	0.2	0.2	6.594	A
C-A	251	63			251				
AB	19	5			19				
AC	285	71			285				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	609	0.134	81	0.1	0.2	6.821	A
B-A	13	3	345	0.038	13	0.0	0.0	10.863	B
C-AB	155	39	653	0.238	155	0.2	0.3	7.225	A
C-A	307	77			307				
AB	23	6			23				
AC	349	87			349				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	81	20	609	0.134	81	0.2	0.2	6.824	A
B-A	13	3	344	0.038	13	0.0	0.0	10.869	B
C-AB	155	39	653	0.238	155	0.3	0.3	7.233	A
C-A	307	77			307				
A-B	23	6			23				
A-C	349	87			349				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	628	0.106	67	0.2	0.1	6.414	A
B-A	11	3	378	0.029	11	0.0	0.0	9.804	A
C-AB	127	32	672	0.189	127	0.3	0.2	6.604	A
C-A	251	63			251				
A-B	19	5			19				
A-C	285	71			285				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	642	0.087	56	0.1	0.1	6.145	A
B-A	9	2	402	0.022	9	0.0	0.0	9.152	A
C-AB	106	27	687	0.155	106	0.2	0.2	6.206	A
C-A	210	52			210				
A-B	16	4			16				
A-C	239	60			239				

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.2.1013 © Copyright TRL Limited, 2019			
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Filename: A464 Holyhead Rd Rbt.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\2 A464 Holyhead Road Roundabout

Report generation date: 04/12/2024 17:04:00

- »A464 / Rbt Access - 2029 + Prop Dev + Comm Dev, AM
- »A464 / Rbt Access - 2029 + Prop Dev + Comm Dev, PM
- »A464 / Rbt Access - 2029 + Prop Dev + Comm Dev + Sens, AM
- »A464 / Rbt Access - 2029 + Prop Dev + Comm Dev + Sens, PM
- »A464 / Rbt Access - 2034 + Prop Dev + Comm Dev, AM
- »A464 / Rbt Access - 2034 + Prop Dev + Comm Dev, PM
- »A464 / Rbt Access - 2034 + Prop Dev + Comm Dev + Sens, AM
- »A464 / Rbt Access - 2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
A464 / Rbt Access - 2029 + Prop Dev + Comm Dev								
Arm 1	0.2	2.84	0.20	A	0.2	2.73	0.16	A
Arm 2	0.4	2.83	0.26	A	0.4	2.89	0.27	A
Arm 3	0.2	3.22	0.18	A	0.3	3.46	0.22	A
A464 / Rbt Access - 2029 + Prop Dev + Comm Dev + Sens								
Arm 1	0.3	2.88	0.21	A	0.2	2.76	0.17	A
Arm 2	0.4	2.85	0.27	A	0.4	2.94	0.28	A
Arm 3	0.2	3.29	0.20	A	0.3	3.50	0.23	A
A464 / Rbt Access - 2034 + Prop Dev + Comm Dev								
Arm 1	0.3	2.87	0.21	A	0.2	2.75	0.16	A
Arm 2	0.4	2.86	0.27	A	0.4	2.92	0.28	A
Arm 3	0.2	3.24	0.18	A	0.3	3.50	0.23	A
A464 / Rbt Access - 2034 + Prop Dev + Comm Dev + Sens								
Arm 1	0.3	2.91	0.21	A	0.2	2.78	0.17	A
Arm 2	0.4	2.88	0.28	A	0.4	2.97	0.29	A
Arm 3	0.2	3.31	0.20	A	0.3	3.54	0.24	A

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

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

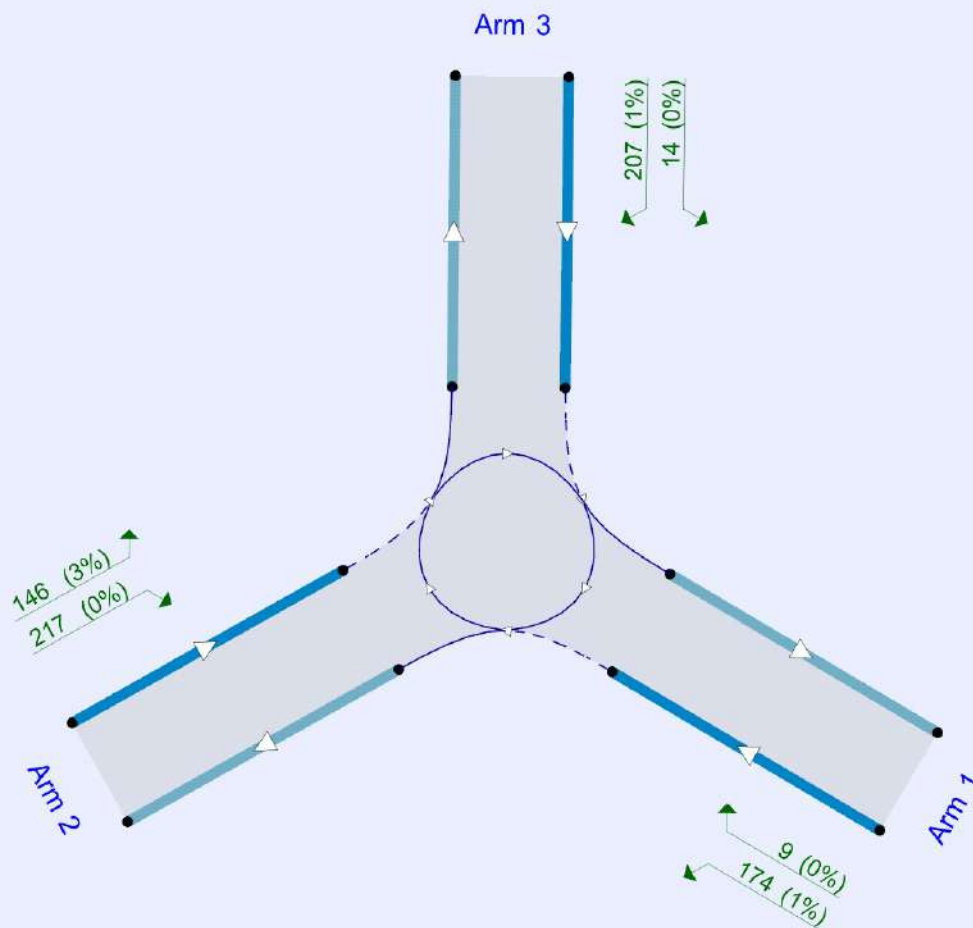
File summary

File Description

Title	Albrighton South
Location	A464 / Rbt Access
Site number	SH5034-13PD
Date	13/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	WL
Description	

Units

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



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15			
D2	2024 Base	PM	ONE HOUR	16:00	17:30	15			
D3	Proposed Development	AM	ONE HOUR	07:15	08:45	15			
D4	Proposed Development	PM	ONE HOUR	16:00	17:30	15			
D5	Sensitivity	AM	ONE HOUR	07:15	08:45	15			
D6	Sensitivity	PM	ONE HOUR	16:00	17:30	15			
D7	Committed Development	AM	ONE HOUR	07:15	08:45	15			
D8	Committed Development	PM	ONE HOUR	16:00	17:30	15			
D9	2029 + Committed Development	AM	ONE HOUR	07:15	08:45	15		Simple	(D1 * G1) + D7
D10	2029 + Committed Development	PM	ONE HOUR	16:00	17:30	15		Simple	(D2 * G1) + D8
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D5
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D6
D15	2034 + Committed Development	AM	ONE HOUR	07:15	08:45	15		Simple	(D1 * G3) + D7
D16	2034 + Committed Development	PM	ONE HOUR	16:00	17:30	15		Simple	(D2 * G4) + D8
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D5
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D18 + D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A464 / Rbt Access	✓	100.000	100.000

A464 / Rbt Access - 2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A464 Holyhead Road (E)	
2	A464 Holyhead Road (W)	
3	Spine Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.40	8.00	17.4	20.0	40.0	36.0	
2	3.00	8.00	20.8	30.0	40.0	34.0	
3	3.25	6.70	10.2	42.0	40.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.645	1748
2	0.657	1770
3	0.604	1499

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	288	100.000
2		ONE HOUR	✓	413	100.000
3		ONE HOUR	✓	222	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
	1	0	262	25
	2	185	0	228
	3	52	170	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	1	0	3	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.20	2.84	0.2	A	264	396
2	0.26	2.83	0.4	A	379	568
3	0.18	3.22	0.2	A	203	305

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	127	1621	0.134	216	178	0.0	0.2	2.561	A
2	311	78	19	1732	0.179	310	324	0.0	0.2	2.530	A
3	167	42	139	1403	0.119	166	190	0.0	0.1	2.909	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	259	65	152	1605	0.161	258	213	0.2	0.2	2.673	A
2	371	93	23	1730	0.214	371	388	0.2	0.3	2.649	A
3	199	50	166	1386	0.144	199	227	0.1	0.2	3.032	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	317	79	186	1583	0.200	316	261	0.2	0.2	2.841	A
2	454	114	28	1726	0.263	454	475	0.3	0.4	2.829	A
3	244	61	203	1363	0.179	244	278	0.2	0.2	3.215	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	317	79	187	1583	0.200	317	261	0.2	0.2	2.841	A
2	454	114	28	1726	0.263	454	476	0.4	0.4	2.829	A
3	244	61	204	1363	0.179	244	279	0.2	0.2	3.215	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	259	65	153	1605	0.161	259	213	0.2	0.2	2.676	A
2	371	93	23	1730	0.214	371	389	0.4	0.3	2.650	A
3	199	50	166	1386	0.144	199	228	0.2	0.2	3.036	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	216	54	128	1621	0.134	217	178	0.2	0.2	2.566	A
2	311	78	19	1732	0.179	311	325	0.3	0.2	2.535	A
3	167	42	139	1402	0.119	167	191	0.2	0.1	2.913	A

A464 / Rbt Access - 2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	3.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	228	100.000
2		ONE HOUR	✓	423	100.000
3		ONE HOUR	✓	268	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
	From	1	0	179
		2	228	0
		3	36	233

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1	2	3
	1	0	1	0
	2	0	0	3
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.16	2.73	0.2	A	209	314
2	0.27	2.89	0.4	A	388	583
3	0.22	3.46	0.3	A	246	369

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	172	43	175	1622	0.106	171	198	0.0	0.1	2.482	A
2	319	80	37	1721	0.185	318	309	0.0	0.2	2.563	A
3	202	50	171	1384	0.146	201	184	0.0	0.2	3.043	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	205	51	209	1599	0.128	205	237	0.1	0.1	2.581	A
2	381	95	44	1717	0.222	380	369	0.2	0.3	2.693	A
3	241	60	205	1363	0.177	241	220	0.2	0.2	3.206	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	251	63	256	1569	0.160	251	290	0.1	0.2	2.730	A
2	466	117	54	1710	0.273	466	452	0.3	0.4	2.892	A
3	295	74	251	1336	0.221	295	269	0.2	0.3	3.458	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	251	63	256	1569	0.160	251	290	0.2	0.2	2.730	A
2	466	117	54	1710	0.273	466	453	0.4	0.4	2.892	A
3	295	74	251	1336	0.221	295	269	0.3	0.3	3.459	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	205	51	209	1599	0.128	205	237	0.2	0.1	2.584	A
2	381	95	44	1717	0.222	381	370	0.4	0.3	2.697	A
3	241	60	205	1363	0.177	241	220	0.3	0.2	3.209	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	172	43	175	1621	0.106	172	199	0.1	0.1	2.483	A
2	319	80	37	1721	0.185	319	310	0.3	0.2	2.568	A
3	202	50	172	1383	0.146	202	184	0.2	0.2	3.047	A

A464 / Rbt Access - 2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	2.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	296	100.000
2		ONE HOUR	✓	420	100.000
3		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	266	29
	2	187	0	233
	3	61	182	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1	2	3
	1	0	3	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.21	2.88	0.3	A	271	407
2	0.27	2.85	0.4	A	385	578
3	0.20	3.29	0.2	A	223	334

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	223	56	136	1616	0.138	222	186	0.0	0.2	2.581	A
2	316	79	22	1730	0.183	315	336	0.0	0.2	2.543	A
3	183	46	140	1402	0.130	182	197	0.0	0.1	2.949	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	266	66	163	1599	0.166	266	223	0.2	0.2	2.700	A
2	377	94	26	1727	0.218	377	402	0.2	0.3	2.665	A
3	218	55	168	1385	0.157	218	235	0.1	0.2	3.083	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	325	81	200	1575	0.207	325	273	0.2	0.3	2.879	A
2	462	116	32	1724	0.268	462	493	0.3	0.4	2.853	A
3	267	67	206	1362	0.196	267	288	0.2	0.2	3.286	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	325	81	200	1575	0.207	325	273	0.3	0.3	2.879	A
2	462	116	32	1724	0.268	462	493	0.4	0.4	2.853	A
3	267	67	206	1362	0.196	267	288	0.2	0.2	3.286	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	266	66	163	1598	0.166	266	223	0.3	0.2	2.703	A
2	377	94	26	1727	0.218	378	403	0.4	0.3	2.667	A
3	218	55	168	1385	0.157	218	236	0.2	0.2	3.085	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	223	56	137	1615	0.138	223	187	0.2	0.2	2.586	A
2	316	79	22	1730	0.183	316	337	0.3	0.2	2.545	A
3	183	46	141	1402	0.130	183	197	0.2	0.2	2.955	A

A464 / Rbt Access - 2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	238	100.000
2		ONE HOUR	✓	436	100.000
3		ONE HOUR	✓	277	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	181	57
	2	231	0	205
	3	40	238	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	
	1	0	1	0
	2	0	0	3
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.17	2.76	0.2	A	218	327
2	0.28	2.94	0.4	A	400	601
3	0.23	3.50	0.3	A	254	381

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	179	45	178	1620	0.111	179	203	0.0	0.1	2.498	A
2	329	82	43	1717	0.191	328	314	0.0	0.2	2.590	A
3	209	52	174	1382	0.151	208	197	0.0	0.2	3.064	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	214	53	213	1597	0.134	214	243	0.1	0.2	2.602	A
2	392	98	52	1712	0.229	392	376	0.2	0.3	2.728	A
3	249	62	208	1362	0.183	249	236	0.2	0.2	3.234	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	262	65	261	1566	0.167	262	298	0.2	0.2	2.760	A
2	480	120	63	1704	0.282	480	460	0.3	0.4	2.941	A
3	305	76	254	1334	0.229	305	289	0.2	0.3	3.498	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	262	65	262	1566	0.167	262	298	0.2	0.2	2.760	A
2	480	120	63	1704	0.282	480	460	0.4	0.4	2.941	A
3	305	76	255	1334	0.229	305	289	0.3	0.3	3.498	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	214	53	214	1597	0.134	214	244	0.2	0.2	2.605	A
2	392	98	52	1712	0.229	393	376	0.4	0.3	2.729	A
3	249	62	208	1362	0.183	249	236	0.3	0.2	3.239	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	179	45	179	1619	0.111	179	204	0.2	0.1	2.501	A
2	329	82	43	1717	0.191	329	315	0.3	0.2	2.593	A
3	209	52	174	1382	0.151	209	198	0.2	0.2	3.068	A

A464 / Rbt Access - 2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	296	100.000
2		ONE HOUR	✓	425	100.000
3		ONE HOUR	✓	225	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1	2	3
	1	0	271	25
	2	191	0	234
	3	52	173	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1	2	3
	1	0	3	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.21	2.87	0.3	A	271	407
2	0.27	2.86	0.4	A	390	584
3	0.18	3.24	0.2	A	206	309

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	223	56	129	1619	0.138	222	182	0.0	0.2	2.575	A
2	320	80	19	1732	0.185	319	333	0.0	0.2	2.546	A
3	169	42	143	1400	0.121	169	194	0.0	0.1	2.921	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	266	66	155	1603	0.166	266	218	0.2	0.2	2.691	A
2	382	95	23	1730	0.221	381	398	0.2	0.3	2.670	A
3	202	50	171	1383	0.146	202	233	0.1	0.2	3.048	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	326	81	190	1581	0.206	326	267	0.2	0.3	2.867	A
2	467	117	28	1726	0.271	467	487	0.3	0.4	2.859	A
3	247	62	210	1359	0.182	247	285	0.2	0.2	3.236	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	326	81	190	1581	0.206	326	267	0.3	0.3	2.867	A
2	467	117	28	1726	0.271	467	488	0.4	0.4	2.859	A
3	247	62	210	1359	0.182	247	285	0.2	0.2	3.237	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	266	66	155	1603	0.166	266	219	0.3	0.2	2.695	A
2	382	95	23	1730	0.221	382	399	0.4	0.3	2.673	A
3	202	50	172	1383	0.146	202	233	0.2	0.2	3.049	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	223	56	130	1619	0.138	223	183	0.2	0.2	2.580	A
2	320	80	19	1732	0.185	320	334	0.3	0.2	2.551	A
3	169	42	144	1400	0.121	169	195	0.2	0.1	2.925	A

A464 / Rbt Access - 2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	3.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	234	100.000
2		ONE HOUR	✓	434	100.000
3		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1	2	3
	1	0	184	50
	2	235	0	199
	3	36	239	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1	2	3
	1	0	1	0
	2	0	0	3
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.16	2.75	0.2	A	214	322
2	0.28	2.92	0.4	A	398	598
3	0.23	3.50	0.3	A	252	378

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	176	44	179	1619	0.109	175	203	0.0	0.1	2.494	A
2	327	82	37	1721	0.190	326	317	0.0	0.2	2.579	A
3	207	52	176	1380	0.150	206	187	0.0	0.2	3.064	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	210	52	214	1596	0.132	210	243	0.1	0.2	2.597	A
2	390	98	45	1717	0.227	390	380	0.2	0.3	2.713	A
3	247	62	211	1360	0.182	247	224	0.2	0.2	3.234	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	257	64	263	1565	0.164	257	298	0.2	0.2	2.752	A
2	478	120	55	1710	0.280	478	465	0.3	0.4	2.921	A
3	302	76	258	1331	0.227	302	274	0.2	0.3	3.498	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	257	64	263	1564	0.164	257	298	0.2	0.2	2.753	A
2	478	120	55	1710	0.280	478	465	0.4	0.4	2.921	A
3	302	76	259	1331	0.227	302	274	0.3	0.3	3.498	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	210	52	215	1595	0.132	210	244	0.2	0.2	2.600	A
2	390	98	45	1717	0.227	391	380	0.4	0.3	2.715	A
3	247	62	211	1359	0.182	247	224	0.3	0.2	3.236	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	176	44	180	1618	0.109	176	204	0.2	0.1	2.496	A
2	327	82	37	1721	0.190	327	319	0.3	0.2	2.584	A
3	207	52	177	1380	0.150	207	188	0.2	0.2	3.068	A

A464 / Rbt Access - 2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	304	100.000
2		ONE HOUR	✓	432	100.000
3		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	275	29
	2	193	0	239
	3	61	185	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	
	1	0	3	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.21	2.91	0.3	A	279	418
2	0.28	2.88	0.4	A	396	594
3	0.20	3.31	0.2	A	225	338

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	138	1614	0.142	228	191	0.0	0.2	2.596	A
2	325	81	22	1730	0.188	324	345	0.0	0.2	2.559	A
3	185	46	145	1399	0.132	184	201	0.0	0.2	2.961	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	273	68	166	1597	0.171	273	228	0.2	0.2	2.719	A
2	388	97	26	1727	0.225	388	412	0.2	0.3	2.687	A
3	221	55	173	1382	0.160	221	241	0.2	0.2	3.099	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	335	84	203	1573	0.213	334	279	0.2	0.3	2.905	A
2	475	119	32	1723	0.276	475	505	0.3	0.4	2.883	A
3	270	68	212	1358	0.199	270	295	0.2	0.2	3.309	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	335	84	203	1573	0.213	335	280	0.3	0.3	2.906	A
2	475	119	32	1723	0.276	475	505	0.4	0.4	2.883	A
3	270	68	212	1358	0.199	270	295	0.2	0.2	3.309	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	273	68	166	1597	0.171	273	228	0.3	0.2	2.722	A
2	388	97	26	1727	0.225	388	413	0.4	0.3	2.690	A
3	221	55	174	1382	0.160	221	241	0.2	0.2	3.101	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	139	1614	0.142	229	191	0.2	0.2	2.599	A
2	325	81	22	1730	0.188	325	346	0.3	0.2	2.564	A
3	185	46	145	1399	0.132	185	202	0.2	0.2	2.967	A

A464 / Rbt Access - 2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A464 / Rbt Access	Standard Roundabout		1, 2, 3	3.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D18 + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	244	100.000
2		ONE HOUR	✓	447	100.000
3		ONE HOUR	✓	284	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	186	58
	2	238	0	209
	3	40	244	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1	2	3	
	1	0	1	0
	2	0	0	3
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.17	2.78	0.2	A	224	335
2	0.29	2.97	0.4	A	410	616
3	0.24	3.54	0.3	A	260	391

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	183	1617	0.113	183	209	0.0	0.1	2.511	A
2	337	84	43	1717	0.196	336	323	0.0	0.2	2.605	A
3	214	53	179	1379	0.155	213	200	0.0	0.2	3.085	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	219	55	219	1593	0.137	219	250	0.1	0.2	2.619	A
2	402	101	52	1712	0.235	402	386	0.2	0.3	2.748	A
3	255	64	214	1358	0.188	255	240	0.2	0.2	3.262	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	268	67	268	1561	0.172	268	306	0.2	0.2	2.783	A
2	492	123	63	1704	0.289	492	473	0.3	0.4	2.970	A
3	312	78	262	1329	0.235	312	294	0.2	0.3	3.538	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	268	67	268	1561	0.172	268	306	0.2	0.2	2.783	A
2	492	123	63	1704	0.289	492	473	0.4	0.4	2.970	A
3	312	78	262	1329	0.235	312	294	0.3	0.3	3.539	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	219	55	219	1593	0.137	219	250	0.2	0.2	2.622	A
2	402	101	52	1712	0.235	402	387	0.4	0.3	2.752	A
3	255	64	214	1358	0.188	255	240	0.3	0.2	3.265	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	184	1616	0.113	184	209	0.2	0.1	2.512	A
2	337	84	43	1717	0.196	337	324	0.3	0.2	2.610	A
3	214	53	179	1379	0.155	214	201	0.2	0.2	3.089	A

Junctions 9			
PICADY 9 - Priority Intersection Module			
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Report generation date: 04/12/2024 17:11:51

- »2029 + Prop Dev + Comm Dev, AM
- »2029 + Prop Dev + Comm Dev, PM
- »2029 + Prop Dev + Comm Dev + Sens, AM
- »2029 + Prop Dev + Comm Dev + Sens, PM
- »2034 + Prop Dev + Comm Dev, AM
- »2034 + Prop Dev + Comm Dev, PM
- »2034 + Prop Dev + Comm Dev + Sens, AM
- »2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2029 + Prop Dev + Comm Dev								
Stream B-AC	0.4	11.74	0.27	B	0.2	10.32	0.17	B
Stream C-AB	0.0	4.87	0.00	A	0.0	4.85	0.02	A
2029 + Prop Dev + Comm Dev + Sens								
Stream B-AC	0.4	11.92	0.27	B	0.2	10.42	0.17	B
Stream C-AB	0.0	4.87	0.00	A	0.0	4.82	0.02	A
2034 + Prop Dev + Comm Dev								
Stream B-AC	0.4	11.94	0.28	B	0.2	10.45	0.18	B
Stream C-AB	0.0	4.87	0.00	A	0.0	4.84	0.02	A
2034 + Prop Dev + Comm Dev + Sens								
Stream B-AC	0.4	12.12	0.28	B	0.2	10.55	0.18	B
Stream C-AB	0.0	4.87	0.00	A	0.0	4.82	0.02	A

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

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

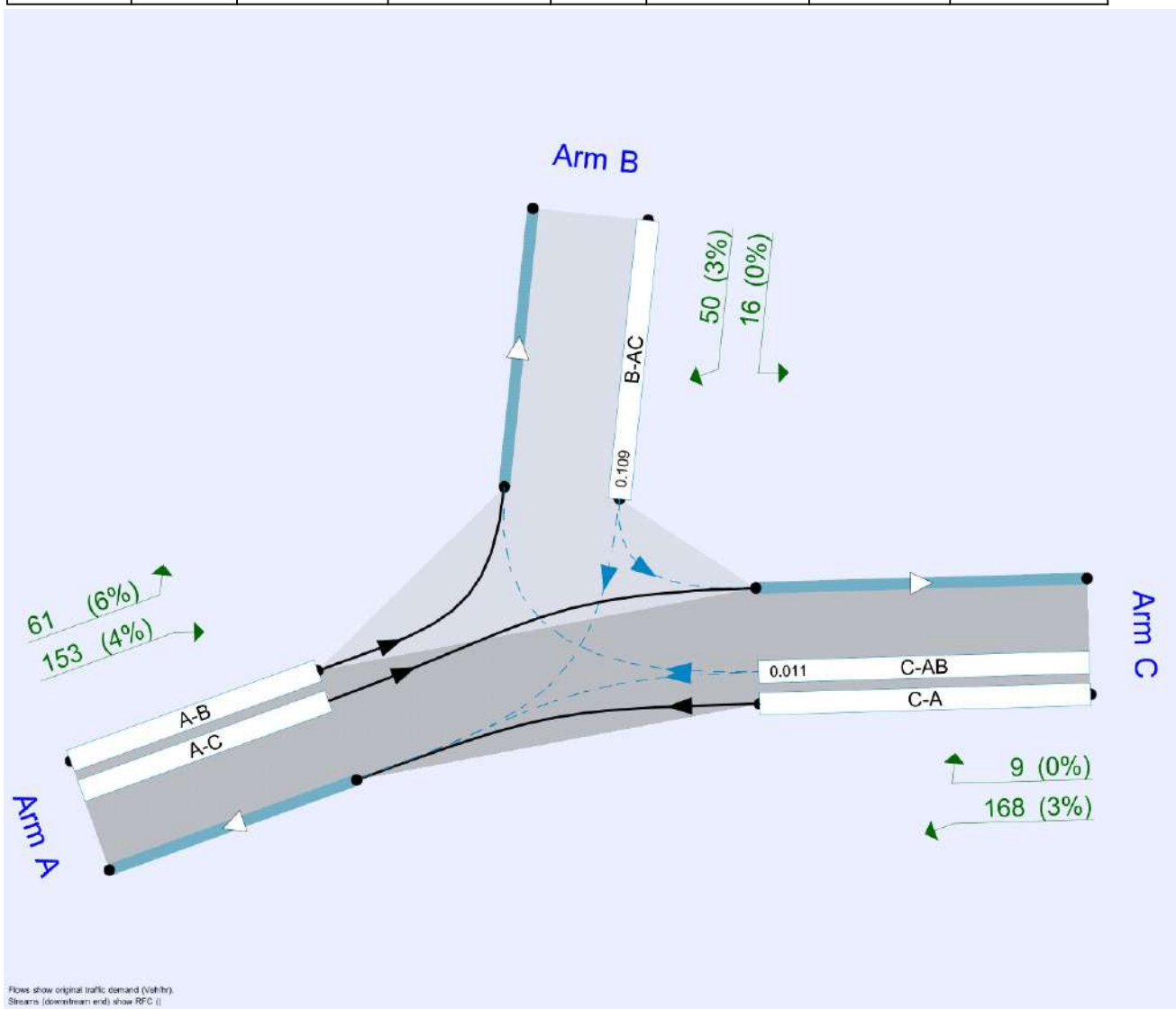
File summary

File Description

Title	South Albrighton
Location	Cross Rd / Elm Rd
Site number	SH5034-13PD
Date	13/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	WL
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15			
D2	2024 Base	PM	ONE HOUR	16:00	17:30	15			
D3	Proposed Development	AM	ONE HOUR	07:15	08:45	15			
D4	Proposed Development	PM	ONE HOUR	16:00	17:30	15			
D5	Committed Development	AM	ONE HOUR	07:15	08:45	15			
D6	Committed Development	PM	ONE HOUR	16:00	17:30	15			
D7	Sensitivity	AM	ONE HOUR	07:15	08:45	15			
D8	Sensitivity	PM	ONE HOUR	16:00	17:30	15			
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15		Simple	(D1 * G1) + D5
D10	2029 + Comm Dev	PM	ONE HOUR	16:00	17:30	15		Simple	(D2 * G2) + D6
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D8
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15		Simple	(D1 * G3) + D5
D16	2034 + Comm Dev	PM	ONE HOUR	16:00	17:30	15		Simple	(D2 * G4) + D6
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D18 + D8

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cross Road (W)		Major
B	Elm Road		Minor
C	Cross Road (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.10			210.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	17	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	493	0.089	0.226	0.142	0.323
B-C	637	0.097	0.246	-	-
C-B	696	0.268	0.268	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	274	100.000
B		ONE HOUR	✓	102	100.000
C		ONE HOUR	✓	214	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	25	249
	B	80	0	22
	C	213	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	4
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.74	0.4	B	94	141
C-AB	0.00	4.87	0.0	A	1	2
C-A					195	292
A-B					23	34
A-C					229	343

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	451	0.171	76	0.0	0.2	9.592	A
C-AB	1	0.25	740	0.001	0.99	0.0	0.0	4.871	A
C-A	160	40			160				
A-B	19	5			19				
A-C	188	47			188				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	438	0.210	92	0.2	0.3	10.401	B
C-AB	1	0.31	750	0.002	1	0.0	0.0	4.807	A
C-A	191	48			191				
A-B	22	6			22				
A-C	224	56			224				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	419	0.269	112	0.3	0.4	11.710	B
C-AB	2	0.41	764	0.002	2	0.0	0.0	4.719	A
C-A	233	58			233				
A-B	27	7			27				
A-C	275	69			275				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	419	0.269	113	0.4	0.4	11.740	B
C-AB	2	0.41	764	0.002	2	0.0	0.0	4.721	A
C-A	233	58			233				
A-B	27	7			27				
A-C	275	69			275				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	438	0.210	92	0.4	0.3	10.441	B
C-AB	1	0.31	750	0.002	1	0.0	0.0	4.811	A
C-A	191	48			191				
A-B	22	6			22				
A-C	224	56			224				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	451	0.171	77	0.3	0.2	9.644	A
C-AB	1	0.25	740	0.001	1	0.0	0.0	4.875	A
C-A	160	40			160				
A-B	19	5			19				
A-C	188	47			188				

2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	253	100.000
B		ONE HOUR	✓	64	100.000
C		ONE HOUR	✓	236	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	62	190
	B	49	0	16
	C	228	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	4
	B	3	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	10.32	0.2	B	59	89
C-AB	0.02	4.85	0.0	A	11	16
C-A					206	309
A-B					57	86
A-C					175	262

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	448	0.108	48	0.0	0.1	8.980	A
C-AB	8	2	751	0.011	8	0.0	0.0	4.846	A
C-A	170	42			170				
A-B	47	12			47				
A-C	143	36			143				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	436	0.133	58	0.1	0.2	9.504	A
C-AB	10	3	763	0.013	10	0.0	0.0	4.780	A
C-A	202	51			202				
A-B	56	14			56				
A-C	171	43			171				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	420	0.169	71	0.2	0.2	10.309	B
C-AB	14	3	780	0.017	14	0.0	0.0	4.693	A
C-A	247	62			247				
A-B	69	17			69				
A-C	209	52			209				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	420	0.169	71	0.2	0.2	10.318	B
C-AB	14	3	780	0.017	14	0.0	0.0	4.697	A
C-A	247	62			247				
A-B	69	17			69				
A-C	209	52			209				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	436	0.133	58	0.2	0.2	9.520	A
C-AB	10	3	763	0.013	10	0.0	0.0	4.788	A
C-A	202	51			202				
A-B	56	14			56				
A-C	171	43			171				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	448	0.108	49	0.2	0.1	9.009	A
C-AB	8	2	751	0.011	8	0.0	0.0	4.850	A
C-A	170	42			170				
A-B	47	12			47				
A-C	143	36			143				

2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	288	100.000
B		ONE HOUR	✓	102	100.000
C		ONE HOUR	✓	220	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	25	263
	B	80	0	22
	C	219	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	6	4
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	11.92	0.4	B	94	141
C-AB	0.00	4.87	0.0	A	1	2
C-A					200	300
A-B					23	34
A-C					242	363

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	448	0.172	76	0.0	0.2	9.670	A
C-AB	1	0.25	740	0.001	1	0.0	0.0	4.869	A
C-A	164	41			164				
A-B	19	5			19				
A-C	198	50			198				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	434	0.212	92	0.2	0.3	10.515	B
C-AB	1	0.32	750	0.002	1	0.0	0.0	4.804	A
C-A	196	49			196				
A-B	22	6			22				
A-C	237	59			237				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	415	0.272	112	0.3	0.4	11.885	B
C-AB	2	0.42	765	0.002	2	0.0	0.0	4.715	A
C-A	240	60			240				
A-B	27	7			27				
A-C	290	73			290				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	415	0.272	113	0.4	0.4	11.918	B
C-AB	2	0.42	765	0.002	2	0.0	0.0	4.719	A
C-A	240	60			240				
A-B	27	7			27				
A-C	290	73			290				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	434	0.212	92	0.4	0.3	10.554	B
C-AB	1	0.32	750	0.002	1	0.0	0.0	4.809	A
C-A	196	49			196				
A-B	22	6			22				
A-C	237	59			237				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	448	0.172	77	0.3	0.2	9.725	A
C-AB	1	0.25	740	0.001	1	0.0	0.0	4.871	A
C-A	164	41			164				
A-B	19	5			19				
A-C	198	50			198				

2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	259	100.000
B		ONE HOUR	✓	64	100.000
C		ONE HOUR	✓	248	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	62	196
	B	49	0	16
	C	240	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	4
	B	3	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	10.42	0.2	B	59	89
C-AB	0.02	4.82	0.0	A	11	16
C-A					217	325
A-B					57	86
A-C					180	270

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	446	0.109	48	0.0	0.1	9.029	A
C-AB	8	2	755	0.011	8	0.0	0.0	4.817	A
C-A	179	45			179				
A-B	47	12			47				
A-C	148	37			148				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	434	0.134	58	0.1	0.2	9.571	A
C-AB	10	3	768	0.014	10	0.0	0.0	4.746	A
C-A	213	53			213				
A-B	56	14			56				
A-C	176	44			176				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	417	0.170	71	0.2	0.2	10.403	B
C-AB	14	3	787	0.018	14	0.0	0.0	4.653	A
C-A	260	65			260				
A-B	69	17			69				
A-C	216	54			216				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	417	0.170	71	0.2	0.2	10.415	B
C-AB	14	3	787	0.018	14	0.0	0.0	4.658	A
C-A	260	65			260				
A-B	69	17			69				
A-C	216	54			216				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	434	0.134	58	0.2	0.2	9.587	A
C-AB	10	3	768	0.014	10	0.0	0.0	4.756	A
C-A	213	53			213				
A-B	56	14			56				
A-C	176	44			176				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	446	0.109	49	0.2	0.1	9.057	A
C-AB	8	2	755	0.011	8	0.0	0.0	4.821	A
C-A	179	45			179				
A-B	47	12			47				
A-C	148	37			148				

2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	281	100.000
B		ONE HOUR	✓	105	100.000
C		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	26	255
	B	83	0	23
	C	216	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	4
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.28	11.94	0.4	B	96	145
C-AB	0.00	4.87	0.0	A	1	2
C-A					198	297
A-B					24	36
A-C					234	351

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	449	0.176	78	0.0	0.2	9.679	A
C-AB	1	0.26	741	0.001	1	0.0	0.0	4.866	A
C-A	163	41			163				
A-B	19	5			19				
A-C	192	48			192				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	436	0.217	94	0.2	0.3	10.528	B
C-AB	1	0.33	751	0.002	1	0.0	0.0	4.802	A
C-A	194	49			194				
A-B	23	6			23				
A-C	229	57			229				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	417	0.277	115	0.3	0.4	11.907	B
C-AB	2	0.43	765	0.002	2	0.0	0.0	4.712	A
C-A	238	59			238				
A-B	28	7			28				
A-C	281	70			281				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	417	0.277	116	0.4	0.4	11.940	B
C-AB	2	0.43	765	0.002	2	0.0	0.0	4.715	A
C-A	238	59			238				
A-B	28	7			28				
A-C	281	70			281				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	436	0.217	95	0.4	0.3	10.569	B
C-AB	1	0.33	751	0.002	1	0.0	0.0	4.808	A
C-A	194	49			194				
A-B	23	6			23				
A-C	229	57			229				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	449	0.176	79	0.3	0.2	9.736	A
C-AB	1	0.26	741	0.001	1	0.0	0.0	4.869	A
C-A	163	41			163				
A-B	19	5			19				
A-C	192	48			192				

2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	259	100.000
B		ONE HOUR	✓	67	100.000
C		ONE HOUR	✓	242	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	64	195
	B	50	0	16
	C	233	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	4
	B	3	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	10.45	0.2	B	61	92
C-AB	0.02	4.84	0.0	A	11	17
C-A					211	316
A-B					59	88
A-C					179	268

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	447	0.112	50	0.0	0.1	9.050	A
C-AB	8	2	752	0.011	8	0.0	0.0	4.840	A
C-A	174	43			174				
A-B	48	12			48				
A-C	147	37			147				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	435	0.138	60	0.1	0.2	9.598	A
C-AB	11	3	764	0.014	11	0.0	0.0	4.774	A
C-A	207	52			207				
A-B	58	14			58				
A-C	175	44			175				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	418	0.176	73	0.2	0.2	10.442	B
C-AB	14	4	782	0.018	14	0.0	0.0	4.685	A
C-A	252	63			252				
A-B	71	18			71				
A-C	214	54			214				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	418	0.176	73	0.2	0.2	10.454	B
C-AB	14	4	782	0.018	14	0.0	0.0	4.688	A
C-A	252	63			252				
A-B	71	18			71				
A-C	214	54			214				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	435	0.138	60	0.2	0.2	9.614	A
C-AB	11	3	764	0.014	11	0.0	0.0	4.783	A
C-A	207	52			207				
A-B	58	14			58				
A-C	175	44			175				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	447	0.112	50	0.2	0.1	9.079	A
C-AB	8	2	752	0.011	8	0.0	0.0	4.844	A
C-A	174	43			174				
A-B	48	12			48				
A-C	147	37			147				

2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	295	100.000
B		ONE HOUR	✓	105	100.000
C		ONE HOUR	✓	224	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	26	269
	B	83	0	23
	C	222	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	6	4
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.28	12.12	0.4	B	96	145
C-AB	0.00	4.87	0.0	A	1	2
C-A					204	306
A-B					24	36
A-C					247	370

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	446	0.177	78	0.0	0.2	9.759	A
C-AB	1	0.26	741	0.001	1	0.0	0.0	4.865	A
C-A	167	42			167				
A-B	19	5			19				
A-C	203	51			203				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	432	0.219	94	0.2	0.3	10.644	B
C-AB	1	0.33	751	0.002	1	0.0	0.0	4.799	A
C-A	200	50			200				
A-B	23	6			23				
A-C	242	60			242				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	413	0.281	115	0.3	0.4	12.089	B
C-AB	2	0.44	766	0.002	2	0.0	0.0	4.709	A
C-A	244	61			244				
A-B	28	7			28				
A-C	296	74			296				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	413	0.281	116	0.4	0.4	12.124	B
C-AB	2	0.44	766	0.002	2	0.0	0.0	4.713	A
C-A	244	61			244				
A-B	28	7			28				
A-C	296	74			296				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	432	0.219	95	0.4	0.3	10.687	B
C-AB	1	0.33	751	0.002	1	0.0	0.0	4.806	A
C-A	200	50			200				
A-B	23	6			23				
A-C	242	60			242				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	446	0.177	79	0.3	0.2	9.819	A
C-AB	1	0.26	741	0.001	1	0.0	0.0	4.869	A
C-A	167	42			167				
A-B	19	5			19				
A-C	203	51			203				

2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D18 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	265	100.000
B		ONE HOUR	✓	67	100.000
C		ONE HOUR	✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	64	201
	B	50	0	16
	C	245	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	6	4
	B	3	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	10.55	0.2	B	61	92
C-AB	0.02	4.82	0.0	A	11	17
C-A					222	332
A-B					59	88
A-C					184	276

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	445	0.113	50	0.0	0.1	9.100	A
C-AB	9	2	757	0.011	9	0.0	0.0	4.811	A
C-A	182	46			182				
A-B	48	12			48				
A-C	151	38			151				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	432	0.139	60	0.1	0.2	9.666	A
C-AB	11	3	770	0.014	11	0.0	0.0	4.739	A
C-A	217	54			217				
A-B	58	14			58				
A-C	180	45			180				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	414	0.177	73	0.2	0.2	10.542	B
C-AB	14	4	789	0.018	14	0.0	0.0	4.644	A
C-A	265	66			265				
A-B	71	18			71				
A-C	221	55			221				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	414	0.177	73	0.2	0.2	10.554	B
C-AB	14	4	789	0.018	14	0.0	0.0	4.648	A
C-A	265	66			265				
A-B	71	18			71				
A-C	221	55			221				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	432	0.139	60	0.2	0.2	9.685	A
C-AB	11	3	770	0.014	11	0.0	0.0	4.747	A
C-A	217	54			217				
A-B	58	14			58				
A-C	180	45			180				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	445	0.113	50	0.2	0.1	9.130	A
C-AB	9	2	757	0.011	9	0.0	0.0	4.815	A
C-A	182	46			182				
A-B	48	12			48				
A-C	151	38			151				

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: M54 A41.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\7 M54 A41

Report generation date: 15/11/2024 15:09:19

-
- »2024 Base, AM
 - »2024 Base, PM
 - »2029 + Comm Dev, AM
 - »2029 + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev, AM
 - »2029 + Prop Dev + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev + Sens, AM
 - »2029 + Prop Dev + Comm Dev + Sens, PM
 - »2034 + Comm Dev, AM
 - »2034 + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev, AM
 - »2034 + Prop Dev + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev + Sens, AM
 - »2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
Arm 1	0.5	3.17	0.32	A	0.7	3.35	0.42	A
Arm 2	0.7	2.69	0.41	A	1.0	3.42	0.51	A
Arm 3	0.4	2.77	0.31	A	0.7	3.97	0.43	A
Arm 4	0.8	2.86	0.43	A	0.4	2.33	0.29	A
2029 + Comm Dev								
Arm 1	0.5	3.38	0.34	A	0.9	3.76	0.47	A
Arm 2	0.9	2.95	0.46	A	1.2	3.79	0.55	A
Arm 3	0.5	2.97	0.33	A	0.9	4.50	0.48	A
Arm 4	0.9	3.13	0.46	A	0.4	2.49	0.31	A
2029 + Prop Dev + Comm Dev								
Arm 1	0.6	3.48	0.36	A	1.0	3.99	0.49	A
Arm 2	1.0	3.13	0.49	A	1.3	3.92	0.57	A
Arm 3	0.5	3.09	0.35	A	1.0	4.76	0.50	A
Arm 4	0.9	3.29	0.48	A	0.5	2.58	0.32	A
2029 + Prop Dev + Comm Dev + Sens								
Arm 1	0.6	3.50	0.36	A	1.0	4.04	0.50	A
Arm 2	1.0	3.17	0.50	A	1.3	3.94	0.57	A
Arm 3	0.5	3.11	0.35	A	1.0	4.81	0.51	A
Arm 4	0.9	3.32	0.48	A	0.5	2.59	0.32	A
2034 + Comm Dev								
Arm 1	0.6	3.56	0.36	A	1.0	3.99	0.49	A
Arm 2	0.9	3.09	0.48	A	1.4	4.05	0.58	A
Arm 3	0.5	3.09	0.35	A	1.0	4.84	0.50	A
Arm 4	0.9	3.31	0.49	A	0.5	2.58	0.32	A
2034 + Prop Dev + Comm Dev								
Arm 1	0.6	3.67	0.38	A	1.1	4.26	0.52	A
Arm 2	1.0	3.28	0.51	A	1.4	4.20	0.59	A
Arm 3	0.6	3.21	0.36	A	1.1	5.15	0.53	A
Arm 4	1.0	3.49	0.50	A	0.5	2.67	0.33	A
2034 + Prop Dev + Comm Dev + Sens								
Arm 1	0.6	3.68	0.38	A	1.1	4.31	0.52	A
Arm 2	1.1	3.32	0.52	A	1.5	4.22	0.59	A
Arm 3	0.6	3.24	0.37	A	1.1	5.20	0.53	A
Arm 4	1.0	3.52	0.50	A	0.5	2.68	0.33	A

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

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

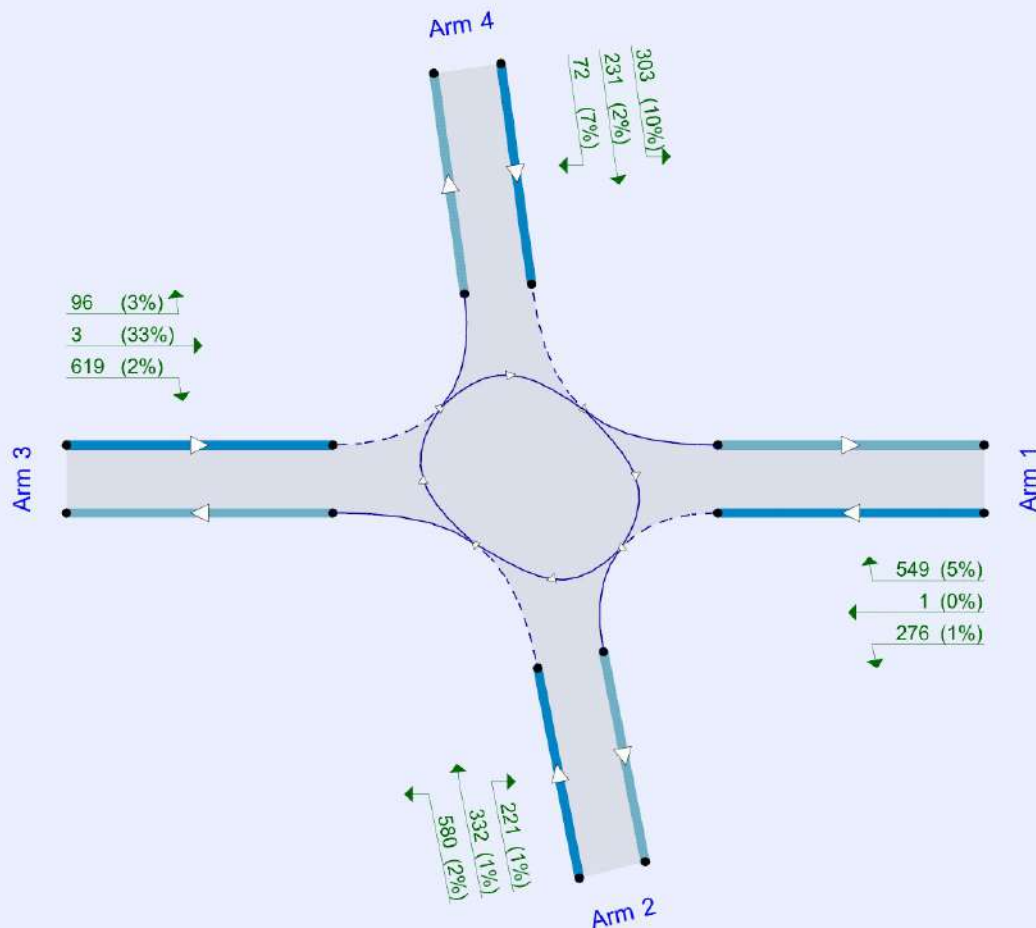
File summary

File Description

Title	South Albrighton
Location	M54 Junction 3
Site number	SH5034-13PD
Date	14/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	CAD-Laptop1\Brad Loxley
Description	

Units

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



Flows show original traffic demand (Veh/hour).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2024 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	Proposed Development	AM	ONE HOUR	07:15	08:45	15			
D4	Proposed Development	PM	ONE HOUR	16:15	17:45	15			
D5	Committed Development	AM	ONE HOUR	07:15	08:45	15			
D6	Committed Development	PM	ONE HOUR	16:15	17:45	15			
D7	Sensitivity	AM	ONE HOUR	07:15	08:45	15			
D8	Sensitivity	PM	ONE HOUR	16:15	17:45	15			
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G2) + D5
D10	2029 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G2) + D6
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D12 + D8
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D5
D16	2034 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G4) + D6
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D18 + D8

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1			1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	M54 (E)	
2	A41 (S)	
3	M54 (W)	
4	A41 (N)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	8.20	8.20	0.0	38.0	190.0	36.0	
2	5.80	7.20	76.0	69.0	190.0	23.0	
3	7.90	7.90	0.0	55.0	190.0	40.0	
4	5.70	7.90	53.0	298.0	190.0	4.0	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.968	2814
2	1.005	2856
3	0.897	2636
4	1.072	3154

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	479	100.000
2		ONE HOUR	✓	856	100.000
3		ONE HOUR	✓	522	100.000
4		ONE HOUR	✓	868	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	196	0	283
	2	169	0	501	186
	3	0	472	0	50
	4	453	302	113	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.32	3.17	0.5	1.8	A	440	659
2	0.41	2.69	0.7	2.7	A	785	1178
3	0.31	2.77	0.4	1.7	A	479	718
4	0.43	2.86	0.8	2.7	A	796	1195

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	90	666	1950	0.185	360	467	0.0	0.2	2.263	A
2	644	161	297	2434	0.265	643	729	0.0	0.4	2.008	A
3	393	98	479	2079	0.189	392	461	0.0	0.2	2.133	A
4	653	163	481	2446	0.267	652	390	0.0	0.4	2.005	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	108	797	1829	0.235	430	559	0.2	0.3	2.573	A
2	770	192	356	2370	0.325	769	871	0.4	0.5	2.249	A
3	469	117	573	1992	0.236	469	552	0.2	0.3	2.363	A
4	780	195	576	2349	0.332	780	466	0.4	0.5	2.294	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	527	132	976	1664	0.317	527	684	0.3	0.5	3.163	A
2	942	236	436	2282	0.413	942	1067	0.5	0.7	2.684	A
3	575	144	702	1873	0.307	574	675	0.3	0.4	2.771	A
4	956	239	705	2216	0.431	955	571	0.5	0.8	2.850	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	527	132	977	1663	0.317	527	685	0.5	0.5	3.168	A
2	942	236	436	2282	0.413	942	1068	0.7	0.7	2.687	A
3	575	144	702	1872	0.307	575	676	0.4	0.4	2.774	A
4	956	239	706	2216	0.431	956	571	0.8	0.8	2.856	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	431	108	798	1828	0.236	431	560	0.5	0.3	2.578	A
2	770	192	356	2369	0.325	770	873	0.7	0.5	2.252	A
3	469	117	574	1991	0.236	470	553	0.4	0.3	2.369	A
4	780	195	577	2348	0.332	781	467	0.8	0.5	2.299	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	361	90	668	1948	0.185	361	469	0.3	0.2	2.268	A
2	644	161	298	2433	0.265	645	731	0.5	0.4	2.013	A
3	393	98	481	2078	0.189	393	463	0.3	0.2	2.137	A
4	653	163	483	2444	0.267	654	391	0.5	0.4	2.012	A

Queue Variation Results for each time segment

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
3	0.31	0.00	0.00	0.31	0.31			N/A	N/A
4	0.50	0.05	0.46	1.28	1.39			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.03	0.25	0.46	0.48			N/A	N/A
2	0.70	0.03	0.25	0.70	0.70			N/A	N/A
3	0.44	0.03	0.25	0.45	0.48			N/A	N/A
4	0.75	0.03	0.25	0.75	0.75			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.03	0.32	1.42	1.81			N/A	N/A
2	0.70	0.03	0.28	0.85	2.74			N/A	N/A
3	0.44	0.03	0.33	1.38	1.66			N/A	N/A
4	0.76	0.03	0.28	0.76	2.68			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
3	0.31	0.00	0.00	0.31	0.31			N/A	N/A
4	0.50	0.00	0.00	0.50	0.50			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4	0.37	0.00	0.00	0.37	0.37			N/A	N/A

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	717	100.000
2		ONE HOUR	✓	996	100.000
3		ONE HOUR	✓	616	100.000
4		ONE HOUR	✓	564	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	205	1	511
	2	177	0	511	308
	3	3	524	0	89
	4	282	215	67	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.42	3.35	0.7	2.9	A	658	987
2	0.51	3.42	1.0	1.5	A	914	1371
3	0.43	3.97	0.7	3.0	A	565	848
4	0.29	2.33	0.4	1.1	A	518	776

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	540	135	605	2132	0.253	538	347	0.0	0.3	2.257	A
2	750	187	435	2360	0.318	748	709	0.0	0.5	2.231	A
3	464	116	748	1901	0.244	462	435	0.0	0.3	2.500	A
4	425	106	529	2417	0.176	424	682	0.0	0.2	1.805	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	645	161	724	2019	0.319	644	415	0.3	0.5	2.619	A
2	895	224	520	2271	0.394	895	848	0.5	0.6	2.613	A
3	554	138	895	1768	0.313	553	520	0.3	0.5	2.961	A
4	507	127	632	2311	0.219	507	816	0.2	0.3	1.995	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	789	197	886	1864	0.424	788	508	0.5	0.7	3.344	A
2	1097	274	637	2150	0.510	1095	1038	0.6	1.0	3.408	A
3	678	170	1095	1587	0.427	677	637	0.5	0.7	3.951	A
4	621	155	774	2166	0.287	620	998	0.3	0.4	2.330	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	789	197	887	1863	0.424	789	509	0.7	0.7	3.353	A
2	1097	274	637	2149	0.510	1097	1039	1.0	1.0	3.419	A
3	678	170	1097	1586	0.428	678	637	0.7	0.7	3.966	A
4	621	155	775	2164	0.287	621	1000	0.4	0.4	2.332	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	645	161	726	2017	0.320	646	416	0.7	0.5	2.626	A
2	895	224	521	2270	0.394	897	850	1.0	0.7	2.626	A
3	554	138	897	1766	0.314	555	521	0.7	0.5	2.976	A
4	507	127	634	2309	0.220	508	818	0.4	0.3	2.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	540	135	607	2130	0.253	540	348	0.5	0.3	2.266	A
2	750	187	436	2359	0.318	751	711	0.7	0.5	2.241	A
3	464	116	751	1898	0.244	464	436	0.5	0.3	2.512	A
4	425	106	531	2415	0.176	425	684	0.3	0.2	1.811	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4	0.21	0.00	0.00	0.21	0.21			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.65	0.07	0.74	1.36	1.44			N/A	N/A
3	0.45	0.00	0.00	0.45	0.45			N/A	N/A
4	0.28	0.00	0.00	0.28	0.28			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.73	0.03	0.25	0.73	0.73			N/A	N/A
2	1.03	0.03	0.25	1.03	1.03			N/A	N/A
3	0.74	0.03	0.25	0.74	0.74			N/A	N/A
4	0.40	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.73	0.03	0.28	0.93	2.90			N/A	N/A
2	1.04	0.03	0.27	1.04	1.50			N/A	N/A
3	0.74	0.03	0.28	1.04	3.04			N/A	N/A
4	0.40	0.03	0.34	1.11	1.11			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3	0.46	0.00	0.00	0.46	0.46			N/A	N/A
4	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3	0.32	0.00	0.00	0.32	0.32			N/A	N/A
4	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2029 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G2) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	506	100.000
2		ONE HOUR	✓	952	100.000
3		ONE HOUR	✓	551	100.000
4		ONE HOUR	✓	902	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	212	0	294
	2	207	0	552	193
	3	0	499	0	52
	4	471	314	117	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.34	3.38	0.5	2.3	A	464	696
2	0.46	2.95	0.9	1.8	A	874	1310
3	0.33	2.97	0.5	2.1	A	505	758
4	0.46	3.13	0.9	2.2	A	828	1242

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	381	95	699	1921	0.198	380	509	0.0	0.2	2.334	A
2	717	179	309	2425	0.296	715	769	0.0	0.4	2.104	A
3	415	104	521	2041	0.203	414	503	0.0	0.3	2.210	A
4	679	170	530	2396	0.284	678	405	0.0	0.4	2.093	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	455	114	836	1795	0.253	455	609	0.2	0.3	2.686	A
2	856	214	370	2358	0.363	855	920	0.4	0.6	2.394	A
3	495	124	624	1947	0.254	495	601	0.3	0.3	2.479	A
4	811	203	634	2290	0.354	811	485	0.4	0.5	2.432	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	139	1023	1622	0.344	556	745	0.3	0.5	3.377	A
2	1048	262	453	2267	0.462	1047	1127	0.6	0.9	2.948	A
3	606	152	764	1817	0.334	606	736	0.3	0.5	2.969	A
4	994	248	776	2144	0.463	992	593	0.5	0.9	3.124	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	557	139	1024	1621	0.344	557	746	0.5	0.5	3.383	A
2	1048	262	453	2266	0.463	1048	1128	0.9	0.9	2.954	A
3	606	152	764	1817	0.334	606	737	0.5	0.5	2.974	A
4	994	248	777	2143	0.464	994	594	0.9	0.9	3.131	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	455	114	837	1793	0.254	456	610	0.5	0.3	2.692	A
2	856	214	371	2357	0.363	857	922	0.9	0.6	2.403	A
3	495	124	625	1946	0.254	496	603	0.5	0.3	2.485	A
4	811	203	635	2288	0.355	813	486	0.9	0.6	2.440	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	381	95	701	1919	0.199	381	511	0.3	0.2	2.341	A
2	717	179	310	2424	0.296	717	772	0.6	0.4	2.111	A
3	415	104	523	2040	0.203	415	504	0.3	0.3	2.217	A
4	679	170	532	2395	0.284	680	407	0.6	0.4	2.101	A

Queue Variation Results for each time segment
07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2	0.42	0.00	0.00	0.42	0.42			N/A	N/A
3	0.25	0.00	0.00	0.25	0.25			N/A	N/A
4	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.57	0.07	0.72	1.34	1.42			N/A	N/A
3	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4	0.55	0.06	0.66	1.33	1.42			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.52	0.03	0.25	0.52	0.52			N/A	N/A
2	0.85	0.03	0.25	0.85	0.85			N/A	N/A
3	0.50	0.03	0.25	0.50	0.50			N/A	N/A
4	0.86	0.03	0.25	0.86	0.86			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.52	0.03	0.31	1.48	2.32			N/A	N/A
2	0.86	0.03	0.27	0.86	1.85			N/A	N/A
3	0.50	0.03	0.31	1.45	2.12			N/A	N/A
4	0.86	0.03	0.27	0.86	2.15			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4	0.55	0.55	1.00	1.40	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2	0.42	0.00	0.00	0.42	0.42			N/A	N/A
3	0.26	0.00	0.00	0.26	0.26			N/A	N/A
4	0.40	0.00	0.00	0.40	0.40			N/A	N/A

2029 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D10	2029 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G2) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	769	100.000
2		ONE HOUR	✓	1066	100.000
3		ONE HOUR	✓	664	100.000
4		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	237	1	531
	2	199	0	546	320
	3	3	569	0	93
	4	293	224	70	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.47	3.76	0.9	2.4	A	706	1059
2	0.55	3.79	1.2	1.5	A	978	1467
3	0.48	4.50	0.9	2.7	A	610	915
4	0.31	2.49	0.4	1.6	A	538	807

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	579	145	647	2094	0.277	578	372	0.0	0.4	2.372	A
2	802	201	452	2343	0.342	800	773	0.0	0.5	2.330	A
3	500	125	789	1864	0.268	499	463	0.0	0.4	2.634	A
4	441	110	579	2366	0.187	441	709	0.0	0.2	1.869	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	692	173	774	1973	0.351	691	445	0.4	0.5	2.807	A
2	958	239	541	2251	0.426	957	925	0.5	0.7	2.782	A
3	597	149	944	1724	0.346	597	554	0.4	0.5	3.190	A
4	527	132	692	2249	0.234	527	848	0.2	0.3	2.090	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	847	212	948	1807	0.469	846	545	0.5	0.9	3.741	A
2	1173	293	662	2124	0.552	1171	1132	0.7	1.2	3.768	A
3	732	183	1155	1534	0.477	730	678	0.5	0.9	4.472	A
4	646	161	847	2091	0.309	645	1038	0.3	0.4	2.490	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	847	212	949	1806	0.469	847	545	0.9	0.9	3.755	A
2	1173	293	663	2123	0.553	1173	1133	1.2	1.2	3.787	A
3	732	183	1157	1532	0.478	732	679	0.9	0.9	4.497	A
4	646	161	849	2089	0.309	646	1039	0.4	0.4	2.493	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	692	173	776	1970	0.351	693	446	0.9	0.5	2.823	A
2	958	239	542	2249	0.426	960	927	1.2	0.7	2.796	A
3	597	149	946	1722	0.347	599	556	0.9	0.5	3.211	A
4	527	132	695	2247	0.235	528	850	0.4	0.3	2.094	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	579	145	650	2091	0.277	580	373	0.5	0.4	2.384	A
2	802	201	454	2341	0.343	803	776	0.7	0.5	2.341	A
3	500	125	792	1862	0.269	501	465	0.5	0.4	2.646	A
4	441	110	581	2363	0.187	442	712	0.3	0.2	1.872	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3	0.37	0.00	0.00	0.37	0.37			N/A	N/A
4	0.23	0.00	0.00	0.23	0.23			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.54	0.06	0.64	1.33	1.41			N/A	N/A
2	0.74	0.07	0.74	1.33	1.33			N/A	N/A
3	0.53	0.06	0.60	1.32	1.41			N/A	N/A
4	0.31	0.00	0.00	0.31	0.31			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.88	0.03	0.25	0.88	0.88			N/A	N/A
2	1.22	0.03	0.26	1.22	1.22			N/A	N/A
3	0.90	0.03	0.25	0.90	0.90			N/A	N/A
4	0.45	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.88	0.03	0.28	0.88	2.43			N/A	N/A
2	1.23	0.03	0.27	1.23	1.23			N/A	N/A
3	0.91	0.03	0.28	0.91	2.73			N/A	N/A
4	0.45	0.03	0.33	1.39	1.64			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2	0.75	0.53	0.99	1.40	1.45			N/A	N/A
3	0.53	0.53	1.00	1.40	1.45			N/A	N/A
4	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2	0.52	0.06	0.58	1.32	1.41			N/A	N/A
3	0.37	0.00	0.00	0.37	0.37			N/A	N/A
4	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	519	100.000
2		ONE HOUR	✓	1018	100.000
3		ONE HOUR	✓	564	100.000
4		ONE HOUR	✓	907	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	225	0	294
	2	240	0	585	193
	3	0	512	0	52
	4	471	319	117	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	3.48	0.6	2.6	A	476	714
2	0.49	3.13	1.0	1.4	A	934	1401
3	0.35	3.09	0.5	2.4	A	517	776
4	0.48	3.29	0.9	1.9	A	833	1249

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	391	98	712	1911	0.204	390	534	0.0	0.3	2.365	A
2	766	192	309	2428	0.316	765	793	0.0	0.5	2.162	A
3	424	106	546	2020	0.210	423	528	0.0	0.3	2.253	A
4	683	171	564	2362	0.289	682	405	0.0	0.4	2.141	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	117	852	1782	0.262	466	638	0.3	0.4	2.736	A
2	915	229	370	2361	0.388	914	948	0.5	0.6	2.486	A
3	507	127	653	1921	0.264	506	631	0.3	0.4	2.544	A
4	816	204	675	2248	0.363	815	485	0.4	0.6	2.511	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	571	143	1043	1606	0.356	571	781	0.4	0.5	3.477	A
2	1121	280	453	2270	0.494	1119	1161	0.6	1.0	3.123	A
3	621	155	800	1786	0.347	620	772	0.4	0.5	3.085	A
4	999	250	826	2093	0.477	998	593	0.6	0.9	3.284	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	571	143	1044	1604	0.356	571	782	0.5	0.6	3.484	A
2	1121	280	453	2270	0.494	1121	1162	1.0	1.0	3.133	A
3	621	155	801	1785	0.348	621	773	0.5	0.5	3.090	A
4	999	250	827	2092	0.478	999	594	0.9	0.9	3.294	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	467	117	854	1780	0.262	467	640	0.6	0.4	2.745	A
2	915	229	371	2360	0.388	916	950	1.0	0.6	2.494	A
3	507	127	655	1920	0.264	507	632	0.5	0.4	2.549	A
4	816	204	676	2246	0.363	817	486	0.9	0.6	2.520	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	391	98	715	1909	0.205	391	536	0.4	0.3	2.374	A
2	766	192	310	2427	0.316	767	795	0.6	0.5	2.170	A
3	424	106	548	2019	0.210	425	529	0.4	0.3	2.260	A
4	683	171	566	2360	0.290	684	407	0.6	0.4	2.148	A

Queue Variation Results for each time segment
07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.63	0.08	0.75	1.35	1.43			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4	0.57	0.07	0.69	1.34	1.42			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.55	0.03	0.25	0.55	0.55			N/A	N/A
2	0.97	0.03	0.25	0.97	0.97			N/A	N/A
3	0.53	0.03	0.25	0.53	0.53			N/A	N/A
4	0.91	0.03	0.25	0.91	0.91			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.55	0.03	0.31	1.48	2.56			N/A	N/A
2	0.97	0.03	0.27	0.97	1.10			N/A	N/A
3	0.53	0.03	0.31	1.46	2.43			N/A	N/A
4	0.91	0.03	0.27	0.91	1.93			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4	0.57	0.55	1.00	1.40	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4	0.41	0.00	0.00	0.41	0.41			N/A	N/A

2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	796	100.000
2		ONE HOUR	✓	1095	100.000
3		ONE HOUR	✓	691	100.000
4		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	264	1	531
	2	213	0	560	321
	3	3	596	0	93
	4	293	224	70	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.49	3.99	1.0	2.0	A	731	1096
2	0.57	3.92	1.3	1.6	A	1004	1507
3	0.50	4.76	1.0	2.4	A	634	952
4	0.32	2.58	0.5	1.8	A	538	807

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	600	150	667	2076	0.289	598	383	0.0	0.4	2.433	A
2	824	206	452	2343	0.352	822	813	0.0	0.5	2.364	A
3	521	130	800	1854	0.281	519	474	0.0	0.4	2.694	A
4	441	110	610	2334	0.189	441	710	0.0	0.2	1.900	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	716	179	798	1951	0.367	715	458	0.4	0.6	2.911	A
2	984	246	541	2251	0.437	983	973	0.5	0.8	2.839	A
3	622	155	957	1713	0.363	621	567	0.4	0.6	3.295	A
4	527	132	729	2212	0.238	527	849	0.2	0.3	2.136	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	877	219	977	1780	0.493	875	560	0.6	1.0	3.971	A
2	1205	301	662	2125	0.567	1203	1191	0.8	1.3	3.898	A
3	761	190	1171	1519	0.501	760	694	0.6	1.0	4.728	A
4	646	161	892	2045	0.316	645	1039	0.3	0.5	2.570	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	877	219	979	1779	0.493	877	561	1.0	1.0	3.991	A
2	1205	301	663	2123	0.568	1205	1193	1.3	1.3	3.920	A
3	761	190	1173	1518	0.502	761	695	1.0	1.0	4.760	A
4	646	161	894	2043	0.316	646	1040	0.5	0.5	2.575	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	716	179	801	1949	0.367	718	459	1.0	0.6	2.929	A
2	984	246	542	2249	0.438	986	976	1.3	0.8	2.854	A
3	622	155	960	1710	0.364	623	568	1.0	0.6	3.316	A
4	527	132	732	2209	0.239	528	851	0.5	0.3	2.143	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	600	150	670	2074	0.289	600	384	0.6	0.4	2.443	A
2	824	206	454	2341	0.352	825	817	0.8	0.5	2.377	A
3	521	130	803	1852	0.281	521	476	0.6	0.4	2.706	A
4	441	110	612	2332	0.189	442	712	0.3	0.2	1.904	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.40	0.00	0.00	0.40	0.40			N/A	N/A
2	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	0.23	0.00	0.00	0.23	0.23			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.07	0.70	1.34	1.42			N/A	N/A
2	0.77	0.07	0.74	1.04	1.59			N/A	N/A
3	0.57	0.06	0.68	1.34	1.42			N/A	N/A
4	0.31	0.00	0.00	0.31	0.31			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.96	0.03	0.25	0.96	0.96			N/A	N/A
2	1.30	0.03	0.26	1.30	1.30			N/A	N/A
3	0.99	0.03	0.26	0.99	0.99			N/A	N/A
4	0.46	0.03	0.25	0.46	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.97	0.03	0.27	0.97	2.01			N/A	N/A
2	1.31	0.03	0.26	1.31	1.31			N/A	N/A
3	1.00	0.03	0.27	1.00	2.45			N/A	N/A
4	0.46	0.03	0.33	1.42	1.76			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2	0.78	0.52	0.99	1.40	1.45			N/A	N/A
3	0.57	0.55	1.00	1.40	1.45			N/A	N/A
4	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2	0.55	0.06	0.64	1.33	1.41			N/A	N/A
3	0.39	0.03	0.27	0.49	0.81			N/A	N/A
4	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	521	100.000
2		ONE HOUR	✓	1030	100.000
3		ONE HOUR	✓	566	100.000
4		ONE HOUR	✓	907	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	227	0	294
	2	246	0	591	193
	3	0	514	0	52
	4	471	319	117	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	3.50	0.6	2.6	A	478	717
2	0.50	3.17	1.0	1.5	A	945	1418
3	0.35	3.11	0.5	2.5	A	519	779
4	0.48	3.32	0.9	1.9	A	833	1249

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	392	98	714	1910	0.205	391	538	0.0	0.3	2.369	A
2	775	194	309	2429	0.319	774	796	0.0	0.5	2.173	A
3	426	106	551	2017	0.211	425	532	0.0	0.3	2.260	A
4	683	171	570	2355	0.290	682	405	0.0	0.4	2.149	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	468	117	854	1781	0.263	468	644	0.3	0.4	2.742	A
2	926	231	370	2362	0.392	925	952	0.5	0.6	2.504	A
3	509	127	659	1917	0.265	508	636	0.3	0.4	2.555	A
4	816	204	682	2241	0.364	815	485	0.4	0.6	2.524	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	574	143	1045	1604	0.358	573	788	0.4	0.6	3.490	A
2	1134	284	453	2271	0.499	1133	1165	0.6	1.0	3.158	A
3	623	156	806	1781	0.350	622	779	0.4	0.5	3.106	A
4	999	250	835	2084	0.480	998	593	0.6	0.9	3.311	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	574	143	1046	1603	0.358	574	789	0.6	0.6	3.497	A
2	1134	284	453	2270	0.500	1134	1167	1.0	1.0	3.168	A
3	623	156	807	1780	0.350	623	780	0.5	0.5	3.111	A
4	999	250	836	2083	0.480	999	594	0.9	0.9	3.321	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	468	117	856	1779	0.263	469	645	0.6	0.4	2.751	A
2	926	231	371	2361	0.392	927	954	1.0	0.6	2.514	A
3	509	127	660	1916	0.266	509	638	0.5	0.4	2.562	A
4	816	204	684	2239	0.364	817	486	0.9	0.6	2.535	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	392	98	716	1908	0.206	393	540	0.4	0.3	2.378	A
2	775	194	310	2428	0.319	776	798	0.6	0.5	2.180	A
3	426	106	553	2015	0.211	426	534	0.4	0.3	2.267	A
4	683	171	572	2353	0.290	684	407	0.6	0.4	2.156	A

Queue Variation Results for each time segment
07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.64	0.08	0.75	1.36	1.43			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4	0.57	0.07	0.70	1.34	1.42			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.55	0.03	0.25	0.55	0.55			N/A	N/A
2	0.99	0.03	0.25	0.99	0.99			N/A	N/A
3	0.54	0.03	0.25	0.54	0.54			N/A	N/A
4	0.91	0.03	0.25	0.91	0.91			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.56	0.03	0.31	1.48	2.58			N/A	N/A
2	0.99	0.03	0.27	0.99	1.48			N/A	N/A
3	0.54	0.03	0.31	1.46	2.47			N/A	N/A
4	0.92	0.03	0.27	0.92	1.91			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4	0.58	0.55	1.00	1.40	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4	0.41	0.00	0.00	0.41	0.41			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D12 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	801	100.000
2		ONE HOUR	✓	1099	100.000
3		ONE HOUR	✓	696	100.000
4		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	269	1	531
	2	215	0	562	321
	3	3	601	0	93
	4	293	224	70	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	4.04	1.0	2.0	A	735	1103
2	0.57	3.94	1.3	1.6	A	1008	1512
3	0.51	4.81	1.0	2.4	A	639	959
4	0.32	2.59	0.5	1.8	A	538	807

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	603	151	671	2073	0.291	602	384	0.0	0.4	2.445	A
2	827	207	452	2343	0.353	825	821	0.0	0.5	2.368	A
3	524	131	802	1853	0.283	523	475	0.0	0.4	2.702	A
4	441	110	615	2329	0.190	441	710	0.0	0.2	1.906	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	721	180	803	1947	0.370	720	459	0.4	0.6	2.931	A
2	988	247	541	2251	0.439	987	982	0.5	0.8	2.847	A
3	626	157	959	1711	0.366	625	569	0.4	0.6	3.314	A
4	527	132	735	2205	0.239	527	849	0.2	0.3	2.144	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	882	221	983	1776	0.497	881	562	0.6	1.0	4.016	A
2	1210	302	662	2125	0.569	1207	1202	0.8	1.3	3.916	A
3	767	192	1173	1517	0.505	765	696	0.6	1.0	4.774	A
4	646	161	900	2037	0.317	645	1039	0.3	0.5	2.584	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	882	221	984	1774	0.497	882	563	1.0	1.0	4.038	A
2	1210	302	663	2123	0.570	1209	1204	1.3	1.3	3.938	A
3	767	192	1175	1516	0.506	767	697	1.0	1.0	4.807	A
4	646	161	902	2035	0.317	646	1040	0.5	0.5	2.590	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	721	180	805	1945	0.370	722	460	1.0	0.6	2.949	A
2	988	247	542	2249	0.439	990	985	1.3	0.8	2.862	A
3	626	157	962	1708	0.366	628	570	1.0	0.6	3.338	A
4	527	132	738	2202	0.239	528	851	0.5	0.3	2.151	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	603	151	674	2071	0.291	604	385	0.6	0.4	2.455	A
2	827	207	454	2341	0.353	828	824	0.8	0.5	2.380	A
3	524	131	805	1850	0.283	525	477	0.6	0.4	2.719	A
4	441	110	617	2326	0.190	442	712	0.3	0.2	1.909	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	0.23	0.00	0.00	0.23	0.23			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.07	0.71	1.34	1.42			N/A	N/A
2	0.78	0.07	0.74	1.08	1.62			N/A	N/A
3	0.57	0.07	0.69	1.34	1.42			N/A	N/A
4	0.31	0.00	0.00	0.31	0.31			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.98	0.03	0.25	0.98	0.98			N/A	N/A
2	1.31	0.03	0.26	1.31	1.31			N/A	N/A
3	1.01	0.03	0.26	1.01	1.01			N/A	N/A
4	0.46	0.03	0.25	0.46	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.99	0.03	0.27	0.99	1.95			N/A	N/A
2	1.32	0.03	0.26	1.32	1.32			N/A	N/A
3	1.02	0.03	0.27	1.02	2.39			N/A	N/A
4	0.46	0.03	0.33	1.42	1.78			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.59	0.55	1.00	1.40	1.45			N/A	N/A
2	0.79	0.52	0.99	1.40	1.45			N/A	N/A
3	0.58	0.55	1.00	1.40	1.45			N/A	N/A
4	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2	0.55	0.06	0.65	1.33	1.42			N/A	N/A
3	0.40	0.03	0.28	0.50	0.96			N/A	N/A
4	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2034 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	523	100.000
2		ONE HOUR	✓	983	100.000
3		ONE HOUR	✓	570	100.000
4		ONE HOUR	✓	934	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	219	0	305
	2	213	0	570	200
	3	0	516	0	54
	4	487	325	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.36	3.56	0.6	2.6	A	480	720
2	0.48	3.09	0.9	1.5	A	902	1353
3	0.35	3.09	0.5	2.5	A	523	784
4	0.49	3.31	0.9	1.7	A	857	1286

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	394	99	723	1899	0.208	393	526	0.0	0.3	2.389	A
2	740	185	320	2413	0.307	738	796	0.0	0.4	2.148	A
3	429	107	539	2025	0.212	428	519	0.0	0.3	2.252	A
4	703	176	547	2378	0.296	701	419	0.0	0.4	2.145	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	471	118	865	1768	0.266	470	629	0.3	0.4	2.773	A
2	884	221	383	2344	0.377	883	952	0.4	0.6	2.463	A
3	512	128	645	1927	0.266	512	621	0.3	0.4	2.543	A
4	840	210	655	2268	0.370	839	502	0.4	0.6	2.517	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	576	144	1058	1589	0.363	575	770	0.4	0.6	3.547	A
2	1082	271	468	2249	0.481	1081	1165	0.6	0.9	3.078	A
3	627	157	789	1794	0.350	627	761	0.4	0.5	3.082	A
4	1028	257	801	2118	0.486	1027	614	0.6	0.9	3.296	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	576	144	1060	1588	0.363	576	771	0.6	0.6	3.557	A
2	1082	271	469	2249	0.481	1082	1167	0.9	0.9	3.085	A
3	627	157	790	1793	0.350	627	762	0.5	0.5	3.087	A
4	1028	257	802	2117	0.486	1028	615	0.9	0.9	3.306	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	471	118	866	1766	0.266	471	631	0.6	0.4	2.781	A
2	884	221	384	2343	0.377	885	954	0.9	0.6	2.471	A
3	512	128	646	1926	0.266	513	623	0.5	0.4	2.550	A
4	840	210	656	2267	0.370	841	503	0.9	0.6	2.526	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	394	99	725	1897	0.208	394	528	0.4	0.3	2.396	A
2	740	185	321	2411	0.307	741	799	0.6	0.4	2.155	A
3	429	107	541	2024	0.212	429	521	0.4	0.3	2.259	A
4	703	176	549	2377	0.296	704	421	0.6	0.4	2.154	A

Queue Variation Results for each time segment
07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4	0.42	0.00	0.00	0.42	0.42			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.60	0.07	0.74	1.35	1.43			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4	0.59	0.07	0.71	1.34	1.42			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.57	0.03	0.25	0.57	0.57			N/A	N/A
2	0.92	0.03	0.25	0.92	0.92			N/A	N/A
3	0.53	0.03	0.25	0.53	0.53			N/A	N/A
4	0.94	0.03	0.25	0.94	0.94			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.57	0.03	0.31	1.47	2.65			N/A	N/A
2	0.92	0.03	0.27	0.92	1.46			N/A	N/A
3	0.54	0.03	0.31	1.46	2.47			N/A	N/A
4	0.94	0.03	0.27	0.94	1.74			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2	0.61	0.55	1.00	1.40	1.45			N/A	N/A
3	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4	0.59	0.55	1.00	1.40	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	0.27	0.00	0.00	0.27	0.27			N/A	N/A
4	0.42	0.00	0.00	0.42	0.42			N/A	N/A

2034 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D16	2034 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G4) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	794	100.000
2		ONE HOUR	✓	1100	100.000
3		ONE HOUR	✓	686	100.000
4		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	244	1	549
	2	205	0	564	331
	3	3	587	0	96
	4	303	231	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.49	3.99	1.0	2.0	A	729	1093
2	0.58	4.05	1.4	1.7	A	1009	1514
3	0.50	4.84	1.0	2.5	A	629	944
4	0.32	2.58	0.5	1.9	A	556	834

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	598	149	668	2074	0.288	596	384	0.0	0.4	2.434	A
2	828	207	467	2327	0.356	826	797	0.0	0.5	2.394	A
3	516	129	814	1841	0.280	515	478	0.0	0.4	2.712	A
4	456	114	597	2347	0.194	455	732	0.0	0.2	1.902	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	714	178	799	1949	0.366	713	459	0.4	0.6	2.912	A
2	989	247	559	2232	0.443	988	954	0.5	0.8	2.893	A
3	616	154	974	1697	0.363	616	572	0.4	0.6	3.328	A
4	545	136	714	2227	0.245	544	876	0.2	0.3	2.139	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	874	219	978	1778	0.492	873	562	0.6	1.0	3.970	A
2	1211	303	684	2102	0.576	1209	1167	0.8	1.3	4.021	A
3	755	189	1192	1500	0.503	753	700	0.6	1.0	4.810	A
4	667	167	874	2064	0.323	666	1072	0.3	0.5	2.574	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	874	219	979	1776	0.492	874	563	1.0	1.0	3.990	A
2	1211	303	685	2101	0.576	1211	1169	1.3	1.4	4.045	A
3	755	189	1194	1498	0.504	755	701	1.0	1.0	4.843	A
4	667	167	875	2062	0.323	667	1074	0.5	0.5	2.580	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	714	178	802	1946	0.367	715	460	1.0	0.6	2.929	A
2	989	247	560	2230	0.443	991	957	1.4	0.8	2.911	A
3	616	154	977	1694	0.364	618	574	1.0	0.6	3.350	A
4	545	136	717	2224	0.245	545	879	0.5	0.3	2.145	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	598	149	671	2071	0.289	599	385	0.6	0.4	2.446	A
2	828	207	469	2326	0.356	829	800	0.8	0.6	2.406	A
3	516	129	818	1838	0.281	517	480	0.6	0.4	2.725	A
4	456	114	599	2345	0.195	456	735	0.3	0.2	1.908	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.40	0.00	0.00	0.40	0.40			N/A	N/A
2	0.55	0.55	1.00	1.40	1.45			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	0.24	0.00	0.00	0.24	0.24			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.07	0.70	1.34	1.42			N/A	N/A
2	0.79	0.06	0.73	1.19	1.69			N/A	N/A
3	0.57	0.06	0.68	1.34	1.42			N/A	N/A
4	0.32	0.00	0.00	0.32	0.32			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.96	0.03	0.25	0.96	0.96			N/A	N/A
2	1.35	0.03	0.26	1.35	1.35			N/A	N/A
3	1.00	0.03	0.26	1.00	1.00			N/A	N/A
4	0.48	0.03	0.25	0.48	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.96	0.03	0.27	0.96	2.04			N/A	N/A
2	1.35	0.03	0.26	1.35	1.35			N/A	N/A
3	1.01	0.03	0.27	1.01	2.48			N/A	N/A
4	0.48	0.03	0.32	1.44	1.88			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.55	1.00	1.40	1.45			N/A	N/A
2	0.80	0.52	0.98	1.40	1.45			N/A	N/A
3	0.58	0.55	1.00	1.40	1.45			N/A	N/A
4	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2	0.56	0.06	0.65	1.33	1.42			N/A	N/A
3	0.39	0.03	0.27	0.49	0.86			N/A	N/A
4	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	536	100.000
2		ONE HOUR	✓	1049	100.000
3		ONE HOUR	✓	583	100.000
4		ONE HOUR	✓	939	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	232	0	305
	2	246	0	603	200
	3	0	529	0	54
	4	487	330	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.67	0.6	2.8	A	492	738
2	0.51	3.28	1.0	1.5	A	963	1444
3	0.36	3.21	0.6	2.7	A	535	802
4	0.50	3.49	1.0	1.5	A	862	1292

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	404	101	736	1889	0.214	403	551	0.0	0.3	2.422	A
2	790	197	320	2416	0.327	788	819	0.0	0.5	2.207	A
3	439	110	564	2004	0.219	438	544	0.0	0.3	2.297	A
4	707	177	582	2344	0.302	705	419	0.0	0.4	2.195	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	482	121	881	1755	0.275	482	659	0.3	0.4	2.827	A
2	943	236	383	2347	0.402	942	980	0.5	0.7	2.561	A
3	524	131	674	1902	0.275	523	651	0.3	0.4	2.611	A
4	844	211	696	2226	0.379	843	502	0.4	0.6	2.601	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	591	148	1078	1573	0.375	590	806	0.4	0.6	3.658	A
2	1155	289	468	2253	0.513	1154	1199	0.7	1.0	3.271	A
3	642	160	825	1763	0.364	641	797	0.4	0.6	3.208	A
4	1034	258	852	2066	0.500	1032	614	0.6	1.0	3.477	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	591	148	1079	1572	0.376	591	807	0.6	0.6	3.669	A
2	1155	289	469	2252	0.513	1155	1201	1.0	1.0	3.281	A
3	642	160	826	1762	0.364	642	798	0.6	0.6	3.213	A
4	1034	258	853	2065	0.501	1034	615	1.0	1.0	3.489	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	482	121	883	1753	0.275	483	660	0.6	0.4	2.837	A
2	943	236	384	2346	0.402	945	982	1.0	0.7	2.573	A
3	524	131	676	1901	0.276	525	653	0.6	0.4	2.617	A
4	844	211	697	2225	0.379	846	503	1.0	0.6	2.612	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	404	101	739	1886	0.214	404	553	0.4	0.3	2.429	A
2	790	197	321	2415	0.327	791	822	0.7	0.5	2.218	A
3	439	110	566	2002	0.219	439	546	0.4	0.3	2.304	A
4	707	177	584	2342	0.302	708	421	0.6	0.4	2.203	A

Queue Variation Results for each time segment
07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2	0.67	0.07	0.75	1.37	1.45			N/A	N/A
3	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4	0.61	0.07	0.72	1.35	1.43			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.60	0.03	0.25	0.60	0.60			N/A	N/A
2	1.04	0.03	0.25	1.04	1.04			N/A	N/A
3	0.57	0.03	0.25	0.57	0.57			N/A	N/A
4	0.99	0.03	0.25	0.99	0.99			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.60	0.03	0.30	1.45	2.83			N/A	N/A
2	1.05	0.03	0.27	1.05	1.32			N/A	N/A
3	0.57	0.03	0.30	1.43	2.68			N/A	N/A
4	1.00	0.03	0.27	1.00	1.54			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2	0.68	0.55	1.00	1.40	1.45			N/A	N/A
3	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4	0.61	0.55	1.00	1.40	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.49	0.00	0.00	0.49	0.49			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4	0.43	0.00	0.00	0.43	0.43			N/A	N/A

2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	4.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	821	100.000
2		ONE HOUR	✓	1129	100.000
3		ONE HOUR	✓	713	100.000
4		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	271	1	549
	2	219	0	578	332
	3	3	614	0	96
	4	303	231	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.52	4.26	1.1	1.7	A	753	1130
2	0.59	4.20	1.4	1.9	A	1036	1554
3	0.53	5.15	1.1	2.2	A	654	981
4	0.33	2.67	0.5	2.0	A	556	834

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	618	155	688	2057	0.301	616	394	0.0	0.4	2.496	A
2	850	212	467	2327	0.365	847	838	0.0	0.6	2.430	A
3	536	134	826	1831	0.293	535	489	0.0	0.4	2.773	A
4	456	114	628	2316	0.197	455	733	0.0	0.2	1.934	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	738	185	823	1927	0.383	737	472	0.4	0.6	3.023	A
2	1015	254	558	2232	0.455	1014	1002	0.6	0.8	2.951	A
3	641	160	988	1685	0.380	640	585	0.4	0.6	3.443	A
4	545	136	751	2190	0.249	544	877	0.2	0.3	2.188	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	904	226	1007	1752	0.516	902	577	0.6	1.1	4.230	A
2	1243	311	683	2102	0.591	1240	1226	0.8	1.4	4.167	A
3	785	196	1208	1486	0.528	783	715	0.6	1.1	5.106	A
4	667	167	918	2018	0.331	666	1073	0.3	0.5	2.662	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	904	226	1009	1750	0.517	904	578	1.1	1.1	4.256	A
2	1243	311	685	2101	0.592	1243	1229	1.4	1.4	4.196	A
3	785	196	1211	1484	0.529	785	717	1.1	1.1	5.149	A
4	667	167	921	2016	0.331	667	1075	0.5	0.5	2.668	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	738	185	826	1925	0.383	740	473	1.1	0.6	3.044	A
2	1015	254	560	2230	0.455	1017	1006	1.4	0.8	2.972	A
3	641	160	991	1682	0.381	643	586	1.1	0.6	3.469	A
4	545	136	754	2186	0.249	545	880	0.5	0.3	2.193	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	618	155	691	2054	0.301	619	396	0.6	0.4	2.511	A
2	850	212	469	2326	0.365	851	841	0.8	0.6	2.442	A
3	536	134	829	1828	0.293	537	491	0.6	0.4	2.789	A
4	456	114	630	2313	0.197	456	736	0.3	0.2	1.940	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4	0.24	0.00	0.00	0.24	0.24			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.62	0.07	0.72	1.35	1.43			N/A	N/A
2	0.83	0.06	0.72	1.42	1.85			N/A	N/A
3	0.61	0.07	0.71	1.35	1.43			N/A	N/A
4	0.33	0.00	0.00	0.33	0.33			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.06	0.03	0.26	1.06	1.06			N/A	N/A
2	1.43	0.03	0.26	1.43	1.43			N/A	N/A
3	1.11	0.03	0.26	1.11	1.11			N/A	N/A
4	0.49	0.03	0.25	0.49	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.06	0.03	0.27	1.06	1.72			N/A	N/A
2	1.44	0.03	0.26	1.44	1.44			N/A	N/A
3	1.12	0.03	0.27	1.12	2.17			N/A	N/A
4	0.49	0.03	0.32	1.46	1.99			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.63	0.55	1.00	1.40	1.45			N/A	N/A
2	0.84	0.50	0.98	1.40	1.45			N/A	N/A
3	0.62	0.18	0.92	1.38	1.44			N/A	N/A
4	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.43	0.03	0.31	0.98	1.24			N/A	N/A
2	0.58	0.06	0.67	1.34	1.42			N/A	N/A
3	0.42	0.03	0.31	1.01	1.26			N/A	N/A
4	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	538	100.000
2		ONE HOUR	✓	1061	100.000
3		ONE HOUR	✓	585	100.000
4		ONE HOUR	✓	939	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	234	0	305
	2	252	0	609	200
	3	0	531	0	54
	4	487	330	122	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	0	13
	2	2	0	3	6
	3	0	3	0	18
	4	8	4	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.68	0.6	2.9	A	494	741
2	0.52	3.32	1.1	1.5	A	974	1460
3	0.37	3.24	0.6	2.7	A	537	805
4	0.50	3.52	1.0	1.5	A	862	1292

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	405	101	738	1888	0.215	404	555	0.0	0.3	2.426	A
2	799	200	320	2417	0.331	797	822	0.0	0.5	2.219	A
3	440	110	568	2001	0.220	439	549	0.0	0.3	2.304	A
4	707	177	588	2337	0.302	705	419	0.0	0.4	2.203	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	121	882	1754	0.276	484	664	0.3	0.4	2.834	A
2	954	238	383	2348	0.406	953	983	0.5	0.7	2.580	A
3	526	131	680	1898	0.277	525	656	0.3	0.4	2.623	A
4	844	211	703	2219	0.380	843	502	0.4	0.6	2.615	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	148	1080	1571	0.377	592	813	0.4	0.6	3.672	A
2	1168	292	468	2253	0.518	1167	1204	0.7	1.1	3.309	A
3	644	161	832	1757	0.366	643	803	0.4	0.6	3.230	A
4	1034	258	861	2057	0.503	1032	614	0.6	1.0	3.508	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	148	1082	1570	0.378	593	814	0.6	0.6	3.683	A
2	1168	292	469	2252	0.519	1168	1205	1.1	1.1	3.319	A
3	644	161	833	1756	0.367	644	804	0.6	0.6	3.235	A
4	1034	258	862	2056	0.503	1034	615	1.0	1.0	3.520	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	484	121	885	1752	0.276	485	666	0.6	0.4	2.844	A
2	954	238	384	2346	0.407	955	986	1.1	0.7	2.592	A
3	526	131	681	1896	0.277	526	658	0.6	0.4	2.629	A
4	844	211	705	2217	0.381	846	503	1.0	0.6	2.626	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	405	101	740	1885	0.215	406	557	0.4	0.3	2.433	A
2	799	200	321	2415	0.331	800	825	0.7	0.5	2.228	A
3	440	110	570	1999	0.220	441	551	0.4	0.3	2.312	A
4	707	177	590	2335	0.303	708	421	0.6	0.4	2.212	A

Queue Variation Results for each time segment

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.49	0.00	0.00	0.49	0.49			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2	0.68	0.07	0.75	1.38	1.46			N/A	N/A
3	0.38	0.00	0.00	0.38	0.38			N/A	N/A
4	0.61	0.07	0.72	1.35	1.43			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.60	0.03	0.25	0.60	0.60			N/A	N/A
2	1.07	0.03	0.25	1.07	1.07			N/A	N/A
3	0.57	0.03	0.25	0.57	0.57			N/A	N/A
4	1.00	0.03	0.25	1.00	1.00			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.60	0.03	0.30	1.44	2.85			N/A	N/A
2	1.07	0.03	0.27	1.07	1.24			N/A	N/A
3	0.58	0.03	0.30	1.43	2.72			N/A	N/A
4	1.01	0.03	0.27	1.01	1.51			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2	0.69	0.55	1.00	1.40	1.45			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	0.62	0.55	1.00	1.40	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.50	0.00	0.00	0.50	0.50			N/A	N/A
3	0.28	0.00	0.00	0.28	0.28			N/A	N/A
4	0.44	0.00	0.00	0.44	0.44			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Large Roundabout		1, 2, 3, 4	4.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	1039	141.80
2	720	61.40
3	1249	152.90
4	945	59.50

Slope / Intercept / Capacity

[same as above]

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	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D18 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	826	100.000
2		ONE HOUR	✓	1133	100.000
3		ONE HOUR	✓	718	100.000
4		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	276	1	549
	2	221	0	580	332
	3	3	619	0	96
	4	303	231	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	1	0	5
	2	1	0	2	1
	3	33	2	0	3
	4	10	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.52	4.31	1.1	1.7	A	758	1137
2	0.59	4.22	1.5	1.9	A	1039	1559
3	0.53	5.20	1.1	2.1	A	658	988
4	0.33	2.68	0.5	2.0	A	556	834

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	622	155	692	2053	0.303	620	396	0.0	0.4	2.508	A
2	853	213	467	2328	0.366	850	845	0.0	0.6	2.434	A
3	540	135	827	1830	0.295	539	490	0.0	0.4	2.784	A
4	456	114	633	2310	0.197	455	733	0.0	0.2	1.939	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	743	186	828	1923	0.386	742	474	0.4	0.6	3.045	A
2	1018	255	558	2232	0.456	1017	1011	0.6	0.8	2.960	A
3	645	161	989	1684	0.383	644	586	0.4	0.6	3.464	A
4	545	136	757	2183	0.249	544	877	0.2	0.3	2.196	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	910	227	1013	1747	0.521	908	580	0.6	1.1	4.281	A
2	1247	312	683	2102	0.593	1245	1237	0.8	1.4	4.188	A
3	790	198	1211	1484	0.532	788	717	0.6	1.1	5.160	A
4	667	167	926	2010	0.332	666	1073	0.3	0.5	2.677	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	910	227	1015	1745	0.521	909	580	1.1	1.1	4.310	A
2	1247	312	685	2101	0.594	1247	1240	1.4	1.5	4.217	A
3	790	198	1213	1482	0.533	790	719	1.1	1.1	5.205	A
4	667	167	928	2008	0.332	667	1075	0.5	0.5	2.684	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	743	186	831	1921	0.387	744	475	1.1	0.6	3.064	A
2	1018	255	560	2230	0.457	1021	1015	1.5	0.8	2.984	A
3	645	161	993	1680	0.384	647	588	1.1	0.6	3.489	A
4	545	136	760	2180	0.250	545	880	0.5	0.3	2.204	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	622	155	695	2051	0.303	623	397	0.6	0.4	2.524	A
2	853	213	469	2326	0.367	854	849	0.8	0.6	2.447	A
3	540	135	830	1827	0.296	541	492	0.6	0.4	2.802	A
4	456	114	636	2307	0.198	456	736	0.3	0.2	1.946	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2	0.58	0.55	1.00	1.40	1.45			N/A	N/A
3	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4	0.25	0.00	0.00	0.25	0.25			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.63	0.07	0.73	1.35	1.43			N/A	N/A
2	0.83	0.06	0.72	1.44	1.87			N/A	N/A
3	0.62	0.07	0.71	1.35	1.43			N/A	N/A
4	0.33	0.00	0.00	0.33	0.33			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.08	0.03	0.26	1.08	1.08			N/A	N/A
2	1.44	0.03	0.26	1.44	1.44			N/A	N/A
3	1.13	0.03	0.26	1.13	1.13			N/A	N/A
4	0.49	0.03	0.25	0.49	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.08	0.03	0.27	1.08	1.66			N/A	N/A
2	1.45	0.03	0.26	1.45	1.45			N/A	N/A
3	1.13	0.03	0.27	1.13	2.11			N/A	N/A
4	0.50	0.03	0.32	1.47	2.02			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.63	0.55	1.00	1.40	1.45			N/A	N/A
2	0.85	0.50	0.98	1.40	1.46			N/A	N/A
3	0.63	0.18	0.92	1.38	1.44			N/A	N/A
4	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.44	0.03	0.32	1.05	1.28			N/A	N/A
2	0.58	0.06	0.68	1.34	1.42			N/A	N/A
3	0.42	0.03	0.32	1.06	1.28			N/A	N/A
4	0.25	0.00	0.00	0.25	0.25			N/A	N/A

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: A41 Newport Rd.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\6 A41 Newport Rd

Report generation date: 15/11/2024 14:20:50

-
- »2024 Base, AM
 - »2024 Base, PM
 - »2029 + Comm Dev, AM
 - »2029 + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev, AM
 - »2029 + Prop Dev + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev + Sens, AM
 - »2029 + Prop Dev + Comm Dev + Sens, PM
 - »2034 + Comm Dev, AM
 - »2034 + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev, AM
 - »2034 + Prop Dev + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev + Sens, AM
 - »2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
Stream B-C	1.1	11.36	0.52	B	0.4	7.29	0.30	A
Stream B-A	0.0	13.58	0.01	B	0.1	16.74	0.05	C
Stream C-AB	0.5	9.76	0.35	A	1.3	13.32	0.57	B
2029 + Comm Dev								
Stream B-C	1.3	13.20	0.57	B	0.5	7.71	0.32	A
Stream B-A	0.0	15.97	0.01	C	0.1	19.89	0.07	C
Stream C-AB	0.6	10.76	0.39	B	1.5	14.89	0.61	B
2029 + Prop Dev + Comm Dev								
Stream B-C	2.2	18.66	0.70	C	0.6	8.41	0.38	A
Stream B-A	0.0	19.82	0.01	C	0.1	23.27	0.08	C
Stream C-AB	0.9	12.57	0.48	B	2.4	20.28	0.71	C
2029 + Prop Dev + Comm Dev + Sens								
Stream B-C	2.5	20.12	0.72	C	0.6	8.52	0.38	A
Stream B-A	0.0	20.86	0.01	C	0.1	24.04	0.08	C
Stream C-AB	0.9	12.82	0.49	B	2.6	21.73	0.73	C
2034 + Comm Dev								
Stream B-C	1.4	14.23	0.59	B	0.5	7.95	0.33	A
Stream B-A	0.0	17.15	0.01	C	0.1	21.62	0.07	C
Stream C-AB	0.7	11.22	0.40	B	1.7	16.03	0.63	C
2034 + Prop Dev + Comm Dev								
Stream B-C	2.5	20.76	0.72	C	0.6	8.70	0.39	A
Stream B-A	0.0	22.13	0.01	C	0.1	25.71	0.09	D
Stream C-AB	1.0	13.21	0.49	B	2.7	22.42	0.74	C
2034 + Prop Dev + Comm Dev + Sens								
Stream B-C	2.8	22.58	0.75	C	0.7	8.83	0.40	A
Stream B-A	0.0	23.57	0.02	C	0.1	26.67	0.09	D
Stream C-AB	1.0	13.48	0.50	B	3.0	24.19	0.76	C

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

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

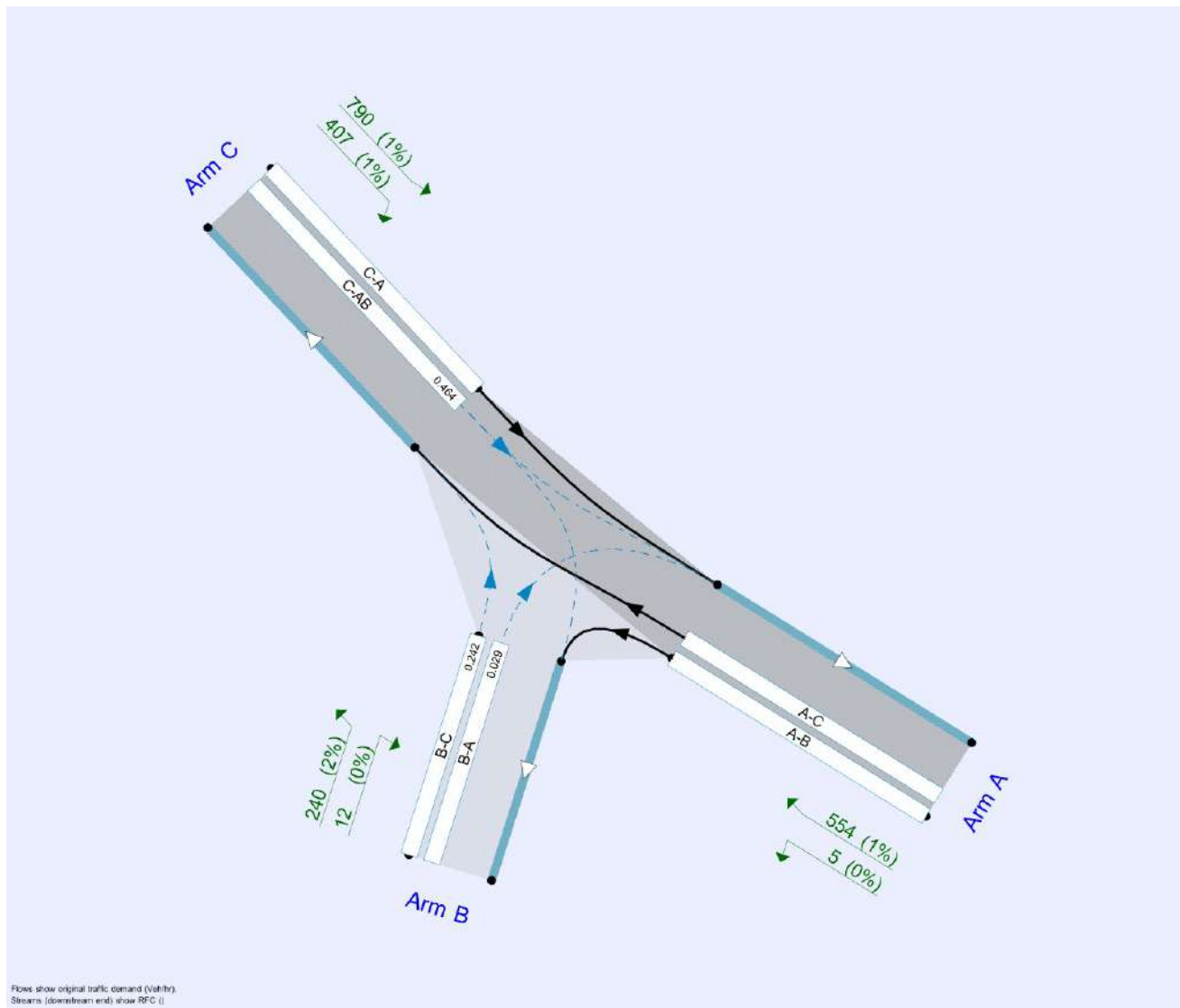
File summary

File Description

Title	South Albrighton
Location	A41 / Newport Rd GRT
Site number	SH5034-13PD
Date	14/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	WL
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2024 Base	PM	ONE HOUR	16:30	18:00	15	✓		
D3	Proposed Development	AM	ONE HOUR	07:15	08:45	15			
D4	Proposed Development	PM	ONE HOUR	16:30	18:00	15			
D5	Committed Development	AM	ONE HOUR	07:15	08:45	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	Sensitivity	AM	ONE HOUR	07:15	08:45	15			
D8	Sensitivity	PM	ONE HOUR	16:30	18:00	15			
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G1) + D5
D10	2029 + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	(D2 * G2) + D6
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D12 + D8
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D5
D16	2034 + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	(D2 * G4) + D6
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D18 + D8

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A41 (S)		Major
B	Newport Road		Minor
C	A41 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40		✓	3.30	215.0	✓	53.00

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	10.00	6.60	6.10	5.00	✓	3.00	215	205

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	629	0.103	0.259	0.163	0.370
B-C	903	0.124	0.313	-	-
C-B	782	0.271	0.271	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	634	100.000
B		ONE HOUR	✓	314	100.000
C		ONE HOUR	✓	646	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	6	628
	B	2	0	312
	C	462	184	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.52	11.36	1.1	3.2	B	286	429
B-A	0.01	13.58	0.0	0.5	B	2	3
C-AB	0.35	9.76	0.5	2.6	A	169	253
C-A						424	636
A-B						6	8
A-C						576	864

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	59	729	0.322	233	0.0	0.5	7.232	A
B-A	2	0.38	389	0.004	1	0.0	0.0	9.299	A
C-AB	139	35	631	0.220	137	0.0	0.3	7.279	A
C-A	348	87			348				
A-B	5	1			5				
A-C	473	118			473				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	280	70	700	0.401	280	0.5	0.7	8.549	A
B-A	2	0.45	339	0.005	2	0.0	0.0	10.660	B
C-AB	165	41	606	0.273	165	0.3	0.4	8.159	A
C-A	415	104			415				
A-B	5	1			5				
A-C	565	141			565				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	344	86	660	0.520	342	0.7	1.1	11.256	B
B-A	2	0.55	268	0.008	2	0.0	0.0	13.557	B
C-AB	203	51	571	0.355	202	0.4	0.5	9.723	A
C-A	509	127			509				
A-B	7	2			7				
A-C	691	173			691				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	344	86	660	0.520	343	1.1	1.1	11.363	B
B-A	2	0.55	267	0.008	2	0.0	0.0	13.584	B
C-AB	203	51	571	0.355	203	0.5	0.5	9.759	A
C-A	509	127			509				
A-B	7	2			7				
A-C	691	173			691				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	280	70	700	0.401	282	1.1	0.7	8.644	A
B-A	2	0.45	339	0.005	2	0.0	0.0	10.681	B
C-AB	165	41	606	0.273	166	0.5	0.4	8.198	A
C-A	415	104			415				
A-B	5	1			5				
A-C	565	141			565				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	59	729	0.322	236	0.7	0.5	7.310	A
B-A	2	0.38	388	0.004	2	0.0	0.0	9.317	A
C-AB	139	35	631	0.220	139	0.4	0.3	7.322	A
C-A	348	87			348				
A-B	5	1			5				
A-C	473	118			473				

Queue Variation Results for each time segment

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.66	0.15	0.90	1.38	1.44			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.37	0.00	0.00	0.37	0.37			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.06	0.03	0.26	1.06	1.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.54	0.03	0.26	0.54	0.54			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.07	0.03	0.28	1.07	3.20			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.54	0.03	0.30	1.35	2.55			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.68	0.08	0.78	1.37	1.45			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.48	0.04	0.42	1.26	1.38			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	494	100.000
B		ONE HOUR	✓	203	100.000
C		ONE HOUR	✓	1015	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	489
	B	11	0	192
	C	691	324	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.30	7.29	0.4	1.8	A	176	264
B-A	0.05	16.74	0.1	0.5	C	10	15
C-AB	0.57	13.32	1.3	3.5	B	297	446
C-A						634	951
A-B						5	7
A-C						449	673

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	145	36	763	0.189	144	0.0	0.2	5.800	A
B-A	8	2	357	0.023	8	0.0	0.0	10.331	B
C-AB	244	61	673	0.362	242	0.0	0.6	8.296	A
C-A	520	130			520				
A-B	4	0.94			4				
A-C	368	92			368				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	173	43	740	0.233	172	0.2	0.3	6.344	A
B-A	10	2	302	0.033	10	0.0	0.0	12.309	B
C-AB	291	73	654	0.445	290	0.6	0.8	9.878	A
C-A	621	155			621				
A-B	4	1			4				
A-C	440	110			440				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	211	53	705	0.300	211	0.3	0.4	7.272	A
B-A	12	3	228	0.053	12	0.0	0.1	16.675	C
C-AB	357	89	627	0.569	355	0.8	1.3	13.138	B
C-A	761	190			761				
A-B	6	1			6				
A-C	538	135			538				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	211	53	705	0.300	211	0.4	0.4	7.288	A
B-A	12	3	227	0.053	12	0.1	0.1	16.745	C
C-AB	357	89	627	0.569	357	1.3	1.3	13.318	B
C-A	761	190			761				
A-B	6	1			6				
A-C	538	135			538				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	173	43	739	0.233	173	0.4	0.3	6.361	A
B-A	10	2	301	0.033	10	0.1	0.0	12.366	B
C-AB	291	73	654	0.445	293	1.3	0.8	10.034	B
C-A	621	155			621				
A-B	4	1			4				
A-C	440	110			440				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	145	36	763	0.189	145	0.3	0.2	5.823	A
B-A	8	2	355	0.023	8	0.0	0.0	10.374	B
C-AB	244	61	673	0.362	245	0.8	0.6	8.421	A
C-A	520	130			520				
A-B	4	0.94			4				
A-C	368	92			368				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.56	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.79	0.16	0.92	1.40	1.46			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	1.28	0.03	0.27	1.28	2.16			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.43	0.03	0.31	1.33	1.77			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	1.30	0.03	0.28	1.30	3.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.82	0.08	0.80	1.14	1.64			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.58	0.05	0.46	1.05	1.05			N/A	N/A

2029 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G1) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	722	100.000
B		ONE HOUR	✓	327	100.000
C		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	6	716
	B	2	0	325
	C	497	191	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.57	13.20	1.3	3.7	B	298	447
B-A	0.01	15.97	0.0	0.5	C	2	3
C-AB	0.39	10.76	0.6	2.9	B	176	264
C-A						456	684
A-B						6	9
A-C						657	985

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	244	61	708	0.345	242	0.0	0.5	7.693	A
B-A	2	0.39	364	0.004	2	0.0	0.0	9.931	A
C-AB	144	36	613	0.235	143	0.0	0.3	7.637	A
C-A	374	94			374				
A-B	5	1			5				
A-C	539	135			539				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	292	73	676	0.432	291	0.5	0.7	9.340	A
B-A	2	0.47	309	0.006	2	0.0	0.0	11.708	B
C-AB	172	43	585	0.294	172	0.3	0.4	8.708	A
C-A	447	112			447				
A-B	6	1			6				
A-C	643	161			643				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	357	89	630	0.567	355	0.7	1.3	13.010	B
B-A	2	0.57	228	0.010	2	0.0	0.0	15.915	C
C-AB	211	53	545	0.387	210	0.4	0.6	10.705	B
C-A	547	137			547				
A-B	7	2			7				
A-C	788	197			788				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	357	89	630	0.567	357	1.3	1.3	13.199	B
B-A	2	0.57	228	0.010	2	0.0	0.0	15.969	C
C-AB	211	53	545	0.387	211	0.6	0.6	10.755	B
C-A	547	137			547				
A-B	7	2			7				
A-C	788	197			788				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	292	73	675	0.432	294	1.3	0.8	9.487	A
B-A	2	0.47	309	0.006	2	0.0	0.0	11.740	B
C-AB	172	43	585	0.294	173	0.6	0.4	8.759	A
C-A	447	112			447				
A-B	6	1			6				
A-C	643	161			643				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	244	61	708	0.345	245	0.8	0.5	7.794	A
B-A	2	0.39	363	0.004	2	0.0	0.0	9.955	A
C-AB	144	36	613	0.235	145	0.4	0.3	7.693	A
C-A	374	94			374				
A-B	5	1			5				
A-C	539	135			539				

Queue Variation Results for each time segment

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.75	0.14	0.89	1.39	1.45			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.27	0.03	0.27	1.27	1.97			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.62	0.03	0.26	0.62	0.62			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.29	0.03	0.28	1.29	3.73			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.62	0.03	0.29	1.30	2.87			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.77	0.07	0.78	1.47	1.47			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.42	0.00	0.00	0.42	0.42			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.53	0.04	0.43	1.34	1.47			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.31	0.03	0.25	0.45	0.48			N/A	N/A

2029 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2029 + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	(D2 * G2) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	543	100.000
B		ONE HOUR	✓	211	100.000
C		ONE HOUR	✓	1103	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	537
	B	11	0	200
	C	766	337	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	7.71	0.5	2.0	A	183	275
B-A	0.07	19.89	0.1	0.5	C	10	16
C-AB	0.61	14.89	1.5	4.2	B	309	464
C-A						703	1055
A-B						5	7
A-C						493	740

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	38	752	0.200	149	0.0	0.2	5.966	A
B-A	9	2	334	0.026	9	0.0	0.0	11.059	B
C-AB	254	63	663	0.382	251	0.0	0.6	8.681	A
C-A	577	144			577				
A-B	4	0.98			4				
A-C	405	101			405				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	179	45	725	0.247	179	0.2	0.3	6.589	A
B-A	10	3	275	0.037	10	0.0	0.0	13.591	B
C-AB	303	76	642	0.472	302	0.6	0.9	10.547	B
C-A	689	172			689				
A-B	5	1			5				
A-C	483	121			483				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	220	55	687	0.320	219	0.3	0.5	7.685	A
B-A	13	3	195	0.065	12	0.0	0.1	19.762	C
C-AB	371	93	612	0.606	368	0.9	1.5	14.621	B
C-A	844	211			844				
A-B	6	1			6				
A-C	592	148			592				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	220	55	687	0.320	220	0.5	0.5	7.706	A
B-A	13	3	194	0.065	13	0.1	0.1	19.886	C
C-AB	371	93	612	0.606	371	1.5	1.5	14.889	B
C-A	844	211			844				
A-B	6	1			6				
A-C	592	148			592				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	179	45	725	0.248	180	0.5	0.3	6.610	A
B-A	10	3	274	0.038	10	0.1	0.0	13.673	B
C-AB	303	76	642	0.472	305	1.5	0.9	10.765	B
C-A	689	172			689				
A-B	5	1			5				
A-C	483	121			483				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	150	38	752	0.200	151	0.3	0.3	5.995	A
B-A	9	2	333	0.026	9	0.0	0.0	11.115	B
C-AB	254	63	663	0.382	255	0.9	0.6	8.831	A
C-A	577	144			577				
A-B	4	0.98			4				
A-C	405	101			405				

Queue Variation Results for each time segment
16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.61	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.87	0.14	0.93	1.41	1.41			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.46	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	1.48	0.03	0.28	1.48	4.17			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.47	0.03	0.31	1.37	2.02			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.51	0.03	0.28	1.51	4.14			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.91	0.07	0.79	1.61	1.98			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.63	0.04	0.44	1.50	1.65			N/A	N/A

2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	722	100.000
B		ONE HOUR	✓	400	100.000
C		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	6	716
	B	2	0	398
	C	497	235	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.70	18.66	2.2	10.0	C	365	547
B-A	0.01	19.82	0.0	0.5	C	2	3
C-AB	0.48	12.57	0.9	3.4	B	216	324
C-A						456	684
A-B						6	9
A-C						657	985

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	299	75	708	0.423	297	0.0	0.7	8.684	A
B-A	2	0.39	348	0.005	2	0.0	0.0	10.384	B
C-AB	177	44	613	0.289	176	0.0	0.4	8.200	A
C-A	374	94			374				
A-B	5	1			5				
A-C	539	135			539				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	358	89	676	0.529	356	0.7	1.1	11.214	B
B-A	2	0.47	286	0.007	2	0.0	0.0	12.680	B
C-AB	212	53	585	0.362	211	0.4	0.6	9.618	A
C-A	447	112			447				
A-B	6	1			6				
A-C	643	161			643				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	438	109	630	0.695	434	1.1	2.1	17.964	C
B-A	2	0.57	186	0.012	2	0.0	0.0	19.577	C
C-AB	259	65	545	0.475	258	0.6	0.9	12.465	B
C-A	547	137			547				
A-B	7	2			7				
A-C	788	197			788				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	438	109	630	0.695	438	2.1	2.2	18.656	C
B-A	2	0.57	184	0.012	2	0.0	0.0	19.824	C
C-AB	259	65	545	0.475	259	0.9	0.9	12.571	B
C-A	547	137			547				
A-B	7	2			7				
A-C	788	197			788				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	358	89	676	0.529	362	2.2	1.2	11.621	B
B-A	2	0.47	284	0.007	2	0.0	0.0	12.765	B
C-AB	212	53	585	0.362	213	0.9	0.6	9.718	A
C-A	447	112			447				
A-B	6	1			6				
A-C	643	161			643				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	299	75	708	0.423	301	1.2	0.7	8.872	A
B-A	2	0.39	347	0.005	2	0.0	0.0	10.425	B
C-AB	177	44	613	0.289	178	0.6	0.4	8.287	A
C-A	374	94			374				
A-B	5	1			5				
A-C	539	135			539				

Queue Variation Results for each time segment

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.72	0.55	1.00	1.40	1.45			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.40	0.00	0.00	0.40	0.40			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.10	0.09	0.98	1.84	2.42			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.56	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.15	0.03	0.30	2.36	9.95			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.88	0.03	0.26	0.88	0.88			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.21	0.03	0.28	2.21	7.52			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.89	0.03	0.28	0.95	3.44			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.15	0.05	0.63	2.60	3.76			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.58	0.06	0.67	1.34	1.42			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.74	0.04	0.39	1.72	2.79			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.41	0.03	0.35	1.14	1.32			N/A	N/A

2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	543	100.000
B		ONE HOUR	✓	245	100.000
C		ONE HOUR	✓	1162	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	537
	B	11	0	234
	C	766	396	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	8.41	0.6	2.8	A	214	322
B-A	0.08	23.27	0.1	0.5	C	10	16
C-AB	0.71	20.28	2.4	11.4	C	363	545
C-A						703	1055
A-B						5	7
A-C						493	740

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	176	44	752	0.234	175	0.0	0.3	6.224	A
B-A	9	2	317	0.027	8	0.0	0.0	11.670	B
C-AB	298	75	663	0.449	295	0.0	0.8	9.684	A
C-A	577	144			577				
A-B	4	0.98			4				
A-C	405	101			405				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	210	53	725	0.290	210	0.3	0.4	6.976	A
B-A	10	3	254	0.040	10	0.0	0.0	14.737	B
C-AB	356	89	642	0.554	354	0.8	1.2	12.436	B
C-A	689	172			689				
A-B	5	1			5				
A-C	483	121			483				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	257	64	686	0.375	256	0.4	0.6	8.370	A
B-A	13	3	169	0.075	12	0.0	0.1	22.982	C
C-AB	436	109	612	0.712	431	1.2	2.3	19.443	C
C-A	844	211			844				
A-B	6	1			6				
A-C	592	148			592				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	257	64	685	0.375	257	0.6	0.6	8.405	A
B-A	13	3	167	0.075	13	0.1	0.1	23.267	C
C-AB	436	109	612	0.712	436	2.3	2.4	20.280	C
C-A	844	211			844				
A-B	6	1			6				
A-C	592	148			592				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	210	53	725	0.290	211	0.6	0.4	7.013	A
B-A	10	3	252	0.041	10	0.1	0.0	14.908	B
C-AB	356	89	642	0.554	360	2.4	1.3	12.969	B
C-A	689	172			689				
A-B	5	1			5				
A-C	483	121			483				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	176	44	752	0.234	176	0.4	0.3	6.262	A
B-A	9	2	315	0.027	9	0.0	0.0	11.757	B
C-AB	298	75	663	0.449	300	1.3	0.8	9.949	A
C-A	577	144			577				
A-B	4	0.98			4				
A-C	405	101			405				

Queue Variation Results for each time segment
16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.80	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.21	0.10	1.04	2.05	2.78			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.59	0.03	0.26	0.59	0.59			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	2.31	0.03	0.31	3.24	11.39			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.60	0.03	0.29	1.29	2.76			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	2.38	0.03	0.29	2.38	8.54			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	1.28	0.05	0.57	3.00	4.56			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.83	0.04	0.38	1.94	3.33			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	722	100.000
B		ONE HOUR	✓	413	100.000
C		ONE HOUR	✓	737	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	6	716
	B	2	0	411
	C	497	240	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.72	20.12	2.5	11.8	C	377	565
B-A	0.01	20.86	0.0	0.5	C	2	3
C-AB	0.49	12.82	0.9	3.5	B	221	331
C-A						456	684
AB						6	9
AC						657	985

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	309	77	708	0.436	306	0.0	0.8	8.885	A
B-A	2	0.39	346	0.005	2	0.0	0.0	10.454	B
C-AB	181	45	613	0.295	179	0.0	0.4	8.270	A
C-A	374	94			374				
AB	5	1			5				
AC	539	135			539				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	369	92	676	0.547	368	0.8	1.2	11.625	B
B-A	2	0.47	282	0.007	2	0.0	0.0	12.860	B
C-AB	216	54	585	0.370	216	0.4	0.6	9.734	A
C-A	447	112			447				
AB	6	1			6				
AC	643	161			643				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	452	113	630	0.718	447	1.2	2.4	19.226	C
B-A	2	0.57	178	0.013	2	0.0	0.0	20.523	C
C-AB	265	66	545	0.485	263	0.6	0.9	12.700	B
C-A	547	137			547				
AB	7	2			7				
AC	788	197			788				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	452	113	630	0.718	452	2.4	2.5	20.124	C
B-A	2	0.57	175	0.013	2	0.0	0.0	20.861	C
C-AB	265	66	545	0.485	265	0.9	0.9	12.817	B
C-A	547	137			547				
A-B	7	2			7				
A-C	788	197			788				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	369	92	676	0.547	374	2.5	1.2	12.127	B
B-A	2	0.47	280	0.007	2	0.0	0.0	12.967	B
C-AB	216	54	585	0.370	218	0.9	0.6	9.841	A
C-A	447	112			447				
A-B	6	1			6				
A-C	643	161			643				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	309	77	708	0.436	311	1.2	0.8	9.101	A
B-A	2	0.39	345	0.005	2	0.0	0.0	10.496	B
C-AB	181	45	613	0.295	182	0.6	0.4	8.359	A
C-A	374	94			374				
A-B	5	1			5				
A-C	539	135			539				

Queue Variation Results for each time segment
07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.17	0.09	0.99	2.02	2.78			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.58	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.37	0.03	0.31	3.40	11.77			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.92	0.03	0.26	0.92	0.92			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.45	0.03	0.29	2.45	9.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.93	0.03	0.28	0.93	3.49			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.24	0.05	0.55	2.90	4.38			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.60	0.07	0.69	1.34	1.42			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.79	0.04	0.37	1.85	3.17			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.42	0.04	0.36	1.17	1.34			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D12 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	543	100.000
B		ONE HOUR	✓	250	100.000
C		ONE HOUR	✓	1173	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	537
	B	11	0	239
	C	766	407	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	8.52	0.6	2.8	A	219	328
B-A	0.08	24.04	0.1	0.5	C	10	16
C-AB	0.73	21.73	2.6	13.0	C	373	560
C-A						703	1055
AB						5	7
AC						493	740

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	180	45	752	0.239	178	0.0	0.3	6.265	A
B-A	9	2	314	0.027	8	0.0	0.0	11.791	B
C-AB	306	77	663	0.462	303	0.0	0.8	9.897	A
C-A	577	144			577				
AB	4	0.98			4				
AC	405	101			405				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	215	54	725	0.296	214	0.3	0.4	7.038	A
B-A	10	3	251	0.041	10	0.0	0.0	14.972	B
C-AB	366	91	642	0.570	364	0.8	1.3	12.864	B
C-A	689	172			689				
AB	5	1			5				
AC	483	121			483				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	263	66	685	0.383	262	0.4	0.6	8.483	A
B-A	13	3	164	0.077	12	0.0	0.1	23.702	C
C-AB	448	112	612	0.732	443	1.3	2.5	20.675	C
C-A	844	211			844				
AB	6	1			6				
AC	592	148			592				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	263	66	685	0.383	263	0.6	0.6	8.522	A
B-A	13	3	162	0.078	13	0.1	0.1	24.040	C
C-AB	448	112	612	0.732	448	2.5	2.6	21.730	C
C-A	844	211			844				
A-B	6	1			6				
A-C	592	148			592				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	215	54	725	0.296	215	0.6	0.4	7.077	A
B-A	10	3	248	0.041	10	0.1	0.0	15.168	C
C-AB	366	91	642	0.570	371	2.6	1.4	13.506	B
C-A	689	172			689				
A-B	5	1			5				
A-C	483	121			483				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	180	45	752	0.239	180	0.4	0.3	6.301	A
B-A	9	2	312	0.028	9	0.0	0.0	11.882	B
C-AB	306	77	663	0.462	308	1.4	0.9	10.191	B
C-A	577	144			577				
A-B	4	0.98			4				
A-C	405	101			405				

Queue Variation Results for each time segment
16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.84	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.28	0.09	1.05	2.39	3.07			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.61	0.03	0.26	0.61	0.61			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	2.52	0.03	0.32	4.27	13.03			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.62	0.03	0.29	1.25	2.82			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	2.61	0.03	0.29	2.61	10.10			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	1.37	0.05	0.50	3.38	5.13			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.87	0.04	0.37	2.09	3.71			N/A	N/A

2034 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	744	100.000
B		ONE HOUR	✓	338	100.000
C		ONE HOUR	✓	711	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	738
	B	2	0	336
	C	513	198	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.59	14.23	1.4	4.1	B	308	462
B-A	0.01	17.15	0.0	0.5	C	2	3
C-AB	0.40	11.22	0.7	3.0	B	182	273
C-A						471	706
A-B						6	9
A-C						677	1015

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	253	63	703	0.359	251	0.0	0.6	7.916	A
B-A	2	0.41	355	0.005	2	0.0	0.0	10.180	B
C-AB	149	37	609	0.245	148	0.0	0.3	7.791	A
C-A	386	97			386				
A-B	5	1			5				
A-C	555	139			555				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	75	669	0.451	301	0.6	0.8	9.743	A
B-A	2	0.48	298	0.006	2	0.0	0.0	12.149	B
C-AB	178	44	579	0.307	178	0.3	0.4	8.949	A
C-A	461	115			461				
A-B	6	1			6				
A-C	663	166			663				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	370	92	622	0.594	367	0.8	1.4	13.979	B
B-A	2	0.59	213	0.011	2	0.0	0.0	17.076	C
C-AB	218	54	539	0.405	217	0.4	0.7	11.156	B
C-A	565	141			565				
A-B	7	2			7				
A-C	812	203			812				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	370	92	622	0.594	370	1.4	1.4	14.230	B
B-A	2	0.59	212	0.011	2	0.0	0.0	17.151	C
C-AB	218	54	539	0.405	218	0.7	0.7	11.217	B
C-A	565	141			565				
A-B	7	2			7				
A-C	812	203			812				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	302	75	669	0.451	304	1.4	0.8	9.927	A
B-A	2	0.48	297	0.007	2	0.0	0.0	12.189	B
C-AB	178	44	579	0.307	179	0.7	0.4	9.012	A
C-A	461	115			461				
A-B	6	1			6				
A-C	663	166			663				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	253	63	703	0.359	254	0.8	0.6	8.033	A
B-A	2	0.41	354	0.005	2	0.0	0.0	10.204	B
C-AB	149	37	609	0.245	150	0.4	0.3	7.852	A
C-A	386	97			386				
A-B	5	1			5				
A-C	555	139			555				

Queue Variation Results for each time segment

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.55	0.55	1.00	1.40	1.45			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.32	0.00	0.00	0.32	0.32			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.81	0.13	0.90	1.43	1.49			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.44	0.00	0.00	0.44	0.44			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.41	0.03	0.28	1.41	3.36			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.67	0.03	0.26	0.67	0.67			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.44	0.03	0.28	1.44	4.14			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.67	0.03	0.29	1.25	3.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.84	0.07	0.78	1.34	1.77			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.45	0.03	0.34	1.12	1.31			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.57	0.04	0.43	1.34	1.34			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.33	0.03	0.26	0.46	0.49			N/A	N/A

2034 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2034 + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	(D2 * G4) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	560	100.000
B		ONE HOUR	✓	218	100.000
C		ONE HOUR	✓	1138	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	5	554
	B	12	0	206
	C	790	348	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.33	7.95	0.5	2.3	A	189	284
B-A	0.07	21.62	0.1	0.5	C	11	16
C-AB	0.63	16.03	1.7	5.7	C	319	479
C-A						725	1088
A-B						5	7
A-C						509	763

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	155	39	747	0.208	154	0.0	0.3	6.058	A
B-A	9	2	324	0.027	9	0.0	0.0	11.400	B
C-AB	262	65	660	0.397	259	0.0	0.6	8.930	A
C-A	595	149			595				
A-B	4	1			4				
A-C	417	104			417				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	720	0.257	185	0.3	0.3	6.723	A
B-A	11	3	264	0.040	11	0.0	0.0	14.215	B
C-AB	313	78	638	0.490	312	0.6	0.9	10.995	B
C-A	710	178			710				
A-B	5	1			5				
A-C	498	125			498				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	227	57	680	0.334	226	0.3	0.5	7.924	A
B-A	13	3	181	0.072	13	0.0	0.1	21.452	C
C-AB	383	96	607	0.631	380	0.9	1.6	15.675	C
C-A	870	217			870				
A-B	6	1			6				
A-C	610	153			610				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	227	57	680	0.334	227	0.5	0.5	7.948	A
B-A	13	3	180	0.072	13	0.1	0.1	21.618	C
C-AB	383	96	607	0.631	383	1.6	1.7	16.030	C
C-A	870	217			870				
A-B	6	1			6				
A-C	610	153			610				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	720	0.258	186	0.5	0.4	6.751	A
B-A	11	3	262	0.041	11	0.1	0.0	14.324	B
C-AB	313	78	638	0.490	316	1.7	1.0	11.264	B
C-A	710	178			710				
A-B	5	1			5				
A-C	498	125			498				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	155	39	747	0.208	156	0.4	0.3	6.089	A
B-A	9	2	323	0.028	9	0.0	0.0	11.464	B
C-AB	262	65	660	0.397	263	1.0	0.7	9.103	A
C-A	595	149			595				
A-B	4	1			4				
A-C	417	104			417				

Queue Variation Results for each time segment
16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.00	0.00	0.26	0.26			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.65	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.94	0.12	0.95	1.30	1.70			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.49	0.03	0.25	0.49	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	1.64	0.03	0.28	1.64	5.74			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.50	0.03	0.30	1.37	2.25			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.67	0.03	0.28	1.67	4.80			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.98	0.06	0.77	1.85	2.57			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.00	0.00	0.26	0.26			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.67	0.04	0.43	1.31	1.90			N/A	N/A

2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	744	100.000
B		ONE HOUR	✓	411	100.000
C		ONE HOUR	✓	755	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	6	738
	B	2	0	409
	C	513	242	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.72	20.76	2.5	12.3	C	375	563
B-A	0.01	22.13	0.0	0.5	C	2	3
C-AB	0.49	13.21	1.0	3.6	B	222	333
C-A						471	706
A-B						6	9
A-C						677	1015

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	308	77	703	0.438	305	0.0	0.8	8.968	A
B-A	2	0.41	339	0.005	2	0.0	0.0	10.670	B
C-AB	182	46	609	0.299	180	0.0	0.4	8.378	A
C-A	386	97			386				
A-B	5	1			5				
A-C	555	139			555				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	367	92	669	0.549	366	0.8	1.2	11.794	B
B-A	2	0.48	274	0.007	2	0.0	0.0	13.253	B
C-AB	218	54	579	0.376	217	0.4	0.6	9.914	A
C-A	461	115			461				
A-B	6	1			6				
A-C	663	166			663				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	450	113	622	0.723	445	1.2	2.4	19.776	C
B-A	2	0.59	168	0.014	2	0.0	0.0	21.740	C
C-AB	266	67	539	0.494	265	0.6	1.0	13.075	B
C-A	565	141			565				
A-B	7	2			7				
A-C	812	203			812				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	450	113	622	0.723	450	2.4	2.5	20.759	C
B-A	2	0.59	165	0.014	2	0.0	0.0	22.134	C
C-AB	266	67	539	0.494	266	1.0	1.0	13.207	B
C-A	565	141			565				
A-B	7	2			7				
A-C	812	203			812				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	367	92	669	0.549	372	2.5	1.3	12.329	B
B-A	2	0.48	271	0.007	2	0.0	0.0	13.371	B
C-AB	218	54	579	0.376	219	1.0	0.6	10.028	B
C-A	461	115			461				
A-B	6	1			6				
A-C	663	166			663				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	308	77	703	0.438	310	1.3	0.8	9.190	A
B-A	2	0.41	338	0.005	2	0.0	0.0	10.717	B
C-AB	182	46	609	0.299	183	0.6	0.4	8.471	A
C-A	386	97			386				
A-B	5	1			5				
A-C	555	139			555				

Queue Variation Results for each time segment

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.42	0.00	0.00	0.42	0.42			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.18	0.09	0.99	2.08	2.82			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.59	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.43	0.03	0.31	3.73	12.27			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.95	0.03	0.26	0.95	0.95			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.51	0.03	0.29	2.51	9.57			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.96	0.03	0.28	0.96	3.58			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.25	0.05	0.52	2.95	4.50			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.61	0.07	0.70	1.35	1.43			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.79	0.04	0.37	1.86	3.24			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.43	0.04	0.37	1.19	1.35			N/A	N/A

2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	560	100.000
B		ONE HOUR	✓	252	100.000
C		ONE HOUR	✓	1197	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	554
	B	12	0	240
	C	790	407	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.39	8.70	0.6	2.9	A	220	331
B-A	0.09	25.71	0.1	0.5	D	11	16
C-AB	0.74	22.42	2.7	13.6	C	373	560
C-A						725	1088
A-B						5	7
A-C						509	763

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	181	45	748	0.242	180	0.0	0.3	6.323	A
B-A	9	2	307	0.029	9	0.0	0.0	12.054	B
C-AB	306	77	660	0.464	303	0.0	0.8	9.992	A
C-A	595	149			595				
A-B	4	1			4				
A-C	417	104			417				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	216	54	720	0.300	216	0.3	0.4	7.131	A
B-A	11	3	243	0.044	11	0.0	0.0	15.479	C
C-AB	366	91	638	0.574	364	0.8	1.3	13.056	B
C-A	710	178			710				
A-B	5	1			5				
A-C	498	125			498				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	264	66	679	0.390	264	0.4	0.6	8.660	A
B-A	13	3	155	0.084	13	0.0	0.1	25.305	D
C-AB	448	112	607	0.738	443	1.3	2.6	21.259	C
C-A	870	217			870				
A-B	6	1			6				
A-C	610	153			610				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	264	66	678	0.390	264	0.6	0.6	8.703	A
B-A	13	3	153	0.085	13	0.1	0.1	25.711	D
C-AB	448	112	607	0.738	448	2.6	2.7	22.419	C
C-A	870	217			870				
A-B	6	1			6				
A-C	610	153			610				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	216	54	720	0.300	217	0.6	0.4	7.169	A
B-A	11	3	240	0.044	11	0.1	0.0	15.698	C
C-AB	366	91	638	0.574	371	2.7	1.4	13.747	B
C-A	710	178			710				
A-B	5	1			5				
A-C	498	125			498				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	181	45	747	0.242	181	0.4	0.3	6.362	A
B-A	9	2	305	0.029	9	0.0	0.0	12.148	B
C-AB	306	77	660	0.464	308	1.4	0.9	10.298	B
C-A	595	149			595				
A-B	4	1			4				
A-C	417	104			417				

Queue Variation Results for each time segment
16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.85	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.30	0.09	1.06	2.46	3.21			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.63	0.03	0.26	0.63	0.63			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	2.59	0.03	0.32	4.66	13.58			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.63	0.03	0.29	1.23	2.86			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	2.69	0.03	0.29	2.69	10.75			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	1.39	0.05	0.49	3.48	5.35			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.88	0.04	0.37	2.13	3.81			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	744	100.000
B		ONE HOUR	✓	424	100.000
C		ONE HOUR	✓	760	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	6	738
	B	2	0	422
	C	513	247	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	A	0	17	2
	B	0	0	3
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.75	22.58	2.8	14.2	C	387	580
B-A	0.02	23.57	0.0	0.5	C	2	3
C-AB	0.50	13.48	1.0	3.6	B	227	340
C-A						471	706
AB						6	9
AC						677	1015

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	317	79	703	0.452	314	0.0	0.8	9.184	A
B-A	2	0.41	337	0.005	2	0.0	0.0	10.746	B
C-AB	186	46	609	0.306	184	0.0	0.4	8.449	A
C-A	386	97			386				
AB	5	1			5				
AC	555	139			555				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	379	95	669	0.566	377	0.8	1.3	12.249	B
B-A	2	0.48	269	0.007	2	0.0	0.0	13.464	B
C-AB	222	56	579	0.383	221	0.4	0.6	10.037	B
C-A	461	115			461				
AB	6	1			6				
AC	663	166			663				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	464	116	622	0.746	459	1.3	2.7	21.285	C
B-A	2	0.59	159	0.015	2	0.0	0.0	23.023	C
C-AB	272	68	539	0.505	270	0.6	1.0	13.334	B
C-A	565	141			565				
AB	7	2			7				
AC	812	203			812				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	464	116	622	0.746	464	2.7	2.8	22.579	C
B-A	2	0.59	155	0.015	2	0.0	0.0	23.573	C
C-AB	272	68	539	0.505	272	1.0	1.0	13.477	B
C-A	565	141			565				
A-B	7	2			7				
A-C	812	203			812				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	379	95	669	0.567	385	2.8	1.3	12.910	B
B-A	2	0.48	267	0.007	2	0.0	0.0	13.610	B
C-AB	222	56	579	0.383	224	1.0	0.6	10.162	B
C-A	461	115			461				
A-B	6	1			6				
A-C	663	166			663				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	317	79	703	0.452	320	1.3	0.8	9.433	A
B-A	2	0.41	335	0.005	2	0.0	0.0	10.796	B
C-AB	186	46	609	0.306	187	0.6	0.4	8.550	A
C-A	386	97			386				
A-B	5	1			5				
A-C	555	139			555				

Queue Variation Results for each time segment

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.81	0.55	1.00	1.40	1.45			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.27	0.08	1.01	2.45	3.24			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.61	0.15	0.90	1.38	1.44			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.70	0.03	0.32	5.01	14.24			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.99	0.03	0.27	0.99	1.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.81	0.03	0.29	2.81	11.62			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	1.00	0.03	0.28	1.00	3.64			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.35	0.05	0.48	3.36	5.17			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.63	0.07	0.71	1.36	1.44			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.84	0.04	0.36	1.97	3.67			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.45	0.04	0.38	1.22	1.36			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D18 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	560	100.000
B		ONE HOUR	✓	257	100.000
C		ONE HOUR	✓	1208	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	554
	B	12	0	245
	C	790	418	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.40	8.83	0.7	2.9	A	225	338
B-A	0.09	26.67	0.1	0.5	D	11	16
C-AB	0.76	24.19	3.0	15.2	C	384	575
C-A						725	1088
AB						5	7
AC						509	763

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	748	0.247	183	0.0	0.3	6.365	A
B-A	9	2	304	0.029	9	0.0	0.0	12.173	B
C-AB	315	79	660	0.477	311	0.0	0.9	10.217	B
C-A	595	149			595				
AB	4	1			4				
AC	417	104			417				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	220	55	720	0.306	220	0.3	0.4	7.196	A
B-A	11	3	239	0.044	11	0.0	0.0	15.741	C
C-AB	376	94	638	0.589	374	0.9	1.4	13.528	B
C-A	710	178			710				
AB	5	1			5				
AC	498	125			498				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	270	67	678	0.398	269	0.4	0.7	8.784	A
B-A	13	3	150	0.087	13	0.0	0.1	26.181	D
C-AB	460	115	607	0.758	454	1.4	2.8	22.709	C
C-A	870	217			870				
AB	6	1			6				
AC	610	153			610				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	270	67	678	0.398	270	0.7	0.7	8.828	A
B-A	13	3	148	0.088	13	0.1	0.1	26.670	D
C-AB	460	115	607	0.758	460	2.8	3.0	24.190	C
C-A	870	217			870				
A-B	6	1			6				
A-C	610	153			610				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	220	55	719	0.306	221	0.7	0.4	7.237	A
B-A	11	3	236	0.045	11	0.1	0.0	15.991	C
C-AB	376	94	638	0.589	382	3.0	1.5	14.364	B
C-A	710	178			710				
A-B	5	1			5				
A-C	498	125			498				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	185	46	747	0.247	185	0.4	0.3	6.408	A
B-A	9	2	302	0.029	9	0.0	0.0	12.287	B
C-AB	315	79	660	0.477	317	1.5	0.9	10.557	B
C-A	595	149			595				
A-B	4	1			4				
A-C	417	104			417				

Queue Variation Results for each time segment
16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.89	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	1.39	0.09	1.07	2.73	3.66			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.65	0.03	0.26	0.65	0.65			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	2.85	0.03	0.33	5.85	15.24			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.66	0.03	0.29	1.19	2.90			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	2.97	0.03	0.30	2.97	12.76			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	1.48	0.05	0.47	3.81	5.99			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.93	0.04	0.36	2.27	4.20			N/A	N/A

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: Cross Road High Street Stag Cross.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\5 Cross Road . High Street

Report generation date: 15/11/2024 12:43:55

-
- »2024 Base, AM
 - »2024 Base, PM
 - »2029 + Comm Dev, AM
 - »2029 + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev, AM
 - »2029 + Prop Dev + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev + Sens, AM
 - »2029 + Prop Dev + Comm Dev + Sens, PM
 - »2034 + Comm Dev, AM
 - »2034 + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev, AM
 - »2034 + Prop Dev + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev + Sens, AM
 - »2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2024 Base						
Stream B-ACD	0.5	9.66	0.35	0.5	9.90	0.32
Stream AB-CD	0.2	5.96	0.14	0.2	6.02	0.13
Stream D-ABC	0.1	8.05	0.12	0.3	9.12	0.21
Stream CD-AB	0.2	6.70	0.17	0.3	7.02	0.23
2029 + Comm Dev						
Stream B-ACD	0.6	10.21	0.38	0.6	10.83	0.36
Stream AB-CD	0.2	5.98	0.14	0.2	6.04	0.14
Stream D-ABC	0.1	8.15	0.12	0.3	9.29	0.22
Stream CD-AB	0.3	6.81	0.18	0.4	7.13	0.24
2029 + Prop Dev + Comm Dev						
Stream B-ACD	1.1	13.69	0.53	0.8	12.60	0.45
Stream AB-CD	0.3	5.74	0.15	0.2	5.99	0.15
Stream D-ABC	0.2	8.54	0.15	0.3	9.79	0.23
Stream CD-AB	0.5	8.25	0.32	0.6	8.48	0.36
2029 + Prop Dev + Comm Dev + Sens						
Stream B-ACD	1.3	14.50	0.56	0.8	12.85	0.46
Stream AB-CD	0.3	5.69	0.16	0.2	5.96	0.15
Stream D-ABC	0.2	8.59	0.15	0.3	9.80	0.23
Stream CD-AB	0.5	8.38	0.33	0.6	8.49	0.36
2034 + Comm Dev						
Stream B-ACD	0.6	10.46	0.39	0.6	11.10	0.37
Stream AB-CD	0.2	5.99	0.15	0.2	6.06	0.14
Stream D-ABC	0.1	8.23	0.13	0.3	9.45	0.23
Stream CD-AB	0.3	6.86	0.19	0.4	7.21	0.25
2034 + Prop Dev + Comm Dev						
Stream B-ACD	1.2	14.16	0.55	0.9	12.99	0.46
Stream AB-CD	0.3	5.76	0.16	0.3	6.02	0.15
Stream D-ABC	0.2	8.64	0.15	0.3	9.95	0.24
Stream CD-AB	0.5	8.34	0.33	0.7	8.60	0.37
2034 + Prop Dev + Comm Dev + Sens						
Stream B-ACD	1.3	15.03	0.58	0.9	13.25	0.48
Stream AB-CD	0.3	5.71	0.16	0.3	5.99	0.15
Stream D-ABC	0.2	8.69	0.15	0.3	9.97	0.24
Stream CD-AB	0.6	8.47	0.34	0.7	8.61	0.37

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

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

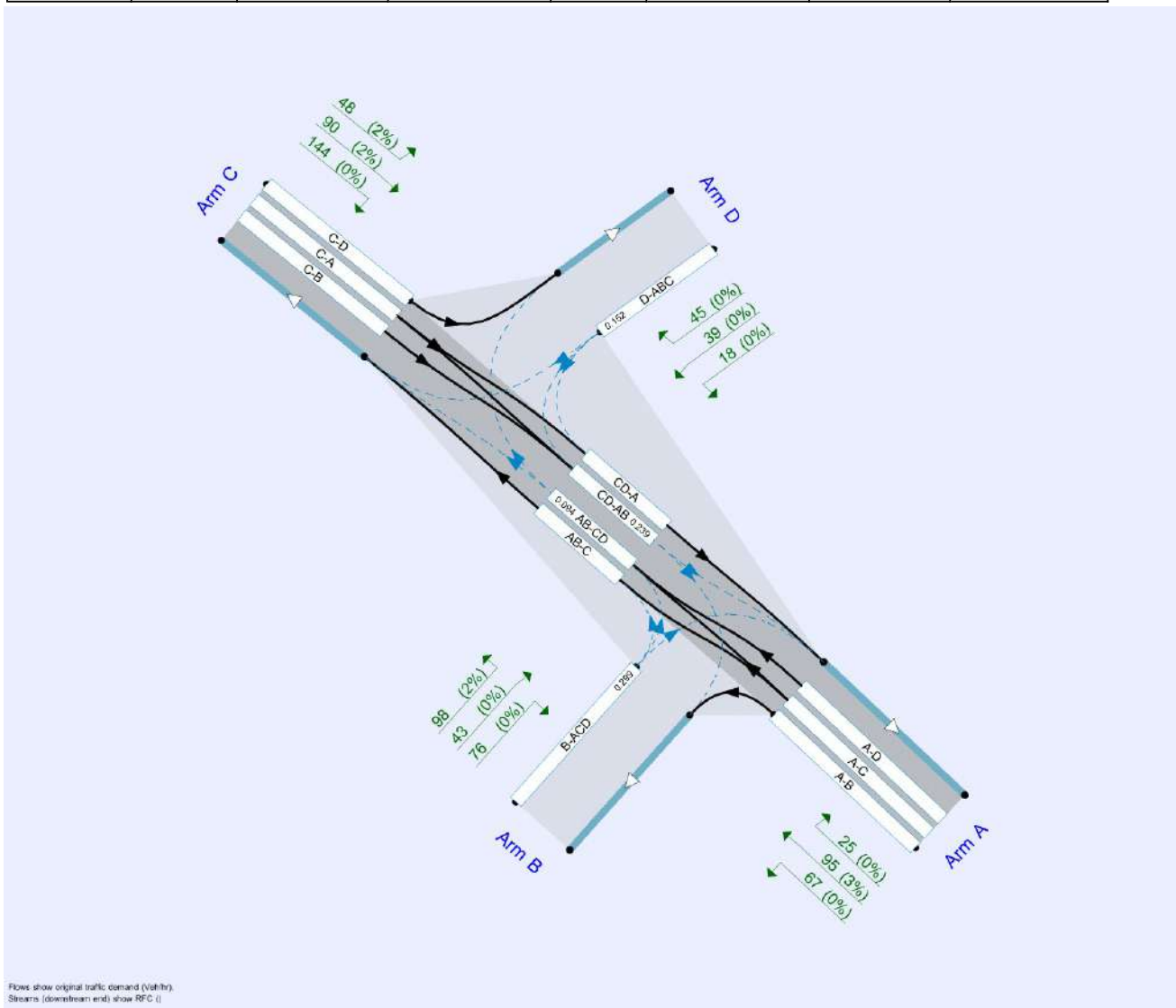
File summary

File Description

Title	South Albrighton
Location	Cross Rd / High St Cross
Site number	SH5034-13PD
Date	14/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	WL
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15	✓		
D2	2024 Base	PM	ONE HOUR	16:00	17:30	15	✓		
D3	Proposed Development	AM	ONE HOUR	07:15	08:45	15			
D4	Proposed Development	PM	ONE HOUR	16:00	17:30	15			
D5	Committed Development	AM	ONE HOUR	07:15	08:45	15			
D6	Committed Development	PM	ONE HOUR	16:00	17:30	15			
D7	Sensitivity	AM	ONE HOUR	07:15	08:45	15			
D8	Sensitivity	PM	ONE HOUR	16:00	17:30	15			
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G1) + D5
D10	2029 + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G2) + D6
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D8
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D5
D16	2034 + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G4) + D6
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D18 + D8

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		3.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major
D	untitled		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.00			105.0	✓	0.00
C	5.50			108.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.60	22	19
D	One lane	3.20	18	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	635	-	-	-	-	-	0.235	0.235	0.235	-	-
B-A	524	0.097	0.246	0.246	-	-	0.155	0.352	-	0.155	0.352
B-CD	674	0.106	0.267	0.267	-	-	-	-	-	-	-
CD-B	637	0.252	0.252	0.252	-	-	-	-	-	-	-
D-AB	647	-	-	-	-	-	0.240	0.240	0.095	-	-
D-C	502	-	0.139	0.316	0.139	0.316	0.221	0.221	0.087	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	120	100.000
B		ONE HOUR	✓	183	100.000
C		ONE HOUR	✓	155	100.000
D		ONE HOUR	✓	55	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A	B	C	D
From	A	0	44	64	12
	B	36	0	94	53
	C	60	66	0	29
	D	9	25	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.35	9.66	0.5	A	168	252
A-B					40	61
A-C					59	88
A-D					11	17
AB-CD	0.14	5.96	0.2	A	76	114
AB-C					128	193
D-ABC	0.12	8.05	0.1	A	50	76
C-D					27	40
C-A					55	83
C-B					61	91
CD-AB	0.17	6.70	0.2	A	93	139
CD-A					54	81

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	588	0.234	137	0.0	0.3	7.951	A
A-B	33	8			33				
A-C	48	12			48				
A-D	9	2			9				
AB-CD	59	15	675	0.087	58	0.0	0.1	5.839	A
AB-C	108	27			108				
D-ABC	41	10	528	0.078	41	0.0	0.1	7.388	A
C-D	22	5			22				
C-A	45	11			45				
C-B	50	12			50				
CD-AB	74	19	646	0.115	74	0.0	0.1	6.284	A
CD-A	46	11			46				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	165	41	582	0.283	164	0.3	0.4	8.603	A
A-B	40	10			40				
A-C	58	14			58				
A-D	11	3			11				
AB-CD	74	18	685	0.107	73	0.1	0.2	5.883	A
AB-C	127	32			127				
D-ABC	49	12	519	0.095	49	0.1	0.1	7.658	A
C-D	26	7			26				
C-A	54	13			54				
C-B	59	15			59				
CD-AB	90	23	648	0.140	90	0.1	0.2	6.450	A
CD-A	53	13			53				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	574	0.351	201	0.4	0.5	9.626	A
A-B	48	12			48				
A-C	70	18			70				
A-D	13	3			13				
AB-CD	95	24	699	0.136	95	0.2	0.2	5.952	A
AB-C	150	38			150				
D-ABC	61	15	508	0.119	60	0.1	0.1	8.048	A
C-D	32	8			32				
C-A	66	17			66				
C-B	73	18			73				
CD-AB	113	28	651	0.174	113	0.2	0.2	6.687	A
CD-A	63	16			63				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	574	0.351	201	0.5	0.5	9.657	A
A-B	48	12			48				
A-C	70	18			70				
A-D	13	3			13				
AB-CD	95	24	700	0.136	95	0.2	0.2	5.959	A
AB-C	150	38			150				
D-ABC	61	15	508	0.119	61	0.1	0.1	8.053	A
C-D	32	8			32				
C-A	66	17			66				
C-B	73	18			73				
CD-AB	114	28	651	0.174	113	0.2	0.2	6.698	A
CD-A	63	16			63				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	165	41	582	0.283	165	0.5	0.4	8.640	A
A-B	40	10			40				
A-C	58	14			58				
A-D	11	3			11				
AB-CD	74	18	686	0.108	74	0.2	0.2	5.898	A
AB-C	127	32			127				
D-ABC	49	12	519	0.095	50	0.1	0.1	7.664	A
C-D	26	7			26				
C-A	54	13			54				
C-B	59	15			59				
CD-AB	91	23	648	0.140	91	0.2	0.2	6.466	A
CD-A	53	13			53				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	588	0.234	138	0.4	0.3	8.010	A
A-B	33	8			33				
A-C	48	12			48				
A-D	9	2			9				
AB-CD	60	15	675	0.088	60	0.2	0.1	5.854	A
AB-C	109	27			109				
D-ABC	41	10	528	0.078	41	0.1	0.1	7.403	A
C-D	22	5			22				
C-A	45	11			45				
C-B	50	12			50				
CD-AB	75	19	646	0.115	75	0.2	0.1	6.306	A
CD-A	46	11			46				

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		3.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:00	17:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	161	100.000
B		ONE HOUR	✓	154	100.000
C		ONE HOUR	✓	208	100.000
D		ONE HOUR	✓	95	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A	B	C	D
	A	0	50	88	23
	B	57	0	58	39
	C	84	79	0	45
	D	17	36	42	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.32	9.90	0.5	A	141	212
A-B					46	69
A-C					81	121
A-D					21	32
AB-CD	0.13	6.02	0.2	A	71	107
AB-C					119	179
D-ABC	0.21	9.12	0.3	A	87	131
C-D					41	62
C-A					77	116
C-B					72	109
CD-AB	0.23	7.02	0.3	A	123	185
CD-A					75	112

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	557	0.208	115	0.0	0.3	8.125	A
A-B	38	9			38				
A-C	66	17			66				
A-D	17	4			17				
AB-CD	55	14	670	0.083	55	0.0	0.1	5.855	A
AB-C	100	25			100				
D-ABC	72	18	523	0.137	71	0.0	0.2	7.945	A
C-D	34	8			34				
C-A	63	16			63				
C-B	59	15			59				
CD-AB	98	24	655	0.149	97	0.0	0.2	6.438	A
CD-A	65	16			65				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	35	547	0.253	138	0.3	0.3	8.797	A
A-B	45	11			45				
A-C	79	20			79				
A-D	21	5			21				
AB-CD	69	17	677	0.102	69	0.1	0.1	5.915	A
AB-C	118	29			118				
D-ABC	85	21	513	0.166	85	0.2	0.2	8.407	A
C-D	40	10			40				
C-A	76	19			76				
C-B	71	18			71				
CD-AB	120	30	660	0.182	120	0.2	0.3	6.669	A
CD-A	74	19			74				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	533	0.318	169	0.3	0.5	9.867	A
A-B	55	14			55				
A-C	97	24			97				
A-D	25	6			25				
AB-CD	89	22	688	0.129	89	0.1	0.2	6.008	A
AB-C	140	35			140				
D-ABC	105	26	499	0.210	104	0.2	0.3	9.112	A
C-D	50	12			50				
C-A	92	23			92				
C-B	87	22			87				
CD-AB	152	38	665	0.229	152	0.3	0.3	7.009	A
CD-A	86	21			86				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	533	0.318	170	0.5	0.5	9.896	A
A-B	55	14			55				
A-C	97	24			97				
A-D	25	6			25				
AB-CD	89	22	688	0.130	89	0.2	0.2	6.017	A
AB-C	140	35			140				
D-ABC	105	26	499	0.210	105	0.3	0.3	9.125	A
C-D	50	12			50				
C-A	92	23			92				
C-B	87	22			87				
CD-AB	152	38	665	0.229	152	0.3	0.3	7.022	A
CD-A	86	21			86				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	35	547	0.253	139	0.5	0.3	8.833	A
A-B	45	11			45				
A-C	79	20			79				
A-D	21	5			21				
AB-CD	69	17	678	0.102	70	0.2	0.1	5.928	A
AB-C	118	29			118				
D-ABC	85	21	513	0.166	86	0.3	0.2	8.429	A
C-D	40	10			40				
C-A	76	19			76				
C-B	71	18			71				
CD-AB	120	30	660	0.182	120	0.3	0.3	6.685	A
CD-A	74	19			74				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	557	0.208	116	0.3	0.3	8.180	A
A-B	38	9			38				
A-C	66	17			66				
A-D	17	4			17				
AB-CD	56	14	670	0.084	56	0.1	0.1	5.870	A
AB-C	101	25			101				
D-ABC	72	18	523	0.137	72	0.2	0.2	7.979	A
C-D	34	8			34				
C-A	63	16			63				
C-B	59	15			59				
CD-AB	98	25	656	0.150	98	0.3	0.2	6.468	A
CD-A	65	16			65				

2029 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		3.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2029 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G1) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	139	100.000
B		ONE HOUR	✓	194	100.000
C		ONE HOUR	✓	161	100.000
D		ONE HOUR	✓	57	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From	A	B	C	D	
	0	60	67	12	
	41	0	98	55	
	62	69	0	30	
	9	26	22	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A	B	C	D
	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.38	10.21	0.6	B	178	268
A-B					55	82
A-C					61	92
A-D					11	17
AB-CD	0.14	5.98	0.2	A	80	120
AB-C					133	199
D-ABC	0.12	8.15	0.1	A	53	79
C-D					28	42
C-A					57	86
C-B					63	95
CD-AB	0.18	6.81	0.3	A	97	146
CD-A					56	84

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	146	37	582	0.252	145	0.0	0.3	8.216	A
A-B	45	11			45				
A-C	50	13			50				
A-D	9	2			9				
AB-CD	62	15	677	0.091	61	0.0	0.1	5.846	A
AB-C	112	28			112				
D-ABC	43	11	526	0.082	43	0.0	0.1	7.441	A
C-D	23	6			23				
C-A	47	12			47				
C-B	52	13			52				
CD-AB	78	19	644	0.121	77	0.0	0.1	6.346	A
CD-A	47	12			47				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	576	0.304	174	0.3	0.4	8.966	A
A-B	54	13			54				
A-C	60	15			60				
A-D	11	3			11				
AB-CD	77	19	688	0.112	77	0.1	0.2	5.894	A
AB-C	131	33			131				
D-ABC	51	13	517	0.099	51	0.1	0.1	7.726	A
C-D	27	7			27				
C-A	56	14			56				
C-B	62	15			62				
CD-AB	95	24	646	0.147	94	0.1	0.2	6.530	A
CD-A	55	14			55				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	214	54	567	0.378	213	0.4	0.6	10.173	B
A-B	66	16			66				
A-C	73	18			73				
A-D	14	3			14				
AB-CD	100	25	703	0.142	100	0.2	0.2	5.970	A
AB-C	155	39			155				
D-ABC	63	16	505	0.125	63	0.1	0.1	8.139	A
C-D	33	8			33				
C-A	69	17			69				
C-B	76	19			76				
CD-AB	119	30	648	0.183	119	0.2	0.3	6.795	A
CD-A	64	16			64				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	214	54	567	0.378	214	0.6	0.6	10.210	B
A-B	66	16			66				
A-C	73	18			73				
A-D	14	3			14				
AB-CD	100	25	703	0.143	100	0.2	0.2	5.977	A
AB-C	155	39			155				
D-ABC	63	16	505	0.125	63	0.1	0.1	8.146	A
C-D	33	8			33				
C-A	69	17			69				
C-B	76	19			76				
CD-AB	119	30	648	0.183	119	0.3	0.3	6.807	A
CD-A	64	16			64				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	575	0.304	175	0.6	0.4	9.015	A
A-B	54	13			54				
A-C	60	15			60				
A-D	11	3			11				
AB-CD	78	19	688	0.113	78	0.2	0.2	5.910	A
AB-C	131	33			131				
D-ABC	51	13	517	0.100	52	0.1	0.1	7.734	A
C-D	27	7			27				
C-A	56	14			56				
C-B	62	15			62				
CD-AB	95	24	646	0.147	95	0.3	0.2	6.545	A
CD-A	55	14			55				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	146	37	582	0.252	147	0.4	0.3	8.284	A
A-B	45	11			45				
A-C	50	13			50				
A-D	9	2			9				
AB-CD	63	16	677	0.092	63	0.2	0.1	5.864	A
AB-C	113	28			113				
D-ABC	43	11	526	0.082	43	0.1	0.1	7.456	A
C-D	23	6			23				
C-A	47	12			47				
C-B	52	13			52				
CD-AB	78	19	644	0.121	78	0.2	0.2	6.369	A
CD-A	47	12			47				

2029 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		3.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2029 + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G2) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	174	100.000
B		ONE HOUR	✓	171	100.000
C		ONE HOUR	✓	216	100.000
D		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	59	91	24
	B	70	0	60	41
	C	87	82	0	47
	D	18	37	44	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.36	10.83	0.6	B	157	236
A-B					54	81
A-C					84	126
A-D					22	33
AB-CD	0.14	6.04	0.2	A	75	112
AB-C					123	185
D-ABC	0.22	9.29	0.3	A	91	136
C-D					43	64
C-A					80	120
C-B					75	113
CD-AB	0.24	7.13	0.4	A	129	194
CD-A					77	115

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	547	0.236	128	0.0	0.3	8.567	A
A-B	44	11			44				
A-C	69	17			69				
A-D	18	5			18				
AB-CD	58	15	671	0.087	58	0.0	0.1	5.864	A
AB-C	104	26			104				
D-ABC	74	19	521	0.143	74	0.0	0.2	8.033	A
C-D	35	9			35				
C-A	66	16			66				
C-B	62	15			62				
CD-AB	102	26	655	0.156	101	0.0	0.2	6.495	A
CD-A	67	17			67				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	154	38	536	0.287	153	0.3	0.4	9.405	A
A-B	53	13			53				
A-C	82	21			82				
A-D	21	5			21				
AB-CD	72	18	679	0.107	72	0.1	0.2	5.931	A
AB-C	122	30			122				
D-ABC	89	22	511	0.174	89	0.2	0.2	8.526	A
C-D	42	11			42				
C-A	79	20			79				
C-B	74	18			74				
CD-AB	125	31	659	0.190	125	0.2	0.3	6.742	A
CD-A	76	19			76				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	188	47	521	0.362	188	0.4	0.6	10.781	B
A-B	65	16			65				
A-C	101	25			101				
A-D	26	7			26				
AB-CD	93	23	690	0.135	93	0.2	0.2	6.030	A
AB-C	144	36			144				
D-ABC	109	27	496	0.219	108	0.2	0.3	9.280	A
C-D	52	13			52				
C-A	96	24			96				
C-B	90	23			90				
CD-AB	159	40	665	0.240	159	0.3	0.4	7.118	A
CD-A	88	22			88				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	188	47	521	0.362	188	0.6	0.6	10.828	B
A-B	65	16			65				
A-C	101	25			101				
A-D	26	7			26				
AB-CD	94	23	690	0.136	94	0.2	0.2	6.038	A
AB-C	144	36			144				
D-ABC	109	27	496	0.219	109	0.3	0.3	9.295	A
C-D	52	13			52				
C-A	96	24			96				
C-B	90	23			90				
CD-AB	160	40	665	0.240	160	0.4	0.4	7.132	A
CD-A	88	22			88				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	154	38	536	0.287	154	0.6	0.4	9.458	A
A-B	53	13			53				
A-C	82	21			82				
A-D	21	5			21				
AB-CD	73	18	679	0.107	73	0.2	0.2	5.944	A
AB-C	122	30			122				
D-ABC	89	22	511	0.174	89	0.3	0.2	8.548	A
C-D	42	11			42				
C-A	79	20			79				
C-B	74	18			74				
CD-AB	126	31	659	0.191	126	0.4	0.3	6.766	A
CD-A	76	19			76				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	546	0.236	129	0.4	0.3	8.640	A
A-B	44	11			44				
A-C	69	17			69				
A-D	18	5			18				
AB-CD	59	15	672	0.087	59	0.2	0.1	5.880	A
AB-C	104	26			104				
D-ABC	74	19	521	0.143	75	0.2	0.2	8.067	A
C-D	35	9			35				
C-A	66	16			66				
C-B	62	15			62				
CD-AB	103	26	655	0.157	103	0.3	0.2	6.526	A
CD-A	67	17			67				

2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	151	100.000
B		ONE HOUR	✓	274	100.000
C		ONE HOUR	✓	223	100.000
D		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	72	67	12
	B	48	0	171	55
	C	62	131	0	30
	D	9	35	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	A	B	C	D	
From	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	13.69	1.1	B	252	378
A-B					66	99
A-C					61	92
A-D					11	17
AB-CD	0.15	5.74	0.3	A	90	135
AB-C					190	285
D-ABC	0.15	8.54	0.2	A	61	91
C-D					28	42
C-A					57	86
C-B					120	180
CD-AB	0.32	8.25	0.5	A	170	255
CD-A					48	72

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	583	0.354	204	0.0	0.5	9.449	A
A-B	54	14			54				
A-C	50	13			50				
A-D	9	2			9				
AB-CD	68	17	703	0.096	67	0.0	0.1	5.659	A
AB-C	160	40			160				
D-ABC	50	12	522	0.095	49	0.0	0.1	7.605	A
C-D	23	6			23				
C-A	47	12			47				
C-B	98	25			98				
CD-AB	136	34	642	0.212	135	0.0	0.3	7.091	A
CD-A	43	11			43				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	247	62	576	0.429	246	0.5	0.7	10.890	B
A-B	65	16			65				
A-C	60	15			60				
A-D	11	3			11				
AB-CD	86	22	720	0.120	86	0.1	0.2	5.682	A
AB-C	187	47			187				
D-ABC	60	15	511	0.117	59	0.1	0.1	7.975	A
C-D	27	7			27				
C-A	56	14			56				
C-B	117	29			117				
CD-AB	166	41	643	0.258	165	0.3	0.4	7.533	A
CD-A	48	12			48				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	302	76	565	0.535	301	0.7	1.1	13.544	B
A-B	79	20			79				
A-C	73	18			73				
A-D	14	3			14				
AB-CD	114	29	742	0.154	114	0.2	0.3	5.728	A
AB-C	220	55			220				
D-ABC	73	18	495	0.147	73	0.1	0.2	8.529	A
C-D	33	8			33				
C-A	69	17			69				
C-B	144	36			144				
CD-AB	208	52	645	0.323	207	0.4	0.5	8.223	A
CD-A	53	13			53				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	302	76	565	0.535	302	1.1	1.1	13.688	B
A-B	79	20			79				
A-C	73	18			73				
A-D	14	3			14				
AB-CD	115	29	743	0.155	115	0.3	0.3	5.739	A
AB-C	221	55			221				
D-ABC	73	18	494	0.148	73	0.2	0.2	8.541	A
C-D	33	8			33				
C-A	69	17			69				
C-B	144	36			144				
CD-AB	208	52	645	0.323	208	0.5	0.5	8.252	A
CD-A	53	13			53				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	247	62	576	0.429	248	1.1	0.8	11.048	B
A-B	65	16			65				
A-C	60	15			60				
A-D	11	3			11				
AB-CD	87	22	721	0.121	87	0.3	0.2	5.696	A
AB-C	188	47			188				
D-ABC	60	15	510	0.117	60	0.2	0.1	7.989	A
C-D	27	7			27				
C-A	56	14			56				
C-B	117	29			117				
CD-AB	166	41	643	0.258	166	0.5	0.4	7.571	A
CD-A	48	12			48				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	583	0.354	207	0.8	0.6	9.605	A
A-B	54	14			54				
A-C	50	13			50				
A-D	9	2			9				
AB-CD	69	17	704	0.097	69	0.2	0.2	5.675	A
AB-C	162	40			162				
D-ABC	50	12	522	0.096	50	0.1	0.1	7.629	A
C-D	23	6			23				
C-A	47	12			47				
C-B	98	25			98				
CD-AB	136	34	642	0.213	137	0.4	0.3	7.142	A
CD-A	42	11			42				

2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		4.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	212	100.000
C		ONE HOUR	✓	275	100.000
D		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	65	91	24
	B	74	0	96	42
	C	87	141	0	47
	D	18	37	44	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.45	12.60	0.8	B	195	292
A-B					60	89
A-C					84	126
A-D					22	33
AB-CD	0.15	5.99	0.2	A	81	121
AB-C					151	227
D-ABC	0.23	9.79	0.3	A	91	136
C-D					43	64
C-A					80	120
C-B					130	194
CD-AB	0.36	8.48	0.6	A	193	289
CD-A					67	101

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	160	40	549	0.291	158	0.0	0.4	9.176	A
A-B	49	12			49				
A-C	69	17			69				
A-D	18	5			18				
AB-CD	62	15	679	0.091	61	0.0	0.1	5.822	A
AB-C	128	32			128				
D-ABC	74	19	508	0.146	74	0.0	0.2	8.272	A
C-D	35	9			35				
C-A	66	16			66				
C-B	106	27			106				
CD-AB	153	38	654	0.233	151	0.0	0.3	7.147	A
CD-A	61	15			61				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	191	48	536	0.355	190	0.4	0.5	10.377	B
A-B	58	15			58				
A-C	82	21			82				
A-D	21	5			21				
AB-CD	78	19	689	0.113	78	0.1	0.2	5.886	A
AB-C	150	37			150				
D-ABC	89	22	495	0.179	89	0.2	0.2	8.854	A
C-D	42	11			42				
C-A	79	20			79				
C-B	127	32			127				
CD-AB	187	47	658	0.285	187	0.3	0.4	7.646	A
CD-A	67	17			67				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	234	58	519	0.450	233	0.5	0.8	12.506	B
A-B	72	18			72				
A-C	101	25			101				
A-D	26	7			26				
AB-CD	102	25	703	0.145	102	0.2	0.2	5.983	A
AB-C	176	44			176				
D-ABC	109	27	477	0.228	108	0.2	0.3	9.766	A
C-D	52	13			52				
C-A	96	24			96				
C-B	155	39			155				
CD-AB	238	60	663	0.359	237	0.4	0.6	8.451	A
CD-A	74	18			74				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	234	58	519	0.450	234	0.8	0.8	12.600	B
A-B	72	18			72				
A-C	101	25			101				
A-D	26	7			26				
AB-CD	102	26	703	0.145	102	0.2	0.2	5.994	A
AB-C	177	44			177				
D-ABC	109	27	477	0.228	109	0.3	0.3	9.785	A
C-D	52	13			52				
C-A	96	24			96				
C-B	155	39			155				
CD-AB	238	60	663	0.360	238	0.6	0.6	8.484	A
CD-A	74	18			74				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	191	48	536	0.356	192	0.8	0.6	10.477	B
A-B	58	15			58				
A-C	82	21			82				
A-D	21	5			21				
AB-CD	78	20	690	0.114	79	0.2	0.2	5.901	A
AB-C	150	37			150				
D-ABC	89	22	495	0.179	89	0.3	0.2	8.880	A
C-D	42	11			42				
C-A	79	20			79				
C-B	127	32			127				
CD-AB	188	47	658	0.286	189	0.6	0.5	7.692	A
CD-A	67	17			67				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	160	40	548	0.291	160	0.6	0.4	9.289	A
A-B	49	12			49				
A-C	69	17			69				
A-D	18	5			18				
AB-CD	62	16	680	0.092	63	0.2	0.1	5.839	A
AB-C	129	32			129				
D-ABC	74	19	508	0.146	75	0.2	0.2	8.311	A
C-D	35	9			35				
C-A	66	16			66				
C-B	106	27			106				
CD-AB	153	38	654	0.234	154	0.5	0.3	7.207	A
CD-A	60	15			60				

2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		5.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D11 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	152	100.000
B		ONE HOUR	✓	288	100.000
C		ONE HOUR	✓	228	100.000
D		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	73	67	12
	B	49	0	184	55
	C	62	136	0	30
	D	9	35	22	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A	B	C	D
	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.56	14.50	1.3	B	265	397
A-B					67	100
A-C					61	92
A-D					11	17
AB-CD	0.16	5.69	0.3	A	92	137
AB-C					200	300
D-ABC	0.15	8.59	0.2	A	61	91
C-D					28	42
C-A					57	86
C-B					125	187
CD-AB	0.33	8.38	0.5	A	175	263
CD-A					47	71

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	217	54	584	0.372	215	0.0	0.6	9.688	A
A-B	55	14			55				
A-C	50	13			50				
A-D	9	2			9				
AB-CD	69	17	708	0.097	68	0.0	0.2	5.618	A
AB-C	169	42			169				
D-ABC	50	12	521	0.096	49	0.0	0.1	7.631	A
C-D	23	6			23				
C-A	47	12			47				
C-B	102	26			102				
CD-AB	140	35	641	0.218	139	0.0	0.3	7.149	A
CD-A	42	11			42				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	259	65	576	0.450	258	0.6	0.8	11.289	B
A-B	65	16			65				
A-C	60	15			60				
A-D	11	3			11				
AB-CD	88	22	727	0.121	88	0.2	0.2	5.633	A
AB-C	197	49			197				
D-ABC	60	15	509	0.117	59	0.1	0.1	8.010	A
C-D	27	7			27				
C-A	56	14			56				
C-B	122	30			122				
CD-AB	171	43	643	0.266	170	0.3	0.4	7.616	A
CD-A	47	12			47				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	318	79	566	0.561	316	0.8	1.2	14.305	B
A-B	80	20			80				
A-C	73	18			73				
A-D	14	3			14				
AB-CD	117	29	751	0.156	117	0.2	0.3	5.675	A
AB-C	232	58			232				
D-ABC	73	18	492	0.148	73	0.1	0.2	8.579	A
C-D	33	8			33				
C-A	69	17			69				
C-B	149	37			149				
CD-AB	214	54	644	0.333	214	0.4	0.5	8.347	A
CD-A	53	13			53				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	318	79	566	0.562	318	1.2	1.3	14.497	B
A-B	80	20			80				
A-C	73	18			73				
A-D	14	3			14				
AB-CD	118	29	752	0.157	118	0.3	0.3	5.686	A
AB-C	232	58			232				
D-ABC	73	18	492	0.148	73	0.2	0.2	8.592	A
C-D	33	8			33				
C-A	69	17			69				
C-B	149	37			149				
CD-AB	214	54	644	0.333	214	0.5	0.5	8.378	A
CD-A	53	13			53				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	259	65	576	0.450	261	1.3	0.8	11.480	B
A-B	65	16			65				
A-C	60	15			60				
A-D	11	3			11				
AB-CD	89	22	728	0.122	89	0.3	0.2	5.647	A
AB-C	199	50			199				
D-ABC	60	15	508	0.117	60	0.2	0.1	8.026	A
C-D	27	7			27				
C-A	56	14			56				
C-B	122	30			122				
CD-AB	171	43	643	0.266	171	0.5	0.4	7.656	A
CD-A	47	12			47				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	217	54	584	0.372	218	0.8	0.6	9.867	A
A-B	55	14			55				
A-C	50	13			50				
A-D	9	2			9				
AB-CD	70	17	710	0.098	70	0.2	0.2	5.632	A
AB-C	171	43			171				
D-ABC	50	12	520	0.096	50	0.1	0.1	7.652	A
C-D	23	6			23				
C-A	47	12			47				
C-B	102	26			102				
CD-AB	141	35	642	0.219	141	0.4	0.3	7.204	A
CD-A	42	11			42				

2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		4.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D12 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	181	100.000
B		ONE HOUR	✓	218	100.000
C		ONE HOUR	✓	275	100.000
D		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	66	91	24
	B	75	0	101	42
	C	87	141	0	47
	D	18	37	44	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.46	12.85	0.8	B	200	300
A-B					61	91
A-C					84	126
A-D					22	33
AB-CD	0.15	5.96	0.2	A	81	122
AB-C					155	233
D-ABC	0.23	9.80	0.3	A	91	136
C-D					43	64
C-A					80	120
C-B					130	194
CD-AB	0.36	8.49	0.6	A	193	289
CD-A					67	101

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	550	0.299	163	0.0	0.4	9.257	A
A-B	50	12			50				
A-C	69	17			69				
A-D	18	5			18				
AB-CD	62	16	682	0.091	62	0.0	0.1	5.802	A
AB-C	131	33			131				
D-ABC	74	19	508	0.146	74	0.0	0.2	8.278	A
C-D	35	9			35				
C-A	66	16			66				
C-B	106	27			106				
CD-AB	153	38	654	0.233	151	0.0	0.3	7.149	A
CD-A	61	15			61				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	537	0.365	196	0.4	0.6	10.508	B
A-B	59	15			59				
A-C	82	21			82				
A-D	21	5			21				
AB-CD	78	20	692	0.113	78	0.1	0.2	5.862	A
AB-C	153	38			153				
D-ABC	89	22	495	0.180	89	0.2	0.2	8.864	A
C-D	42	11			42				
C-A	79	20			79				
C-B	127	32			127				
CD-AB	188	47	658	0.285	187	0.3	0.4	7.650	A
CD-A	67	17			67				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	240	60	520	0.462	239	0.6	0.8	12.746	B
A-B	73	18			73				
A-C	101	25			101				
A-D	26	7			26				
AB-CD	103	26	707	0.145	102	0.2	0.2	5.957	A
AB-C	181	45			181				
D-ABC	109	27	476	0.228	108	0.2	0.3	9.780	A
C-D	52	13			52				
C-A	96	24			96				
C-B	155	39			155				
CD-AB	238	60	663	0.359	237	0.4	0.6	8.457	A
CD-A	74	18			74				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	240	60	520	0.462	240	0.8	0.8	12.846	B
A-B	73	18			73				
A-C	101	25			101				
A-D	26	7			26				
AB-CD	103	26	707	0.146	103	0.2	0.2	5.964	A
AB-C	181	45			181				
D-ABC	109	27	476	0.228	109	0.3	0.3	9.799	A
C-D	52	13			52				
C-A	96	24			96				
C-B	155	39			155				
CD-AB	238	60	663	0.360	238	0.6	0.6	8.491	A
CD-A	74	18			74				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	537	0.365	197	0.8	0.6	10.618	B
A-B	59	15			59				
A-C	82	21			82				
A-D	21	5			21				
AB-CD	79	20	693	0.114	79	0.2	0.2	5.875	A
AB-C	154	38			154				
D-ABC	89	22	494	0.180	89	0.3	0.2	8.888	A
C-D	42	11			42				
C-A	79	20			79				
C-B	127	32			127				
CD-AB	188	47	658	0.286	189	0.6	0.5	7.696	A
CD-A	67	17			67				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	549	0.299	165	0.6	0.4	9.377	A
A-B	50	12			50				
A-C	69	17			69				
A-D	18	5			18				
AB-CD	63	16	683	0.092	63	0.2	0.1	5.819	A
AB-C	132	33			132				
D-ABC	74	19	508	0.146	75	0.2	0.2	8.318	A
C-D	35	9			35				
C-A	66	16			66				
C-B	106	27			106				
CD-AB	153	38	654	0.234	154	0.5	0.3	7.210	A
CD-A	60	15			60				

2034 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		3.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2034 + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	(D1 * G3) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	143	100.000
B		ONE HOUR	✓	201	100.000
C		ONE HOUR	✓	167	100.000
D		ONE HOUR	✓	59	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	61	69	13
	B	43	0	101	57
	C	65	71	0	31
	D	10	27	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.39	10.46	0.6	B	184	277
A-B					56	84
A-C					63	95
A-D					12	18
AB-CD	0.15	5.99	0.2	A	83	125
AB-C					137	205
D-ABC	0.13	8.23	0.1	A	54	81
C-D					29	43
C-A					59	89
C-B					65	98
CD-AB	0.19	6.86	0.3	A	101	151
CD-A					57	86

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	581	0.260	150	0.0	0.3	8.324	A
A-B	46	12			46				
A-C	52	13			52				
A-D	10	2			10				
AB-CD	64	16	679	0.095	64	0.0	0.1	5.853	A
AB-C	115	29			115				
D-ABC	45	11	525	0.085	44	0.0	0.1	7.487	A
C-D	23	6			23				
C-A	49	12			49				
C-B	53	13			53				
CD-AB	81	20	644	0.125	80	0.0	0.2	6.372	A
CD-A	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	574	0.314	180	0.3	0.5	9.123	A
A-B	55	14			55				
A-C	62	15			62				
A-D	12	3			12				
AB-CD	81	20	690	0.117	80	0.1	0.2	5.904	A
AB-C	135	34			135				
D-ABC	53	13	515	0.103	53	0.1	0.1	7.783	A
C-D	28	7			28				
C-A	58	15			58				
C-B	64	16			64				
CD-AB	98	25	646	0.152	98	0.2	0.2	6.567	A
CD-A	57	14			57				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	221	55	565	0.391	220	0.5	0.6	10.422	B
A-B	68	17			68				
A-C	76	19			76				
A-D	14	4			14				
AB-CD	105	26	705	0.148	104	0.2	0.2	5.986	A
AB-C	159	40			159				
D-ABC	65	16	503	0.130	65	0.1	0.1	8.221	A
C-D	34	9			34				
C-A	71	18			71				
C-B	78	20			78				
CD-AB	123	31	649	0.190	123	0.2	0.3	6.847	A
CD-A	66	17			66				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	221	55	565	0.391	221	0.6	0.6	10.464	B
A-B	68	17			68				
A-C	76	19			76				
A-D	14	4			14				
AB-CD	105	26	706	0.149	105	0.2	0.2	5.994	A
AB-C	159	40			159				
D-ABC	65	16	503	0.130	65	0.1	0.1	8.228	A
C-D	34	9			34				
C-A	71	18			71				
C-B	78	20			78				
CD-AB	123	31	649	0.190	123	0.3	0.3	6.857	A
CD-A	66	17			66				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	574	0.315	181	0.6	0.5	9.178	A
A-B	55	14			55				
A-C	62	15			62				
A-D	12	3			12				
AB-CD	81	20	690	0.117	81	0.2	0.2	5.918	A
AB-C	135	34			135				
D-ABC	53	13	515	0.103	53	0.1	0.1	7.794	A
C-D	28	7			28				
C-A	58	15			58				
C-B	64	16			64				
CD-AB	98	25	646	0.152	99	0.3	0.2	6.585	A
CD-A	57	14			57				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	581	0.260	152	0.5	0.4	8.398	A
A-B	46	12			46				
A-C	52	13			52				
A-D	10	2			10				
AB-CD	65	16	679	0.096	65	0.2	0.1	5.871	A
AB-C	116	29			116				
D-ABC	45	11	524	0.085	45	0.1	0.1	7.506	A
C-D	23	6			23				
C-A	49	12			49				
C-B	53	13			53				
CD-AB	81	20	644	0.125	81	0.2	0.2	6.395	A
CD-A	49	12			49				

2034 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		3.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2034 + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	(D2 * G4) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	176	100.000
C		ONE HOUR	✓	223	100.000
D		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	61	95	25
	B	72	0	62	42
	C	90	85	0	48
	D	18	39	45	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.37	11.10	0.6	B	162	243
A-B					56	84
A-C					87	130
A-D					23	34
AB-CD	0.14	6.06	0.2	A	78	117
AB-C					127	190
D-ABC	0.23	9.45	0.3	A	94	140
C-D					44	67
C-A					83	124
C-B					78	117
CD-AB	0.25	7.21	0.4	A	134	201
CD-A					79	118

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	133	33	545	0.244	132	0.0	0.3	8.678	A
A-B	46	11			46				
A-C	71	18			71				
A-D	19	5			19				
AB-CD	60	15	672	0.090	60	0.0	0.1	5.874	A
AB-C	107	27			107				
D-ABC	77	19	519	0.148	76	0.0	0.2	8.108	A
C-D	36	9			36				
C-A	68	17			68				
C-B	64	16			64				
CD-AB	106	26	656	0.162	105	0.0	0.2	6.529	A
CD-A	68	17			68				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	159	40	534	0.297	158	0.3	0.4	9.570	A
A-B	55	14			55				
A-C	85	21			85				
A-D	22	6			22				
AB-CD	75	19	681	0.111	75	0.1	0.2	5.944	A
AB-C	125	31			125				
D-ABC	92	23	509	0.180	92	0.2	0.2	8.629	A
C-D	43	11			43				
C-A	81	20			81				
C-B	76	19			76				
CD-AB	130	33	660	0.197	130	0.2	0.3	6.792	A
CD-A	78	20			78				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	49	518	0.375	194	0.4	0.6	11.054	B
A-B	67	17			67				
A-C	104	26			104				
A-D	27	7			27				
AB-CD	97	24	692	0.141	97	0.2	0.2	6.051	A
AB-C	148	37			148				
D-ABC	112	28	493	0.228	112	0.2	0.3	9.423	A
C-D	53	13			53				
C-A	99	25			99				
C-B	93	23			93				
CD-AB	166	41	666	0.249	165	0.3	0.4	7.188	A
CD-A	90	22			90				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	49	518	0.375	194	0.6	0.6	11.103	B
A-B	67	17			67				
A-C	104	26			104				
A-D	27	7			27				
AB-CD	98	24	692	0.141	98	0.2	0.2	6.061	A
AB-C	148	37			148				
D-ABC	112	28	493	0.228	112	0.3	0.3	9.447	A
C-D	53	13			53				
C-A	99	25			99				
C-B	93	23			93				
CD-AB	166	41	666	0.249	166	0.4	0.4	7.208	A
CD-A	90	22			90				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	159	40	534	0.297	159	0.6	0.4	9.631	A
A-B	55	14			55				
A-C	85	21			85				
A-D	22	6			22				
AB-CD	76	19	681	0.111	76	0.2	0.2	5.959	A
AB-C	125	31			125				
D-ABC	92	23	508	0.180	92	0.3	0.2	8.651	A
C-D	43	11			43				
C-A	81	20			81				
C-B	76	19			76				
CD-AB	131	33	660	0.198	131	0.4	0.3	6.817	A
CD-A	78	20			78				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	133	33	545	0.244	133	0.4	0.3	8.757	A
A-B	46	11			46				
A-C	71	18			71				
A-D	19	5			19				
AB-CD	61	15	673	0.091	61	0.2	0.1	5.890	A
AB-C	107	27			107				
D-ABC	77	19	519	0.148	77	0.2	0.2	8.145	A
C-D	36	9			36				
C-A	68	17			68				
C-B	64	16			64				
CD-AB	106	27	656	0.162	107	0.3	0.2	6.561	A
CD-A	68	17			68				

2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		5.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	155	100.000
B		ONE HOUR	✓	281	100.000
C		ONE HOUR	✓	229	100.000
D		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	73	69	13
	B	50	0	174	57
	C	65	133	0	31
	D	10	36	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.55	14.16	1.2	B	258	387
A-B					67	101
A-C					63	95
A-D					12	18
AB-CD	0.16	5.76	0.3	A	94	140
AB-C					193	290
D-ABC	0.15	8.64	0.2	A	63	94
C-D					29	43
C-A					59	89
C-B					122	183
CD-AB	0.33	8.34	0.5	A	174	261
CD-A					49	74

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	211	53	582	0.363	209	0.0	0.6	9.597	A
A-B	55	14			55				
A-C	52	13			52				
A-D	10	2			10				
AB-CD	70	18	705	0.100	70	0.0	0.2	5.667	A
AB-C	163	41			163				
D-ABC	51	13	521	0.099	51	0.0	0.1	7.658	A
C-D	23	6			23				
C-A	49	12			49				
C-B	100	25			100				
CD-AB	139	35	642	0.217	138	0.0	0.3	7.129	A
CD-A	44	11			44				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	574	0.440	252	0.6	0.8	11.129	B
A-B	66	16			66				
A-C	62	15			62				
A-D	12	3			12				
AB-CD	90	22	722	0.124	90	0.2	0.2	5.694	A
AB-C	191	48			191				
D-ABC	61	15	509	0.121	61	0.1	0.1	8.045	A
C-D	28	7			28				
C-A	58	15			58				
C-B	120	30			120				
CD-AB	169	42	643	0.263	169	0.3	0.4	7.586	A
CD-A	49	12			49				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	309	77	563	0.549	308	0.8	1.2	13.991	B
A-B	81	20			81				
A-C	76	19			76				
A-D	14	4			14				
AB-CD	119	30	745	0.160	119	0.2	0.3	5.751	A
AB-C	224	56			224				
D-ABC	75	19	492	0.153	75	0.1	0.2	8.629	A
C-D	34	9			34				
C-A	71	18			71				
C-B	146	37			146				
CD-AB	213	53	645	0.330	212	0.4	0.5	8.307	A
CD-A	55	14			55				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	309	77	563	0.549	309	1.2	1.2	14.164	B
A-B	81	20			81				
A-C	76	19			76				
A-D	14	4			14				
AB-CD	120	30	746	0.161	120	0.3	0.3	5.760	A
AB-C	224	56			224				
D-ABC	75	19	492	0.153	75	0.2	0.2	8.639	A
C-D	34	9			34				
C-A	71	18			71				
C-B	146	37			146				
CD-AB	213	53	645	0.330	213	0.5	0.5	8.337	A
CD-A	55	14			55				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	253	63	574	0.440	254	1.2	0.8	11.303	B
A-B	66	16			66				
A-C	62	15			62				
A-D	12	3			12				
AB-CD	91	23	723	0.126	91	0.3	0.2	5.707	A
AB-C	192	48			192				
D-ABC	61	15	508	0.121	61	0.2	0.1	8.059	A
C-D	28	7			28				
C-A	58	15			58				
C-B	120	30			120				
CD-AB	170	42	643	0.264	170	0.5	0.4	7.626	A
CD-A	49	12			49				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	211	53	582	0.363	212	0.8	0.6	9.765	A
A-B	55	14			55				
A-C	52	13			52				
A-D	10	2			10				
AB-CD	71	18	706	0.101	72	0.2	0.2	5.682	A
AB-C	165	41			165				
D-ABC	51	13	520	0.099	51	0.1	0.1	7.680	A
C-D	23	6			23				
C-A	49	12			49				
C-B	100	25			100				
CD-AB	139	35	642	0.217	140	0.4	0.3	7.178	A
CD-A	44	11			44				

2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		4.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	186	100.000
B		ONE HOUR	✓	217	100.000
C		ONE HOUR	✓	282	100.000
D		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	67	95	25
	B	76	0	98	43
	C	90	144	0	48
	D	18	39	45	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.46	12.99	0.9	B	199	299
A-B					61	92
A-C					87	130
A-D					23	34
AB-CD	0.15	6.02	0.3	A	84	126
AB-C					155	232
D-ABC	0.24	9.95	0.3	A	94	140
C-D					44	67
C-A					83	124
C-B					132	198
CD-AB	0.37	8.60	0.7	A	198	298
CD-A					69	103

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	547	0.299	162	0.0	0.4	9.310	A
A-B	50	13			50				
A-C	71	18			71				
A-D	19	5			19				
AB-CD	64	16	681	0.094	64	0.0	0.1	5.832	A
AB-C	131	33			131				
D-ABC	77	19	506	0.152	76	0.0	0.2	8.352	A
C-D	36	9			36				
C-A	68	17			68				
C-B	108	27			108				
CD-AB	157	39	655	0.239	155	0.0	0.3	7.195	A
CD-A	62	16			62				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	195	49	534	0.366	195	0.4	0.6	10.585	B
A-B	60	15			60				
A-C	85	21			85				
A-D	22	6			22				
AB-CD	81	20	691	0.117	81	0.1	0.2	5.900	A
AB-C	153	38			153				
D-ABC	92	23	493	0.186	92	0.2	0.2	8.965	A
C-D	43	11			43				
C-A	81	20			81				
C-B	129	32			129				
CD-AB	193	48	659	0.293	192	0.3	0.5	7.716	A
CD-A	69	17			69				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	239	60	517	0.463	238	0.6	0.8	12.883	B
A-B	73	18			73				
A-C	104	26			104				
A-D	27	7			27				
AB-CD	106	27	705	0.151	106	0.2	0.2	6.008	A
AB-C	180	45			180				
D-ABC	112	28	474	0.237	112	0.2	0.3	9.933	A
C-D	53	13			53				
C-A	99	25			99				
C-B	158	40			158				
CD-AB	245	61	664	0.369	244	0.5	0.7	8.566	A
CD-A	75	19			75				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	239	60	516	0.464	239	0.8	0.9	12.988	B
A-B	73	18			73				
A-C	104	26			104				
A-D	27	7			27				
AB-CD	107	27	705	0.151	107	0.2	0.3	6.015	A
AB-C	180	45			180				
D-ABC	112	28	474	0.237	112	0.3	0.3	9.955	A
C-D	53	13			53				
C-A	99	25			99				
C-B	158	40			158				
CD-AB	245	61	664	0.369	245	0.7	0.7	8.604	A
CD-A	75	19			75				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	195	49	534	0.366	196	0.9	0.6	10.700	B
A-B	60	15			60				
A-C	85	21			85				
A-D	22	6			22				
AB-CD	82	20	692	0.118	82	0.3	0.2	5.914	A
AB-C	153	38			153				
D-ABC	92	23	493	0.186	92	0.3	0.2	8.992	A
C-D	43	11			43				
C-A	81	20			81				
C-B	129	32			129				
CD-AB	193	48	659	0.293	194	0.7	0.5	7.764	A
CD-A	69	17			69				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	547	0.299	164	0.6	0.4	9.432	A
A-B	50	13			50				
A-C	71	18			71				
A-D	19	5			19				
AB-CD	65	16	681	0.095	65	0.2	0.1	5.848	A
AB-C	132	33			132				
D-ABC	77	19	506	0.152	77	0.2	0.2	8.394	A
C-D	36	9			36				
C-A	68	17			68				
C-B	108	27			108				
CD-AB	157	39	655	0.240	158	0.5	0.4	7.257	A
CD-A	62	15			62				

2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		5.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:15	08:45	15	✓	Simple	D17 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	156	100.000
B		ONE HOUR	✓	295	100.000
C		ONE HOUR	✓	234	100.000
D		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	A	B	C	D	
From	A	0	74	69	13
	B	51	0	187	57
	C	65	138	0	31
	D	10	36	23	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A	B	C	D
	A	0	5	5	0
	B	6	0	3	2
	C	5	0	0	0
	D	0	0	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.58	15.03	1.3	C	271	406
A-B					68	102
A-C					63	95
A-D					12	18
AB-CD	0.16	5.71	0.3	A	96	143
AB-C					203	305
D-ABC	0.15	8.69	0.2	A	63	94
C-D					29	43
C-A					59	89
C-B					127	190
CD-AB	0.34	8.47	0.6	A	179	269
CD-A					49	73

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	56	583	0.381	220	0.0	0.6	9.844	A
A-B	56	14			56				
A-C	52	13			52				
A-D	10	2			10				
AB-CD	71	18	710	0.101	71	0.0	0.2	5.627	A
AB-C	172	43			172				
D-ABC	51	13	519	0.099	51	0.0	0.1	7.683	A
C-D	23	6			23				
C-A	49	12			49				
C-B	104	26			104				
CD-AB	143	36	642	0.223	142	0.0	0.3	7.188	A
CD-A	43	11			43				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	265	66	575	0.461	264	0.6	0.8	11.545	B
A-B	67	17			67				
A-C	62	15			62				
A-D	12	3			12				
AB-CD	92	23	729	0.126	91	0.2	0.2	5.646	A
AB-C	201	50			201				
D-ABC	61	15	507	0.121	61	0.1	0.1	8.081	A
C-D	28	7			28				
C-A	58	15			58				
C-B	124	31			124				
CD-AB	174	44	643	0.271	174	0.3	0.4	7.671	A
CD-A	49	12			49				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	325	81	564	0.576	323	0.8	1.3	14.808	B
A-B	82	20			82				
A-C	76	19			76				
A-D	14	4			14				
AB-CD	122	31	754	0.162	122	0.2	0.3	5.698	A
AB-C	235	59			235				
D-ABC	75	19	489	0.153	75	0.1	0.2	8.681	A
C-D	34	9			34				
C-A	71	18			71				
C-B	152	38			152				
CD-AB	219	55	645	0.340	219	0.4	0.6	8.434	A
CD-A	54	13			54				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	325	81	564	0.576	325	1.3	1.3	15.030	C
A-B	82	20			82				
A-C	76	19			76				
A-D	14	4			14				
AB-CD	123	31	755	0.163	123	0.3	0.3	5.705	A
AB-C	236	59			236				
D-ABC	75	19	489	0.153	75	0.2	0.2	8.692	A
C-D	34	9			34				
C-A	71	18			71				
C-B	152	38			152				
CD-AB	220	55	645	0.340	219	0.6	0.6	8.467	A
CD-A	54	13			54				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	265	66	575	0.461	267	1.3	0.9	11.760	B
A-B	67	17			67				
A-C	62	15			62				
A-D	12	3			12				
AB-CD	93	23	730	0.127	93	0.3	0.2	5.661	A
AB-C	202	50			202				
D-ABC	61	15	506	0.121	61	0.2	0.1	8.096	A
C-D	28	7			28				
C-A	58	15			58				
C-B	124	31			124				
CD-AB	175	44	643	0.272	175	0.6	0.4	7.714	A
CD-A	48	12			48				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	56	583	0.381	223	0.9	0.6	10.036	B
A-B	56	14			56				
A-C	52	13			52				
A-D	10	2			10				
AB-CD	73	18	712	0.102	73	0.2	0.2	5.641	A
AB-C	174	43			174				
D-ABC	51	13	519	0.099	51	0.1	0.1	7.709	A
C-D	23	6			23				
C-A	49	12			49				
C-B	104	26			104				
CD-AB	144	36	642	0.224	144	0.4	0.3	7.241	A
CD-A	43	11			43				

2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way		4.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:00	17:30	15	✓	Simple	D18 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	187	100.000
B		ONE HOUR	✓	223	100.000
C		ONE HOUR	✓	282	100.000
D		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A	B	C	D
	A	0	68	95	25
	B	77	0	103	43
	C	90	144	0	48
	D	18	39	45	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.48	13.25	0.9	B	205	307
A-B					62	93
A-C					87	130
A-D					23	34
AB-CD	0.15	5.99	0.3	A	85	127
AB-C					159	238
D-ABC	0.24	9.97	0.3	A	94	140
C-D					44	67
C-A					83	124
C-B					132	198
CD-AB	0.37	8.61	0.7	A	198	298
CD-A					69	103

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	168	42	548	0.307	166	0.0	0.4	9.395	A
A-B	51	13			51				
A-C	71	18			71				
A-D	19	5			19				
AB-CD	65	16	683	0.094	64	0.0	0.1	5.812	A
AB-C	134	34			134				
D-ABC	77	19	506	0.152	76	0.0	0.2	8.358	A
C-D	36	9			36				
C-A	68	17			68				
C-B	108	27			108				
CD-AB	157	39	654	0.239	155	0.0	0.3	7.197	A
CD-A	62	16			62				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	535	0.375	200	0.4	0.6	10.723	B
A-B	61	15			61				
A-C	85	21			85				
A-D	22	6			22				
AB-CD	82	20	694	0.118	81	0.1	0.2	5.877	A
AB-C	157	39			157				
D-ABC	92	23	492	0.186	92	0.2	0.2	8.974	A
C-D	43	11			43				
C-A	81	20			81				
C-B	129	32			129				
CD-AB	193	48	658	0.293	192	0.3	0.5	7.719	A
CD-A	69	17			69				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	246	61	518	0.475	245	0.6	0.9	13.138	B
A-B	75	19			75				
A-C	104	26			104				
A-D	27	7			27				
AB-CD	107	27	709	0.151	107	0.2	0.3	5.978	A
AB-C	184	46			184				
D-ABC	112	28	474	0.237	112	0.2	0.3	9.948	A
C-D	53	13			53				
C-A	99	25			99				
C-B	158	40			158				
CD-AB	245	61	664	0.369	244	0.5	0.7	8.572	A
CD-A	75	19			75				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	246	61	517	0.475	246	0.9	0.9	13.253	B
A-B	75	19			75				
A-C	104	26			104				
A-D	27	7			27				
AB-CD	107	27	709	0.152	107	0.3	0.3	5.987	A
AB-C	185	46			185				
D-ABC	112	28	473	0.237	112	0.3	0.3	9.969	A
C-D	53	13			53				
C-A	99	25			99				
C-B	158	40			158				
CD-AB	245	61	664	0.369	245	0.7	0.7	8.608	A
CD-A	75	19			75				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	535	0.375	202	0.9	0.6	10.845	B
A-B	61	15			61				
A-C	85	21			85				
A-D	22	6			22				
AB-CD	82	21	695	0.118	82	0.3	0.2	5.893	A
AB-C	157	39			157				
D-ABC	92	23	492	0.186	92	0.3	0.2	9.004	A
C-D	43	11			43				
C-A	81	20			81				
C-B	129	32			129				
CD-AB	193	48	659	0.293	194	0.7	0.5	7.769	A
CD-A	69	17			69				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	168	42	548	0.307	169	0.6	0.4	9.523	A
A-B	51	13			51				
A-C	71	18			71				
A-D	19	5			19				
AB-CD	65	16	684	0.095	65	0.2	0.1	5.830	A
AB-C	135	34			135				
D-ABC	77	19	506	0.152	77	0.2	0.2	8.399	A
C-D	36	9			36				
C-A	68	17			68				
C-B	108	27			108				
CD-AB	157	39	655	0.240	158	0.5	0.4	7.260	A
CD-A	62	15			62				

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: A464 A4169 Shrewsbury Rd Haughton Ln.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\10 A464 A4169 Shrewsbury Rd Haughton Ln

Report generation date: 15/11/2024 15:28:41

-
- »2024 Base, AM
 - »2024 Base, PM
 - »2029 + Comm Dev, AM
 - »2029 + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev, AM
 - »2029 + Prop Dev + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev + Sens, AM
 - »2029 + Prop Dev + Comm Dev + Sens, PM
 - »2034 + Comm Dev, AM
 - »2034 + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev, AM
 - »2034 + Prop Dev + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev + Sens, AM
 - »2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
Arm 1	0.7	8.82	0.40	A	0.3	7.16	0.25	A
Arm 2	0.8	7.20	0.43	A	0.5	5.55	0.33	A
Arm 3	2.0	12.65	0.67	B	2.2	12.18	0.70	B
Arm 4	0.7	7.16	0.43	A	1.8	11.98	0.65	B
Arm 5	0.5	13.20	0.33	B	0.3	14.57	0.26	B
2029 + Comm Dev								
Arm 1	0.7	9.40	0.42	A	0.4	7.51	0.27	A
Arm 2	0.9	7.73	0.47	A	0.5	5.76	0.35	A
Arm 3	2.5	14.85	0.72	B	2.7	14.04	0.73	B
Arm 4	0.8	7.62	0.46	A	2.3	14.03	0.70	B
Arm 5	0.6	14.36	0.36	B	0.4	16.17	0.28	C
2029 + Prop Dev + Comm Dev								
Arm 1	0.8	9.72	0.43	A	0.4	7.92	0.28	A
Arm 2	1.2	9.14	0.55	A	0.6	6.07	0.38	A
Arm 3	2.9	17.69	0.75	C	3.0	15.53	0.76	C
Arm 4	0.9	8.07	0.49	A	3.1	17.69	0.76	C
Arm 5	0.6	15.10	0.37	C	0.4	18.16	0.31	C
2029 + Prop Dev + Comm Dev + Sens								
Arm 1	0.8	9.78	0.43	A	0.4	8.01	0.28	A
Arm 2	1.3	9.45	0.56	A	0.6	6.13	0.39	A
Arm 3	3.0	18.35	0.76	C	3.1	15.85	0.76	C
Arm 4	1.0	8.17	0.49	A	3.3	18.68	0.77	C
Arm 5	0.6	15.26	0.38	C	0.4	18.64	0.31	C
2034 + Comm Dev								
Arm 1	0.8	9.94	0.44	A	0.4	7.78	0.28	A
Arm 2	0.9	8.08	0.48	A	0.6	5.91	0.36	A
Arm 3	2.9	17.03	0.75	C	3.1	15.97	0.76	C
Arm 4	0.9	8.01	0.48	A	2.6	15.91	0.73	C
Arm 5	0.6	15.45	0.39	C	0.4	17.59	0.31	C
2034 + Prop Dev + Comm Dev								
Arm 1	0.8	10.29	0.45	B	0.4	8.22	0.30	A
Arm 2	1.3	9.63	0.57	A	0.7	6.23	0.40	A
Arm 3	3.5	20.83	0.79	C	3.5	17.91	0.79	C
Arm 4	1.0	8.52	0.51	A	3.7	20.71	0.79	C
Arm 5	0.7	16.31	0.40	C	0.5	19.96	0.34	C
2034 + Prop Dev + Comm Dev + Sens								
Arm 1	0.8	10.36	0.46	B	0.4	8.32	0.30	A
Arm 2	1.4	9.98	0.58	A	0.7	6.29	0.40	A
Arm 3	3.7	21.73	0.80	C	3.6	18.33	0.79	C
Arm 4	1.0	8.62	0.51	A	3.9	22.06	0.81	C
Arm 5	0.7	16.49	0.40	C	0.5	20.53	0.34	C

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

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

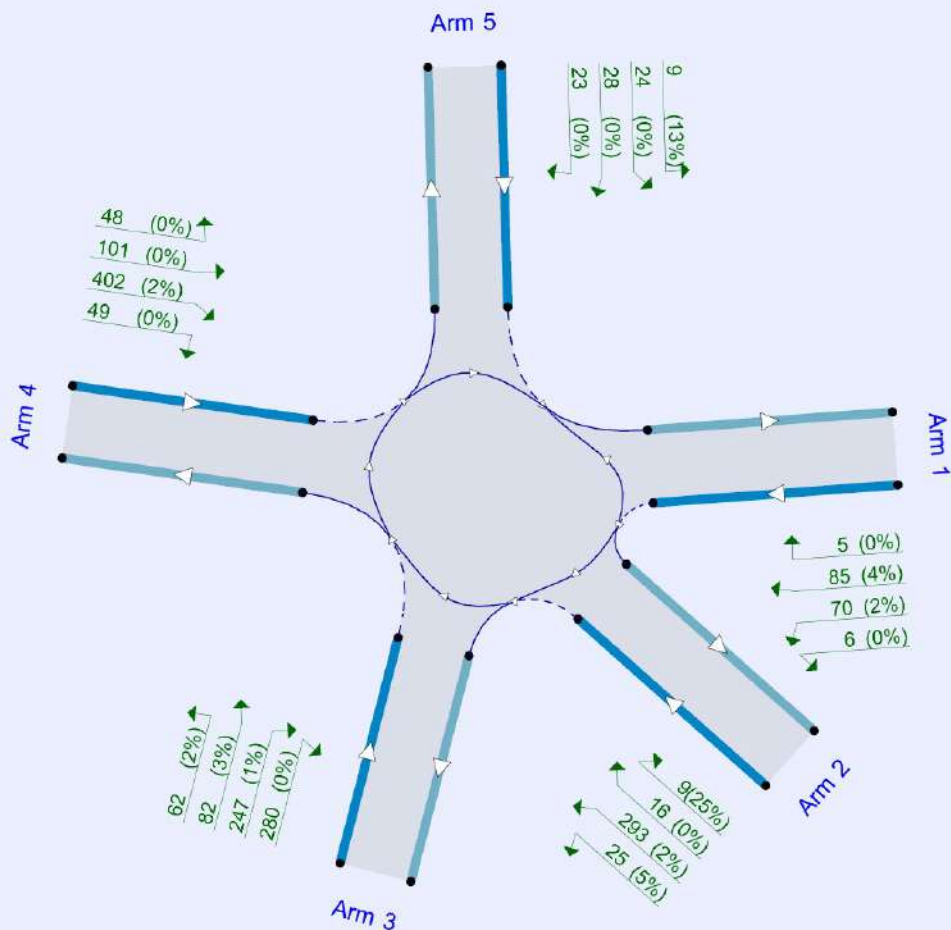
File summary

File Description

Title	South Albrighton
Location	A464 / A4169 / B4379 / Haughton Ln Rdbt
Site number	SH5034-13PD
Date	14/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	CAD-Laptop1\Brad Loxley
Description	

Units

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



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2024 Base	PM	ONE HOUR	16:15	17:45	15	✓		
D3	Proposed Development	AM	ONE HOUR	07:45	09:15	15			
D4	Proposed Development	PM	ONE HOUR	16:15	17:45	15			
D5	Committed Development	AM	ONE HOUR	07:45	09:15	15			
D6	Committed Development	PM	ONE HOUR	16:15	17:45	15			
D7	Sensitivity	AM	ONE HOUR	07:45	09:15	15			
D8	Sensitivity	PM	ONE HOUR	16:15	17:45	15			
D9	2029 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G1) + D5
D10	2029 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G2) + D6
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D11 + D7
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D12 + D8
D15	2034 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G3) + D5
D16	2034 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G4) + D6
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D17 + D7
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D18 + D8

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 AM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	9.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Shrewsbury Road	
2	Victoria Road	
3	A4169 Innage Road	
4	A464 Priorslee Road	
5	Haughton Lane (N)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.00	6.70	3.0	4.0	31.0	54.0	
2	3.90	4.90	1.0	11.0	31.0	47.0	
3	2.80	4.80	8.0	41.0	31.0	28.0	
4	3.70	4.70	34.0	6.0	31.0	36.0	
5	2.70	4.60	1.5	6.0	31.0	43.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.433	1026
2	0.510	1130
3	0.569	1223
4	0.515	1209
5	0.420	784

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	245	100.000
2		ONE HOUR	✓	344	100.000
3		ONE HOUR	✓	533	100.000
4		ONE HOUR	✓	344	100.000
5		ONE HOUR	✓	124	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
	1	2	3	4	5	
From	1	0	7	123	111	4
	2	3	0	13	314	14
	3	178	256	0	59	40
	4	48	260	25	0	11
	5	1	33	52	38	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
	1	2	3	4	5	
From	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.40	8.82	0.7	3.0	A	225	337
2	0.43	7.20	0.8	2.8	A	316	473
3	0.67	12.65	2.0	6.4	B	489	734
4	0.43	7.16	0.7	2.9	A	316	473
5	0.33	13.20	0.5	2.2	B	114	171

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	184	46	497	780	0.236	183	172	0.0	0.3	6.019	A
2	259	65	264	941	0.275	257	416	0.0	0.4	5.258	A
3	401	100	362	968	0.414	398	159	0.0	0.7	6.288	A
4	259	65	370	972	0.267	258	390	0.0	0.4	5.032	A
5	93	23	576	527	0.177	93	52	0.0	0.2	8.274	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	220	55	595	737	0.299	220	206	0.3	0.4	6.954	A
2	309	77	317	914	0.338	309	499	0.4	0.5	5.938	A
3	479	120	434	927	0.517	478	191	0.7	1.1	7.985	A
4	309	77	444	934	0.331	309	468	0.4	0.5	5.756	A
5	111	28	691	477	0.234	111	62	0.2	0.3	9.827	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	270	67	728	679	0.397	269	252	0.4	0.6	8.750	A
2	379	95	387	880	0.431	378	609	0.5	0.7	7.162	A
3	587	147	531	872	0.673	583	234	1.1	2.0	12.313	B
4	379	95	542	883	0.429	378	573	0.5	0.7	7.108	A
5	137	34	844	411	0.332	136	76	0.3	0.5	13.051	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	270	67	731	678	0.398	270	253	0.6	0.7	8.816	A
2	379	95	389	879	0.431	379	612	0.7	0.8	7.198	A
3	587	147	533	871	0.674	587	234	2.0	2.0	12.646	B
4	379	95	545	881	0.430	379	575	0.7	0.7	7.160	A
5	137	34	848	409	0.334	136	76	0.5	0.5	13.204	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	220	55	600	735	0.300	221	208	0.7	0.4	7.020	A
2	309	77	319	913	0.339	310	503	0.8	0.5	5.977	A
3	479	120	437	926	0.518	483	192	2.0	1.1	8.195	A
4	309	77	448	931	0.332	310	471	0.7	0.5	5.808	A
5	111	28	696	475	0.235	112	62	0.5	0.3	9.950	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	184	46	501	778	0.237	185	174	0.4	0.3	6.074	A
2	259	65	267	939	0.276	260	420	0.5	0.4	5.302	A
3	401	100	365	967	0.415	403	161	1.1	0.7	6.403	A
4	259	65	374	970	0.267	260	394	0.5	0.4	5.075	A
5	93	23	581	524	0.178	94	52	0.3	0.2	8.364	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2	0.38	0.00	0.00	0.38	0.38			N/A	N/A
3	0.70	0.55	1.00	1.40	1.45			N/A	N/A
4	0.36	0.00	0.00	0.36	0.36			N/A	N/A
5	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2	0.51	0.51	1.00	1.40	1.45			N/A	N/A
3	1.05	0.08	0.91	1.83	2.43			N/A	N/A
4	0.49	0.00	0.00	0.49	0.49			N/A	N/A
5	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.65	0.03	0.26	0.65	0.65			N/A	N/A
2	0.75	0.03	0.26	0.75	0.75			N/A	N/A
3	1.98	0.03	0.28	1.98	6.45			N/A	N/A
4	0.74	0.03	0.26	0.74	0.74			N/A	N/A
5	0.49	0.03	0.26	0.49	0.49			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.66	0.03	0.29	1.27	2.96			N/A	N/A
2	0.75	0.03	0.28	0.79	2.81			N/A	N/A
3	2.02	0.03	0.28	2.02	4.23			N/A	N/A
4	0.75	0.03	0.28	0.90	2.91			N/A	N/A
5	0.49	0.03	0.31	1.43	2.15			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2	0.52	0.52	1.00	1.40	1.45			N/A	N/A
3	1.09	0.07	0.84	2.06	2.88			N/A	N/A
4	0.50	0.50	1.00	1.40	1.45			N/A	N/A
5	0.31	0.00	0.00	0.31	0.31			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2	0.38	0.03	0.26	0.48	0.60			N/A	N/A
3	0.72	0.04	0.43	1.52	2.23			N/A	N/A
4	0.37	0.00	0.00	0.37	0.37			N/A	N/A
5	0.22	0.00	0.00	0.22	0.22			N/A	N/A

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.58	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:15	17:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	155	100.000
2		ONE HOUR	✓	288	100.000
3		ONE HOUR	✓	616	100.000
4		ONE HOUR	✓	511	100.000
5		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1	2	3	4	5
From	1	0	6	65	79	5
	2	8	0	19	246	15
	3	230	252	0	58	76
	4	94	326	46	0	45
	5	8	22	26	21	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.25	7.16	0.3	1.5	A	142	213
2	0.33	5.55	0.5	2.2	A	264	396
3	0.70	12.18	2.2	7.7	B	565	848
4	0.65	11.98	1.8	4.8	B	469	703
5	0.26	14.57	0.3	1.4	B	71	106

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	117	29	518	777	0.150	116	254	0.0	0.2	5.438	A
2	217	54	181	1008	0.215	216	453	0.0	0.3	4.537	A
3	464	116	280	1049	0.442	461	117	0.0	0.8	6.083	A
4	385	96	438	969	0.397	382	302	0.0	0.7	6.108	A
5	58	14	715	473	0.122	57	105	0.0	0.1	8.644	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	139	35	621	734	0.190	139	305	0.2	0.2	6.052	A
2	259	65	217	990	0.262	259	543	0.3	0.4	4.919	A
3	554	138	336	1017	0.544	552	140	0.8	1.2	7.716	A
4	459	115	525	924	0.497	458	363	0.7	1.0	7.703	A
5	69	17	857	414	0.167	69	126	0.1	0.2	10.435	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	171	43	758	675	0.253	170	372	0.2	0.3	7.122	A
2	317	79	265	966	0.328	317	663	0.4	0.5	5.542	A
3	678	170	411	974	0.697	674	171	1.2	2.2	11.853	B
4	563	141	641	864	0.651	559	444	1.0	1.8	11.670	B
5	85	21	1046	334	0.254	84	154	0.2	0.3	14.363	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	171	43	763	673	0.253	171	374	0.3	0.3	7.159	A
2	317	79	266	965	0.329	317	667	0.5	0.5	5.555	A
3	678	170	412	973	0.697	678	172	2.2	2.2	12.176	B
4	563	141	645	863	0.652	562	445	1.8	1.8	11.979	B
5	85	21	1052	332	0.256	85	155	0.3	0.3	14.568	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	139	35	628	731	0.191	140	308	0.3	0.2	6.096	A
2	259	65	219	989	0.262	259	549	0.5	0.4	4.937	A
3	554	138	337	1016	0.545	558	141	2.2	1.2	7.920	A
4	459	115	531	921	0.499	463	364	1.8	1.0	7.904	A
5	69	17	866	410	0.169	70	128	0.3	0.2	10.595	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	117	29	524	775	0.151	117	257	0.2	0.2	5.474	A
2	217	54	183	1007	0.215	217	458	0.4	0.3	4.559	A
3	464	116	282	1048	0.442	465	118	1.2	0.8	6.195	A
4	385	96	443	967	0.398	386	305	1.0	0.7	6.215	A
5	58	14	722	470	0.123	58	107	0.2	0.1	8.742	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3	0.78	0.55	1.00	1.40	1.45			N/A	N/A
4	0.65	0.55	1.00	1.40	1.45			N/A	N/A
5	0.14	0.00	0.00	0.14	0.14			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3	1.17	0.07	0.92	2.27	3.01			N/A	N/A
4	0.97	0.08	0.90	1.62	1.95			N/A	N/A
5	0.20	0.00	0.00	0.20	0.20			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.33	0.03	0.25	0.46	0.48			N/A	N/A
2	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3	2.20	0.03	0.29	2.20	7.66			N/A	N/A
4	1.80	0.03	0.28	1.80	4.81			N/A	N/A
5	0.33	0.03	0.26	0.47	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.03	0.32	1.16	1.45			N/A	N/A
2	0.49	0.03	0.30	1.36	2.18			N/A	N/A
3	2.25	0.03	0.27	2.25	4.11			N/A	N/A
4	1.84	0.03	0.27	1.84	3.73			N/A	N/A
5	0.34	0.03	0.32	1.16	1.44			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3	1.22	0.06	0.85	2.56	3.56			N/A	N/A
4	1.01	0.07	0.86	1.81	2.43			N/A	N/A
5	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3	0.80	0.04	0.43	1.78	2.74			N/A	N/A
4	0.67	0.04	0.44	1.27	1.86			N/A	N/A
5	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2029 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.83	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2029 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G1) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	255	100.000
2		ONE HOUR	✓	368	100.000
3		ONE HOUR	✓	555	100.000
4		ONE HOUR	✓	361	100.000
5		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
From		1	2	3	4	5
	1	0	7	128	116	4
	2	3	0	14	337	15
	3	185	266	0	61	42
	4	50	274	26	0	11
	5	1	34	54	40	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.42	9.40	0.7	3.1	A	234	351
2	0.47	7.73	0.9	2.7	A	338	507
3	0.72	14.85	2.5	10.3	B	509	763
4	0.46	7.62	0.8	2.9	A	331	497
5	0.36	14.36	0.6	2.6	B	118	178

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	192	48	519	770	0.249	191	179	0.0	0.3	6.196	A
2	277	69	275	935	0.296	275	435	0.0	0.4	5.444	A
3	418	104	384	956	0.437	415	166	0.0	0.8	6.616	A
4	272	68	385	964	0.282	270	414	0.0	0.4	5.179	A
5	97	24	602	516	0.188	96	54	0.0	0.2	8.562	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	622	725	0.316	229	215	0.3	0.5	7.241	A
2	331	83	329	908	0.364	330	522	0.4	0.6	6.224	A
3	499	125	461	912	0.547	497	199	0.8	1.2	8.641	A
4	325	81	462	924	0.351	324	496	0.4	0.5	5.989	A
5	116	29	721	464	0.250	116	64	0.2	0.3	10.325	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	281	70	760	665	0.422	280	262	0.5	0.7	9.314	A
2	405	101	403	872	0.465	404	637	0.6	0.9	7.678	A
3	611	153	564	853	0.716	606	243	1.2	2.4	14.282	B
4	397	99	563	872	0.456	396	607	0.5	0.8	7.547	A
5	142	36	881	395	0.360	141	79	0.3	0.5	14.146	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	281	70	764	664	0.423	281	263	0.7	0.7	9.401	A
2	405	101	404	871	0.465	405	640	0.9	0.9	7.728	A
3	611	153	566	852	0.717	610	244	2.4	2.5	14.850	B
4	397	99	567	870	0.457	397	609	0.8	0.8	7.617	A
5	142	36	885	393	0.362	142	79	0.5	0.6	14.356	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	628	723	0.317	230	217	0.7	0.5	7.326	A
2	331	83	332	907	0.365	332	526	0.9	0.6	6.275	A
3	499	125	464	910	0.548	504	200	2.5	1.2	8.954	A
4	325	81	468	921	0.352	326	500	0.8	0.5	6.055	A
5	116	29	728	461	0.252	117	65	0.6	0.3	10.493	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	192	48	524	768	0.250	192	181	0.5	0.3	6.262	A
2	277	69	277	934	0.297	278	439	0.6	0.4	5.494	A
3	418	104	388	954	0.438	419	167	1.2	0.8	6.759	A
4	272	68	389	961	0.283	272	418	0.5	0.4	5.228	A
5	97	24	608	513	0.189	98	54	0.3	0.2	8.673	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2	0.42	0.00	0.00	0.42	0.42			N/A	N/A
3	0.77	0.55	1.00	1.40	1.45			N/A	N/A
4	0.39	0.00	0.00	0.39	0.39			N/A	N/A
5	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3	1.18	0.07	0.91	2.31	3.08			N/A	N/A
4	0.54	0.54	1.00	1.40	1.45			N/A	N/A
5	0.33	0.00	0.00	0.33	0.33			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.72	0.03	0.26	0.72	0.72			N/A	N/A
2	0.86	0.03	0.26	0.86	0.86			N/A	N/A
3	2.39	0.03	0.30	2.39	10.32			N/A	N/A
4	0.82	0.03	0.26	0.82	0.82			N/A	N/A
5	0.55	0.03	0.26	0.55	0.55			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.73	0.03	0.29	1.17	3.12			N/A	N/A
2	0.86	0.03	0.28	0.86	2.71			N/A	N/A
3	2.46	0.03	0.28	2.46	6.59			N/A	N/A
4	0.83	0.03	0.28	0.83	2.88			N/A	N/A
5	0.56	0.03	0.31	1.49	2.60			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.58	0.09	0.81	1.36	1.43			N/A	N/A
3	1.24	0.06	0.73	2.76	3.94			N/A	N/A
4	0.55	0.08	0.75	1.35	1.43			N/A	N/A
5	0.34	0.00	0.00	0.34	0.34			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.03	0.26	0.46	0.49			N/A	N/A
2	0.43	0.03	0.33	1.08	1.29			N/A	N/A
3	0.79	0.04	0.39	1.83	2.95			N/A	N/A
4	0.40	0.03	0.29	0.77	1.13			N/A	N/A
5	0.24	0.03	0.25	0.45	0.48			N/A	N/A

2029 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.04	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2029 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G2) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	161	100.000
2		ONE HOUR	✓	304	100.000
3		ONE HOUR	✓	640	100.000
4		ONE HOUR	✓	539	100.000
5		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1	2	3	4	5
	1	0	6	68	82	5
	2	8	0	20	261	16
	3	239	262	0	60	79
	4	98	347	48	0	47
	5	8	23	27	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.27	7.51	0.4	1.2	A	148	222
2	0.35	5.76	0.5	2.5	A	279	419
3	0.73	14.04	2.7	11.4	B	588	882
4	0.70	14.03	2.3	8.6	B	495	742
5	0.28	16.17	0.4	1.3	C	73	110

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	121	30	544	766	0.158	121	264	0.0	0.2	5.571	A
2	229	57	188	1005	0.228	228	477	0.0	0.3	4.628	A
3	482	121	295	1041	0.463	479	121	0.0	0.9	6.366	A
4	406	102	455	960	0.423	403	318	0.0	0.7	6.432	A
5	60	15	749	459	0.131	60	110	0.0	0.1	9.001	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	145	36	653	720	0.201	145	317	0.2	0.2	6.252	A
2	274	68	226	986	0.278	273	572	0.3	0.4	5.051	A
3	576	144	354	1007	0.572	574	145	0.9	1.3	8.278	A
4	485	121	546	913	0.531	483	381	0.7	1.1	8.338	A
5	72	18	898	397	0.181	72	131	0.1	0.2	11.073	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	177	44	796	659	0.269	177	386	0.2	0.4	7.460	A
2	335	84	276	960	0.349	335	697	0.4	0.5	5.748	A
3	705	176	433	961	0.734	700	178	1.3	2.6	13.518	B
4	594	148	666	852	0.697	589	467	1.1	2.2	13.503	B
5	88	22	1095	314	0.281	87	160	0.2	0.4	15.859	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	177	44	802	657	0.270	177	389	0.4	0.4	7.508	A
2	335	84	277	960	0.349	335	702	0.5	0.5	5.762	A
3	705	176	434	961	0.734	705	179	2.6	2.7	14.037	B
4	594	148	671	849	0.699	594	468	2.2	2.3	14.033	B
5	88	22	1103	311	0.284	88	161	0.4	0.4	16.172	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	145	36	661	717	0.202	145	321	0.4	0.3	6.307	A
2	274	68	227	985	0.278	274	579	0.5	0.4	5.071	A
3	576	144	355	1006	0.572	581	147	2.7	1.4	8.572	A
4	485	121	553	910	0.533	489	384	2.3	1.2	8.642	A
5	72	18	909	392	0.184	73	133	0.4	0.2	11.297	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	121	30	551	763	0.159	122	267	0.3	0.2	5.612	A
2	229	57	190	1004	0.228	230	482	0.4	0.3	4.653	A
3	482	121	297	1040	0.464	484	122	1.4	0.9	6.502	A
4	406	102	460	957	0.424	408	321	1.2	0.7	6.568	A
5	60	15	757	455	0.132	61	111	0.2	0.2	9.122	A

Queue Variation Results for each time segment
16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3	0.85	0.55	1.00	1.40	1.45			N/A	N/A
4	0.72	0.55	1.00	1.40	1.45			N/A	N/A
5	0.15	0.00	0.00	0.15	0.15			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2	0.38	0.00	0.00	0.38	0.38			N/A	N/A
3	1.31	0.07	0.90	2.77	3.84			N/A	N/A
4	1.11	0.08	0.91	1.98	2.77			N/A	N/A
5	0.22	0.00	0.00	0.22	0.22			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.03	0.25	0.46	0.48			N/A	N/A
2	0.53	0.03	0.25	0.53	0.53			N/A	N/A
3	2.61	0.03	0.30	2.61	11.41			N/A	N/A
4	2.20	0.03	0.29	2.20	8.62			N/A	N/A
5	0.38	0.03	0.26	0.47	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.37	0.03	0.32	1.21	1.21			N/A	N/A
2	0.53	0.03	0.30	1.32	2.49			N/A	N/A
3	2.68	0.03	0.28	2.68	6.50			N/A	N/A
4	2.26	0.03	0.28	2.26	5.64			N/A	N/A
5	0.39	0.03	0.32	1.28	1.33			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3	1.37	0.06	0.73	3.16	4.64			N/A	N/A
4	1.16	0.06	0.78	2.46	3.45			N/A	N/A
5	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3	0.88	0.04	0.39	2.05	3.49			N/A	N/A
4	0.75	0.04	0.40	1.68	2.63			N/A	N/A
5	0.15	0.00	0.00	0.15	0.15			N/A	N/A

2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	255	100.000
2		ONE HOUR	✓	434	100.000
3		ONE HOUR	✓	559	100.000
4		ONE HOUR	✓	383	100.000
5		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1	2	3	4	5
From	1	0	7	128	116	4
	2	3	0	25	392	15
	3	185	270	0	61	42
	4	50	296	26	0	11
	5	1	34	54	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.43	9.72	0.8	3.2	A	234	351
2	0.55	9.14	1.2	2.4	A	398	597
3	0.75	17.69	2.9	14.0	C	513	769
4	0.49	8.07	0.9	2.8	A	351	527
5	0.37	15.10	0.6	2.7	C	118	178

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	192	48	538	762	0.252	191	179	0.0	0.3	6.288	A
2	327	82	274	936	0.349	325	454	0.0	0.5	5.870	A
3	421	105	425	932	0.451	417	174	0.0	0.8	6.955	A
4	288	72	388	962	0.300	287	455	0.0	0.4	5.319	A
5	97	24	621	507	0.192	96	54	0.0	0.2	8.738	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	645	715	0.321	229	214	0.3	0.5	7.393	A
2	390	98	329	909	0.429	389	545	0.5	0.7	6.921	A
3	502	126	510	883	0.569	500	209	0.8	1.3	9.351	A
4	344	86	465	922	0.373	344	545	0.4	0.6	6.217	A
5	116	29	744	454	0.256	116	64	0.2	0.3	10.631	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	281	70	788	653	0.430	280	261	0.5	0.7	9.611	A
2	478	119	403	872	0.548	476	665	0.7	1.2	9.042	A
3	615	154	624	818	0.752	609	255	1.3	2.8	16.715	C
4	422	105	566	870	0.485	420	667	0.6	0.9	7.982	A
5	142	36	908	383	0.371	141	78	0.3	0.6	14.834	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	281	70	792	651	0.431	281	263	0.7	0.8	9.720	A
2	478	119	404	871	0.548	478	669	1.2	1.2	9.141	A
3	615	154	626	817	0.753	615	256	2.8	2.9	17.693	C
4	422	105	571	867	0.486	422	670	0.9	0.9	8.075	A
5	142	36	914	380	0.374	142	79	0.6	0.6	15.103	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	652	712	0.322	230	217	0.8	0.5	7.490	A
2	390	98	332	907	0.430	392	551	1.2	0.8	7.007	A
3	502	126	514	881	0.570	509	210	2.9	1.4	9.815	A
4	344	86	472	918	0.375	346	550	0.9	0.6	6.300	A
5	116	29	753	450	0.258	117	65	0.6	0.4	10.836	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	192	48	544	759	0.253	193	181	0.5	0.3	6.359	A
2	327	82	277	934	0.350	328	459	0.8	0.5	5.941	A
3	421	105	429	930	0.453	423	176	1.4	0.8	7.133	A
4	288	72	393	959	0.301	289	459	0.6	0.4	5.378	A
5	97	24	627	504	0.193	98	54	0.4	0.2	8.858	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2	0.53	0.53	1.00	1.40	1.45			N/A	N/A
3	0.81	0.55	1.00	1.40	1.45			N/A	N/A
4	0.42	0.00	0.00	0.42	0.42			N/A	N/A
5	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.74	0.13	0.88	1.39	1.45			N/A	N/A
3	1.29	0.07	0.90	2.71	3.75			N/A	N/A
4	0.59	0.10	0.84	1.37	1.43			N/A	N/A
5	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.74	0.03	0.26	0.74	0.74			N/A	N/A
2	1.19	0.03	0.26	1.19	1.19			N/A	N/A
3	2.82	0.03	0.31	4.04	14.04			N/A	N/A
4	0.93	0.03	0.26	0.93	0.93			N/A	N/A
5	0.58	0.03	0.26	0.58	0.58			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.75	0.03	0.29	1.16	3.20			N/A	N/A
2	1.20	0.03	0.27	1.20	2.35			N/A	N/A
3	2.93	0.03	0.29	2.93	10.16			N/A	N/A
4	0.94	0.03	0.28	0.94	2.79			N/A	N/A
5	0.59	0.03	0.31	1.02	2.75			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.48	0.04	0.41	1.24	1.37			N/A	N/A
2	0.76	0.11	0.86	1.41	1.48			N/A	N/A
3	1.36	0.05	0.55	3.30	4.95			N/A	N/A
4	0.61	0.10	0.83	1.37	1.43			N/A	N/A
5	0.35	0.00	0.00	0.35	0.35			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.03	0.26	0.47	0.49			N/A	N/A
2	0.54	0.05	0.48	1.31	1.41			N/A	N/A
3	0.84	0.04	0.36	1.97	3.62			N/A	N/A
4	0.43	0.03	0.35	1.15	1.33			N/A	N/A
5	0.24	0.03	0.25	0.45	0.48			N/A	N/A

2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	13.89	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	161	100.000
2		ONE HOUR	✓	333	100.000
3		ONE HOUR	✓	649	100.000
4		ONE HOUR	✓	583	100.000
5		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1	2	3	4	5
	1	0	6	68	82	5
	2	8	0	25	285	16
	3	239	271	0	60	79
	4	98	391	48	0	47
	5	8	23	27	22	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	7.92	0.4	1.4	A	148	222
2	0.38	6.07	0.6	2.7	A	306	459
3	0.76	15.53	3.0	13.9	C	596	894
4	0.76	17.69	3.1	14.7	C	535	803
5	0.31	18.16	0.4	1.6	C	73	110

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	121	30	584	749	0.162	121	264	0.0	0.2	5.718	A
2	251	63	188	1005	0.250	250	516	0.0	0.3	4.759	A
3	489	122	313	1031	0.474	485	125	0.0	0.9	6.560	A
4	439	110	462	956	0.459	436	336	0.0	0.8	6.876	A
5	60	15	788	442	0.136	60	110	0.0	0.2	9.390	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	145	36	700	700	0.207	145	317	0.2	0.3	6.480	A
2	300	75	226	986	0.304	299	619	0.3	0.4	5.239	A
3	584	146	375	995	0.587	582	150	0.9	1.4	8.676	A
4	524	131	554	909	0.577	522	403	0.8	1.3	9.267	A
5	72	18	945	377	0.191	72	131	0.2	0.2	11.790	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	177	44	852	635	0.279	177	386	0.3	0.4	7.848	A
2	367	92	276	961	0.382	366	754	0.4	0.6	6.049	A
3	715	179	459	946	0.756	709	183	1.4	2.9	14.811	B
4	642	161	675	847	0.759	636	493	1.3	2.9	16.594	C
5	88	22	1151	290	0.304	87	160	0.2	0.4	17.673	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	177	44	860	632	0.281	177	389	0.4	0.4	7.920	A
2	367	92	277	960	0.382	367	760	0.6	0.6	6.071	A
3	715	179	460	945	0.756	715	184	2.9	3.0	15.531	C
4	642	161	680	844	0.761	642	494	2.9	3.1	17.691	C
5	88	22	1161	286	0.308	88	161	0.4	0.4	18.159	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	145	36	711	695	0.208	145	321	0.4	0.3	6.553	A
2	300	75	228	985	0.304	300	628	0.6	0.4	5.264	A
3	584	146	377	994	0.588	590	151	3.0	1.5	9.048	A
4	524	131	561	905	0.579	531	405	3.1	1.4	9.786	A
5	72	18	959	371	0.194	73	133	0.4	0.2	12.114	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	121	30	591	746	0.163	122	267	0.3	0.2	5.768	A
2	251	63	190	1004	0.250	251	523	0.4	0.3	4.788	A
3	489	122	315	1029	0.475	491	126	1.5	0.9	6.717	A
4	439	110	467	953	0.461	441	339	1.4	0.9	7.062	A
5	60	15	798	438	0.137	61	111	0.2	0.2	9.538	A

Queue Variation Results for each time segment
16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2	0.33	0.00	0.00	0.33	0.33			N/A	N/A
3	0.89	0.55	1.00	1.40	1.45			N/A	N/A
4	0.84	0.55	1.00	1.40	1.45			N/A	N/A
5	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3	1.39	0.06	0.89	3.01	4.33			N/A	N/A
4	1.33	0.07	0.89	2.85	3.96			N/A	N/A
5	0.23	0.00	0.00	0.23	0.23			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.38	0.03	0.25	0.46	0.48			N/A	N/A
2	0.61	0.03	0.25	0.61	0.61			N/A	N/A
3	2.90	0.03	0.31	3.57	13.87			N/A	N/A
4	2.92	0.03	0.31	4.35	14.69			N/A	N/A
5	0.42	0.03	0.26	0.47	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.03	0.32	1.28	1.40			N/A	N/A
2	0.62	0.03	0.29	1.14	2.72			N/A	N/A
3	3.00	0.03	0.28	3.00	8.74			N/A	N/A
4	3.05	0.03	0.29	3.05	10.68			N/A	N/A
5	0.44	0.03	0.33	1.37	1.65			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	1.46	0.05	0.62	3.58	5.36			N/A	N/A
4	1.41	0.05	0.55	3.48	5.25			N/A	N/A
5	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.92	0.04	0.37	2.24	3.91			N/A	N/A
4	0.87	0.04	0.36	2.06	3.78			N/A	N/A
5	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	12.43	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D11 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	255	100.000
2		ONE HOUR	✓	446	100.000
3		ONE HOUR	✓	560	100.000
4		ONE HOUR	✓	387	100.000
5		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1	2	3	4	5
From	1	0	7	128	116	4
	2	3	0	27	402	15
	3	185	271	0	61	42
	4	50	300	26	0	11
	5	1	34	54	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.43	9.78	0.8	3.2	A	234	351
2	0.56	9.45	1.3	2.4	A	409	614
3	0.76	18.35	3.0	14.9	C	514	770
4	0.49	8.17	1.0	2.8	A	355	533
5	0.38	15.26	0.6	2.8	C	118	178

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	192	48	542	760	0.252	191	179	0.0	0.3	6.306	A
2	336	84	274	936	0.359	334	458	0.0	0.6	5.955	A
3	421	105	433	928	0.454	418	175	0.0	0.8	7.021	A
4	291	73	389	961	0.303	290	462	0.0	0.4	5.345	A
5	97	24	625	506	0.192	96	54	0.0	0.2	8.771	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	650	713	0.321	229	214	0.3	0.5	7.423	A
2	401	100	329	909	0.441	400	549	0.6	0.8	7.064	A
3	503	126	519	878	0.573	501	210	0.8	1.3	9.499	A
4	348	87	466	922	0.378	347	554	0.4	0.6	6.259	A
5	116	29	749	452	0.257	116	64	0.2	0.3	10.691	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	281	70	793	651	0.431	280	261	0.5	0.7	9.672	A
2	491	123	403	872	0.563	489	670	0.8	1.3	9.344	A
3	616	154	635	812	0.759	610	257	1.3	2.9	17.262	C
4	426	107	567	870	0.490	425	677	0.6	0.9	8.042	A
5	142	36	913	381	0.373	141	78	0.3	0.6	14.973	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	281	70	798	649	0.433	281	263	0.7	0.8	9.785	A
2	491	123	404	872	0.563	491	674	1.3	1.3	9.454	A
3	616	154	637	811	0.760	616	258	2.9	3.0	18.354	C
4	426	107	572	867	0.492	426	681	0.9	1.0	8.168	A
5	142	36	919	378	0.376	142	79	0.6	0.6	15.256	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	229	57	657	710	0.323	230	218	0.8	0.5	7.523	A
2	401	100	332	907	0.442	403	555	1.3	0.8	7.163	A
3	503	126	523	876	0.574	510	212	3.0	1.4	10.001	B
4	348	87	474	918	0.379	349	559	1.0	0.6	6.351	A
5	116	29	758	448	0.259	117	65	0.6	0.4	10.906	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	192	48	548	758	0.253	193	181	0.5	0.3	6.376	A
2	336	84	277	934	0.359	337	463	0.8	0.6	6.034	A
3	421	105	437	925	0.455	424	177	1.4	0.8	7.206	A
4	291	73	394	959	0.304	292	467	0.6	0.4	5.404	A
5	97	24	631	503	0.193	98	54	0.4	0.2	8.896	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2	0.55	0.55	1.00	1.40	1.45			N/A	N/A
3	0.82	0.55	1.00	1.40	1.45			N/A	N/A
4	0.43	0.00	0.00	0.43	0.43			N/A	N/A
5	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2	0.78	0.12	0.88	1.41	1.48			N/A	N/A
3	1.31	0.07	0.89	2.78	3.87			N/A	N/A
4	0.60	0.11	0.85	1.37	1.44			N/A	N/A
5	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.75	0.03	0.26	0.75	0.75			N/A	N/A
2	1.26	0.03	0.27	1.26	1.26			N/A	N/A
3	2.92	0.03	0.32	4.59	14.87			N/A	N/A
4	0.94	0.03	0.26	0.94	0.94			N/A	N/A
5	0.58	0.03	0.26	0.58	0.58			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.76	0.03	0.29	1.15	3.22			N/A	N/A
2	1.27	0.03	0.27	1.27	2.36			N/A	N/A
3	3.04	0.03	0.29	3.04	11.04			N/A	N/A
4	0.96	0.03	0.28	0.96	2.77			N/A	N/A
5	0.59	0.03	0.31	1.03	2.77			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.48	0.04	0.42	1.25	1.38			N/A	N/A
2	0.80	0.10	0.87	1.21	1.21			N/A	N/A
3	1.38	0.05	0.51	3.41	5.17			N/A	N/A
4	0.62	0.10	0.84	1.37	1.43			N/A	N/A
5	0.36	0.03	0.25	0.46	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.34	0.03	0.26	0.47	0.50			N/A	N/A
2	0.57	0.05	0.49	1.33	1.44			N/A	N/A
3	0.85	0.04	0.36	1.99	3.72			N/A	N/A
4	0.44	0.04	0.36	1.18	1.34			N/A	N/A
5	0.24	0.03	0.25	0.45	0.48			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	14.36	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D12 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	161	100.000
2		ONE HOUR	✓	338	100.000
3		ONE HOUR	✓	651	100.000
4		ONE HOUR	✓	592	100.000
5		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
From		1	2	3	4	5
	1	0	6	68	82	5
	2	8	0	26	289	16
	3	239	273	0	60	79
	4	98	400	48	0	47
	5	8	23	27	22	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	8.01	0.4	1.4	A	148	222
2	0.39	6.13	0.6	2.7	A	311	466
3	0.76	15.85	3.1	14.4	C	598	897
4	0.77	18.68	3.3	16.2	C	543	815
5	0.31	18.64	0.4	1.7	C	73	110

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	121	30	592	746	0.163	121	264	0.0	0.2	5.750	A
2	255	64	188	1005	0.254	253	525	0.0	0.3	4.781	A
3	490	123	316	1029	0.477	487	126	0.0	0.9	6.597	A
4	446	111	464	955	0.467	442	339	0.0	0.9	6.976	A
5	60	15	796	439	0.137	60	110	0.0	0.2	9.475	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	145	36	710	696	0.208	145	317	0.2	0.3	6.529	A
2	304	76	226	986	0.309	304	629	0.3	0.4	5.273	A
3	586	146	379	993	0.590	584	151	0.9	1.4	8.756	A
4	532	133	556	908	0.586	530	407	0.9	1.4	9.481	A
5	72	18	955	373	0.193	72	131	0.2	0.2	11.951	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	177	44	864	630	0.282	177	386	0.3	0.4	7.934	A
2	373	93	275	961	0.388	372	765	0.4	0.6	6.106	A
3	717	179	463	944	0.760	711	184	1.4	3.0	15.081	C
4	652	163	677	845	0.771	645	497	1.4	3.1	17.393	C
5	88	22	1162	285	0.309	87	160	0.2	0.4	18.096	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	177	44	872	627	0.283	177	389	0.4	0.4	8.010	A
2	373	93	277	960	0.388	373	772	0.6	0.6	6.127	A
3	717	179	464	943	0.761	717	185	3.0	3.1	15.847	C
4	652	163	683	843	0.774	652	499	3.1	3.3	18.684	C
5	88	22	1173	281	0.314	88	161	0.4	0.4	18.642	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	145	36	721	691	0.210	145	321	0.4	0.3	6.605	A
2	304	76	228	985	0.309	305	639	0.6	0.5	5.299	A
3	586	146	380	992	0.591	592	152	3.1	1.5	9.147	A
4	532	133	563	904	0.589	540	409	3.3	1.5	10.069	B
5	72	18	970	366	0.197	73	133	0.4	0.2	12.301	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	121	30	600	743	0.163	122	267	0.3	0.2	5.802	A
2	255	64	190	1004	0.254	255	531	0.5	0.3	4.810	A
3	490	123	318	1028	0.477	493	127	1.5	0.9	6.756	A
4	446	111	469	952	0.468	448	342	1.5	0.9	7.171	A
5	60	15	806	435	0.139	61	111	0.2	0.2	9.628	A

Queue Variation Results for each time segment
16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.90	0.55	1.00	1.40	1.45			N/A	N/A
4	0.86	0.55	1.00	1.40	1.45			N/A	N/A
5	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	1.41	0.06	0.88	3.09	4.44			N/A	N/A
4	1.38	0.06	0.89	3.00	4.31			N/A	N/A
5	0.24	0.00	0.00	0.24	0.24			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.03	0.25	0.46	0.48			N/A	N/A
2	0.63	0.03	0.25	0.63	0.63			N/A	N/A
3	2.97	0.03	0.31	3.85	14.37			N/A	N/A
4	3.12	0.03	0.32	5.28	16.16			N/A	N/A
5	0.43	0.03	0.26	0.47	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.03	0.32	1.29	1.44			N/A	N/A
2	0.63	0.03	0.29	1.09	2.72			N/A	N/A
3	3.07	0.03	0.28	3.07	9.25			N/A	N/A
4	3.27	0.03	0.29	3.27	12.26			N/A	N/A
5	0.45	0.03	0.33	1.39	1.71			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3	1.48	0.05	0.60	3.65	5.51			N/A	N/A
4	1.47	0.05	0.50	3.70	5.70			N/A	N/A
5	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3	0.93	0.04	0.37	2.27	3.98			N/A	N/A
4	0.89	0.04	0.35	2.14	4.00			N/A	N/A
5	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2034 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	11.88	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2034 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G3) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	264	100.000
2		ONE HOUR	✓	380	100.000
3		ONE HOUR	✓	574	100.000
4		ONE HOUR	✓	373	100.000
5		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1	2	3	4	5
From	1	0	8	132	119	4
	2	3	0	14	348	15
	3	192	275	0	63	43
	4	52	283	27	0	12
	5	1	36	56	41	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.44	9.94	0.8	3.3	A	242	363
2	0.48	8.08	0.9	2.6	A	349	523
3	0.75	17.03	2.9	13.7	C	526	789
4	0.48	8.01	0.9	2.8	A	342	514
5	0.39	15.45	0.6	2.9	C	122	184

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	198	50	536	763	0.260	197	185	0.0	0.3	6.348	A
2	286	72	284	931	0.308	284	450	0.0	0.4	5.558	A
3	432	108	397	948	0.455	428	171	0.0	0.8	6.883	A
4	281	70	398	957	0.294	279	427	0.0	0.4	5.298	A
5	100	25	622	507	0.198	99	56	0.0	0.2	8.813	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	59	643	716	0.331	236	222	0.3	0.5	7.493	A
2	342	85	341	902	0.379	341	539	0.4	0.6	6.403	A
3	516	129	476	903	0.571	514	205	0.8	1.3	9.196	A
4	335	84	477	916	0.366	335	513	0.4	0.6	6.184	A
5	120	30	745	453	0.265	120	67	0.2	0.4	10.767	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	290	73	785	654	0.444	289	270	0.5	0.8	9.822	A
2	419	105	416	865	0.484	417	658	0.6	0.9	8.017	A
3	631	158	582	843	0.749	625	251	1.3	2.8	16.148	C
4	411	103	581	863	0.476	410	627	0.6	0.9	7.920	A
5	147	37	909	382	0.384	146	81	0.4	0.6	15.160	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	290	73	790	652	0.445	290	272	0.8	0.8	9.937	A
2	419	105	418	864	0.484	419	662	0.9	0.9	8.078	A
3	631	158	584	841	0.750	631	252	2.8	2.9	17.027	C
4	411	103	586	860	0.478	411	629	0.9	0.9	8.010	A
5	147	37	915	380	0.387	147	82	0.6	0.6	15.446	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	59	650	713	0.332	238	225	0.8	0.5	7.597	A
2	342	85	343	901	0.379	343	545	0.9	0.6	6.467	A
3	516	129	479	901	0.572	522	207	2.9	1.4	9.626	A
4	335	84	484	913	0.368	337	517	0.9	0.6	6.266	A
5	120	30	754	450	0.267	121	67	0.6	0.4	10.982	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	198	50	542	760	0.261	199	187	0.5	0.4	6.421	A
2	286	72	287	929	0.308	287	454	0.6	0.4	5.611	A
3	432	108	401	946	0.456	434	173	1.4	0.9	7.052	A
4	281	70	403	955	0.294	282	432	0.6	0.4	5.356	A
5	100	25	628	504	0.199	101	56	0.4	0.3	8.938	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3	0.82	0.55	1.00	1.40	1.45			N/A	N/A
4	0.41	0.00	0.00	0.41	0.41			N/A	N/A
5	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2	0.60	0.12	0.87	1.37	1.44			N/A	N/A
3	1.30	0.07	0.90	2.75	3.80			N/A	N/A
4	0.57	0.10	0.82	1.37	1.43			N/A	N/A
5	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.78	0.03	0.26	0.78	0.78			N/A	N/A
2	0.92	0.03	0.26	0.92	0.92			N/A	N/A
3	2.80	0.03	0.31	3.77	13.68			N/A	N/A
4	0.89	0.03	0.26	0.89	0.89			N/A	N/A
5	0.61	0.03	0.26	0.61	0.61			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.79	0.03	0.29	1.08	3.28			N/A	N/A
2	0.93	0.03	0.28	0.93	2.63			N/A	N/A
3	2.90	0.03	0.29	2.90	9.55			N/A	N/A
4	0.91	0.03	0.28	0.91	2.85			N/A	N/A
5	0.62	0.03	0.30	1.05	2.92			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.50	0.05	0.49	1.29	1.40			N/A	N/A
2	0.62	0.10	0.84	1.37	1.43			N/A	N/A
3	1.37	0.05	0.58	3.31	4.94			N/A	N/A
4	0.59	0.09	0.81	1.36	1.43			N/A	N/A
5	0.37	0.03	0.26	0.47	0.50			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.03	0.27	0.49	0.89			N/A	N/A
2	0.45	0.04	0.37	1.19	1.35			N/A	N/A
3	0.85	0.04	0.37	2.00	3.64			N/A	N/A
4	0.42	0.03	0.33	1.08	1.29			N/A	N/A
5	0.25	0.03	0.25	0.45	0.48			N/A	N/A

2034 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	13.45	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2034 + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	(D2 * G4) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	166	100.000
2		ONE HOUR	✓	314	100.000
3		ONE HOUR	✓	662	100.000
4		ONE HOUR	✓	557	100.000
5		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1	2	3	4	5
	1	0	6	70	85	5
	2	9	0	20	269	16
	3	247	271	0	62	82
	4	101	358	49	0	48
	5	9	24	28	23	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.28	7.78	0.4	1.5	A	153	229
2	0.36	5.91	0.6	2.6	A	288	433
3	0.76	15.97	3.1	14.8	C	607	911
4	0.73	15.91	2.6	11.6	C	511	766
5	0.31	17.59	0.4	1.7	C	76	114

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	125	31	562	759	0.165	125	273	0.0	0.2	5.670	A
2	237	59	194	1002	0.236	235	492	0.0	0.3	4.690	A
3	498	125	304	1035	0.481	494	125	0.0	0.9	6.613	A
4	419	105	470	952	0.440	416	328	0.0	0.8	6.676	A
5	62	16	773	449	0.139	62	113	0.0	0.2	9.283	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	150	37	674	711	0.210	149	327	0.2	0.3	6.405	A
2	283	71	233	982	0.288	282	590	0.3	0.4	5.142	A
3	595	149	365	1000	0.595	593	150	0.9	1.4	8.786	A
4	501	125	564	904	0.554	499	394	0.8	1.2	8.841	A
5	74	19	927	384	0.193	74	136	0.2	0.2	11.589	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	821	649	0.283	183	399	0.3	0.4	7.719	A
2	346	87	285	956	0.362	345	719	0.4	0.6	5.891	A
3	728	182	447	953	0.764	722	183	1.4	3.0	15.176	C
4	613	153	687	841	0.729	608	482	1.2	2.5	15.106	C
5	91	23	1129	299	0.304	90	165	0.2	0.4	17.150	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	828	646	0.284	183	402	0.4	0.4	7.783	A
2	346	87	286	955	0.362	346	725	0.6	0.6	5.909	A
3	728	182	448	952	0.765	728	184	3.0	3.1	15.966	C
4	613	153	693	838	0.732	613	483	2.5	2.6	15.907	C
5	91	23	1139	296	0.308	91	167	0.4	0.4	17.588	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	150	37	684	707	0.212	150	332	0.4	0.3	6.469	A
2	283	71	235	981	0.288	283	599	0.6	0.4	5.165	A
3	595	149	367	999	0.595	601	152	3.1	1.5	9.187	A
4	501	125	572	900	0.556	506	396	2.6	1.3	9.253	A
5	74	19	940	379	0.196	75	137	0.4	0.2	11.882	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	125	31	569	756	0.166	126	276	0.3	0.2	5.717	A
2	237	59	196	1001	0.236	237	498	0.4	0.3	4.716	A
3	498	125	307	1034	0.482	500	127	1.5	0.9	6.775	A
4	419	105	476	949	0.442	421	331	1.3	0.8	6.840	A
5	62	16	783	445	0.140	63	114	0.2	0.2	9.424	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3	0.91	0.55	1.00	1.40	1.45			N/A	N/A
4	0.78	0.55	1.00	1.40	1.45			N/A	N/A
5	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3	1.43	0.06	0.88	3.21	4.59			N/A	N/A
4	1.21	0.07	0.90	2.46	3.35			N/A	N/A
5	0.24	0.00	0.00	0.24	0.24			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.03	0.25	0.46	0.48			N/A	N/A
2	0.56	0.03	0.25	0.56	0.56			N/A	N/A
3	3.03	0.03	0.31	4.08	14.85			N/A	N/A
4	2.54	0.03	0.30	2.65	11.64			N/A	N/A
5	0.43	0.03	0.26	0.47	0.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.03	0.32	1.29	1.47			N/A	N/A
2	0.57	0.03	0.29	1.27	2.62			N/A	N/A
3	3.14	0.03	0.28	3.14	9.60			N/A	N/A
4	2.63	0.03	0.28	2.63	7.91			N/A	N/A
5	0.44	0.03	0.32	1.37	1.67			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3	1.50	0.05	0.58	3.74	5.68			N/A	N/A
4	1.28	0.06	0.68	2.92	4.30			N/A	N/A
5	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3	0.94	0.04	0.37	2.32	4.11			N/A	N/A
4	0.80	0.04	0.38	1.88	3.18			N/A	N/A
5	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	13.52	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	264	100.000
2		ONE HOUR	✓	446	100.000
3		ONE HOUR	✓	578	100.000
4		ONE HOUR	✓	395	100.000
5		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1	2	3	4	5
From	1	0	8	132	119	4
	2	3	0	25	403	15
	3	192	279	0	63	43
	4	52	305	27	0	12
	5	1	36	56	41	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.45	10.29	0.8	3.4	B	242	363
2	0.57	9.63	1.3	2.4	A	409	614
3	0.79	20.83	3.5	18.0	C	530	795
4	0.51	8.52	1.0	2.7	A	363	544
5	0.40	16.31	0.7	3.1	C	122	184

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	198	50	556	754	0.263	197	185	0.0	0.4	6.445	A
2	336	84	284	931	0.361	334	469	0.0	0.6	6.003	A
3	435	109	438	925	0.470	431	179	0.0	0.9	7.247	A
4	297	74	401	955	0.311	296	468	0.0	0.4	5.445	A
5	100	25	641	499	0.201	99	55	0.0	0.2	8.997	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	59	666	706	0.336	236	222	0.4	0.5	7.656	A
2	401	100	341	903	0.444	400	562	0.6	0.8	7.144	A
3	519	130	525	875	0.594	517	215	0.9	1.4	10.001	B
4	355	89	480	914	0.389	355	562	0.4	0.6	6.424	A
5	120	30	768	443	0.271	119	67	0.2	0.4	11.100	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	290	73	812	642	0.452	289	270	0.5	0.8	10.154	B
2	491	123	416	866	0.567	489	685	0.8	1.3	9.510	A
3	636	159	642	808	0.787	628	263	1.4	3.4	19.236	C
4	435	109	584	861	0.505	434	686	0.6	1.0	8.393	A
5	147	37	936	371	0.396	146	81	0.4	0.6	15.938	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	290	73	818	640	0.454	290	272	0.8	0.8	10.294	B
2	491	123	418	865	0.568	491	690	1.3	1.3	9.633	A
3	636	159	645	806	0.789	635	264	3.4	3.5	20.827	C
4	435	109	590	858	0.507	435	690	1.0	1.0	8.516	A
5	147	37	944	367	0.400	147	82	0.6	0.7	16.311	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	59	675	702	0.337	238	225	0.8	0.5	7.777	A
2	401	100	344	902	0.445	403	569	1.3	0.8	7.247	A
3	519	130	529	872	0.595	527	217	3.5	1.5	10.663	B
4	355	89	490	909	0.391	357	567	1.0	0.6	6.533	A
5	120	30	779	439	0.273	121	67	0.7	0.4	11.370	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	198	50	562	751	0.264	199	187	0.5	0.4	6.526	A
2	336	84	287	930	0.361	337	474	0.8	0.6	6.084	A
3	435	109	442	922	0.472	437	181	1.5	0.9	7.459	A
4	297	74	406	952	0.312	298	473	0.6	0.5	5.511	A
5	100	25	648	495	0.203	101	56	0.4	0.3	9.137	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.56	0.55	1.00	1.40	1.45			N/A	N/A
3	0.87	0.55	1.00	1.40	1.45			N/A	N/A
4	0.45	0.00	0.00	0.45	0.45			N/A	N/A
5	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.50	0.00	0.00	0.50	0.50			N/A	N/A
2	0.79	0.12	0.88	1.42	1.48			N/A	N/A
3	1.42	0.06	0.88	3.16	4.54			N/A	N/A
4	0.63	0.12	0.86	1.37	1.44			N/A	N/A
5	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.81	0.03	0.26	0.81	0.81			N/A	N/A
2	1.28	0.03	0.27	1.28	1.28			N/A	N/A
3	3.37	0.03	0.33	6.76	18.04			N/A	N/A
4	1.00	0.03	0.26	1.00	1.00			N/A	N/A
5	0.64	0.03	0.26	0.64	0.64			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.82	0.03	0.29	1.07	3.37			N/A	N/A
2	1.30	0.03	0.27	1.30	2.41			N/A	N/A
3	3.54	0.03	0.30	3.54	14.84			N/A	N/A
4	1.02	0.03	0.28	1.02	2.75			N/A	N/A
5	0.65	0.03	0.30	1.11	3.11			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.52	0.05	0.54	1.31	1.40			N/A	N/A
2	0.81	0.10	0.87	1.32	1.32			N/A	N/A
3	1.51	0.05	0.47	3.88	6.13			N/A	N/A
4	0.65	0.11	0.84	1.37	1.44			N/A	N/A
5	0.38	0.03	0.27	0.49	0.95			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.03	0.28	0.60	1.05			N/A	N/A
2	0.57	0.05	0.49	1.34	1.45			N/A	N/A
3	0.91	0.03	0.34	2.13	4.24			N/A	N/A
4	0.46	0.04	0.39	1.22	1.36			N/A	N/A
5	0.26	0.03	0.25	0.45	0.48			N/A	N/A

2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	15.85	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	166	100.000
2		ONE HOUR	✓	343	100.000
3		ONE HOUR	✓	671	100.000
4		ONE HOUR	✓	601	100.000
5		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To					
From		1	2	3	4	5	
	1	0	6	70	85	5	
	2	9	0	25	293	16	
	3	247	280	0	62	82	
	4	101	402	49	0	48	
	5	9	24	28	23	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	8.22	0.4	1.6	A	153	229
2	0.40	6.23	0.7	2.7	A	315	473
3	0.79	17.91	3.5	17.8	C	615	923
4	0.79	20.71	3.7	18.5	C	551	827
5	0.34	19.96	0.5	1.9	C	76	114

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	125	31	601	742	0.169	125	273	0.0	0.2	5.825	A
2	258	65	194	1002	0.258	257	532	0.0	0.3	4.825	A
3	505	126	322	1025	0.492	501	129	0.0	1.0	6.820	A
4	452	113	477	948	0.477	449	346	0.0	0.9	7.149	A
5	62	16	813	432	0.144	62	113	0.0	0.2	9.695	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	150	37	721	691	0.217	149	327	0.2	0.3	6.644	A
2	309	77	233	982	0.314	308	637	0.3	0.5	5.337	A
3	603	151	387	988	0.610	601	155	1.0	1.5	9.236	A
4	540	135	572	900	0.600	538	415	0.9	1.5	9.885	A
5	74	19	974	365	0.204	74	136	0.2	0.3	12.375	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	877	625	0.293	183	398	0.3	0.4	8.134	A
2	378	94	284	956	0.395	377	775	0.5	0.6	6.210	A
3	738	185	473	938	0.787	731	189	1.5	3.4	16.789	C
4	662	165	696	836	0.791	654	508	1.5	3.5	18.955	C
5	91	23	1184	276	0.330	90	165	0.3	0.5	19.252	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	886	621	0.295	183	402	0.4	0.4	8.224	A
2	378	94	286	955	0.396	378	783	0.6	0.7	6.234	A
3	738	185	474	937	0.788	738	190	3.4	3.5	17.909	C
4	662	165	702	833	0.794	661	510	3.5	3.7	20.708	C
5	91	23	1196	271	0.336	91	167	0.5	0.5	19.960	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	150	37	734	685	0.218	150	333	0.4	0.3	6.732	A
2	309	77	235	981	0.315	309	649	0.7	0.5	5.365	A
3	603	151	388	987	0.611	611	156	3.5	1.6	9.755	A
4	540	135	581	895	0.603	548	418	3.7	1.6	10.625	B
5	74	19	992	357	0.208	75	138	0.5	0.3	12.810	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	125	31	610	738	0.170	126	276	0.3	0.2	5.880	A
2	258	65	196	1001	0.258	259	539	0.5	0.4	4.857	A
3	505	126	325	1024	0.493	507	130	1.6	1.0	7.004	A
4	452	113	483	945	0.478	455	349	1.6	0.9	7.375	A
5	62	16	823	428	0.146	63	115	0.3	0.2	9.870	A

Queue Variation Results for each time segment
16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3	0.96	0.55	1.00	1.40	1.45			N/A	N/A
4	0.90	0.55	1.00	1.40	1.45			N/A	N/A
5	0.17	0.00	0.00	0.17	0.17			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2	0.45	0.00	0.00	0.45	0.45			N/A	N/A
3	1.53	0.06	0.87	3.56	5.08			N/A	N/A
4	1.46	0.06	0.87	3.33	4.76			N/A	N/A
5	0.25	0.00	0.00	0.25	0.25			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.03	0.26	0.46	0.48			N/A	N/A
2	0.65	0.03	0.25	0.65	0.65			N/A	N/A
3	3.41	0.03	0.32	5.98	17.85			N/A	N/A
4	3.45	0.03	0.34	6.95	18.53			N/A	N/A
5	0.48	0.03	0.26	0.48	0.50			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.42	0.03	0.32	1.33	1.63			N/A	N/A
2	0.65	0.03	0.29	1.04	2.74			N/A	N/A
3	3.55	0.03	0.29	3.55	12.94			N/A	N/A
4	3.65	0.03	0.30	3.65	15.39			N/A	N/A
5	0.49	0.03	0.33	1.47	1.95			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3	1.61	0.05	0.49	4.14	6.51			N/A	N/A
4	1.56	0.05	0.47	4.02	6.40			N/A	N/A
5	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3	0.99	0.04	0.35	2.43	4.60			N/A	N/A
4	0.93	0.03	0.34	2.20	4.39			N/A	N/A
5	0.17	0.03	0.25	0.45	0.48			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	13.91	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D17 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	264	100.000
2		ONE HOUR	✓	458	100.000
3		ONE HOUR	✓	579	100.000
4		ONE HOUR	✓	399	100.000
5		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
From		1	2	3	4	5
	1	0	8	132	119	4
	2	3	0	27	413	15
	3	192	280	0	63	43
	4	52	309	27	0	12
	5	1	36	56	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	5	1	0
	2	0	0	0	6	0
	3	4	4	0	2	8
	4	2	5	0	0	0
	5	0	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.46	10.36	0.8	3.4	B	242	363
2	0.58	9.98	1.4	2.5	A	420	631
3	0.80	21.73	3.7	18.9	C	531	796
4	0.51	8.62	1.0	2.7	A	366	549
5	0.40	16.49	0.7	3.2	C	122	184

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	198	50	559	753	0.264	197	185	0.0	0.4	6.464	A
2	345	86	284	931	0.370	343	473	0.0	0.6	6.093	A
3	436	109	445	920	0.473	432	181	0.0	0.9	7.320	A
4	300	75	401	955	0.315	299	476	0.0	0.5	5.471	A
5	100	25	645	497	0.202	99	55	0.0	0.3	9.034	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	59	671	704	0.337	236	222	0.4	0.5	7.687	A
2	412	103	340	903	0.456	411	567	0.6	0.8	7.297	A
3	520	130	534	869	0.598	518	217	0.9	1.4	10.169	B
4	359	90	481	914	0.393	358	571	0.5	0.6	6.472	A
5	120	30	773	441	0.272	119	67	0.3	0.4	11.165	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	290	73	818	640	0.454	289	270	0.5	0.8	10.221	B
2	504	126	416	866	0.583	502	691	0.8	1.4	9.845	A
3	637	159	653	802	0.795	629	265	1.4	3.5	19.941	C
4	439	110	585	860	0.511	438	697	0.6	1.0	8.488	A
5	147	37	941	368	0.399	146	81	0.4	0.6	16.098	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	290	73	824	637	0.455	290	272	0.8	0.8	10.365	B
2	504	126	418	865	0.583	504	696	1.4	1.4	9.981	A
3	637	159	656	800	0.796	636	267	3.5	3.7	21.735	C
4	439	110	591	857	0.513	439	701	1.0	1.0	8.618	A
5	147	37	949	365	0.402	147	82	0.6	0.7	16.486	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	237	59	679	700	0.338	238	226	0.8	0.5	7.811	A
2	412	103	344	902	0.457	414	574	1.4	0.9	7.414	A
3	520	130	538	867	0.600	529	219	3.7	1.5	10.895	B
4	359	90	491	909	0.395	360	576	1.0	0.7	6.583	A
5	120	30	784	437	0.275	121	68	0.7	0.4	11.449	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	198	50	566	750	0.265	199	187	0.5	0.4	6.546	A
2	345	86	287	930	0.371	346	478	0.9	0.6	6.179	A
3	436	109	450	918	0.475	438	183	1.5	0.9	7.542	A
4	300	75	407	952	0.316	301	481	0.7	0.5	5.539	A
5	100	25	652	494	0.203	101	56	0.4	0.3	9.176	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.58	0.55	1.00	1.40	1.45			N/A	N/A
3	0.88	0.55	1.00	1.40	1.45			N/A	N/A
4	0.46	0.00	0.00	0.46	0.46			N/A	N/A
5	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2	0.83	0.11	0.89	1.28	1.28			N/A	N/A
3	1.45	0.06	0.87	3.28	4.69			N/A	N/A
4	0.64	0.12	0.86	1.37	1.44			N/A	N/A
5	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.81	0.03	0.26	0.81	0.81			N/A	N/A
2	1.36	0.03	0.27	1.36	1.36			N/A	N/A
3	3.50	0.03	0.34	7.44	18.89			N/A	N/A
4	1.02	0.03	0.26	1.02	1.02			N/A	N/A
5	0.64	0.03	0.26	0.64	0.64			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.83	0.03	0.28	1.07	3.38			N/A	N/A
2	1.38	0.03	0.27	1.38	2.47			N/A	N/A
3	3.69	0.03	0.30	3.69	16.11			N/A	N/A
4	1.04	0.03	0.28	1.04	2.74			N/A	N/A
5	0.66	0.03	0.30	1.12	3.16			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.52	0.05	0.55	1.31	1.41			N/A	N/A
2	0.85	0.09	0.87	1.07	1.58			N/A	N/A
3	1.54	0.05	0.46	3.97	6.39			N/A	N/A
4	0.66	0.11	0.85	1.37	1.44			N/A	N/A
5	0.39	0.03	0.28	0.51	1.00			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.36	0.03	0.28	0.64	1.07			N/A	N/A
2	0.60	0.05	0.49	1.38	1.49			N/A	N/A
3	0.92	0.03	0.34	2.13	4.36			N/A	N/A
4	0.47	0.04	0.40	1.24	1.37			N/A	N/A
5	0.26	0.03	0.25	0.45	0.48			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	16.48	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:15	17:45	15	✓	Simple	D18 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	166	100.000
2		ONE HOUR	✓	348	100.000
3		ONE HOUR	✓	673	100.000
4		ONE HOUR	✓	610	100.000
5		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1	2	3	4	5
From	1	0	6	70	85	5
	2	9	0	26	297	16
	3	247	282	0	62	82
	4	101	411	49	0	48
	5	9	24	28	23	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	0	2	4	0
	2	25	0	5	2	0
	3	1	0	0	2	3
	4	0	2	0	0	0
	5	13	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	8.32	0.4	1.7	A	153	229
2	0.40	6.29	0.7	2.7	A	320	479
3	0.79	18.33	3.6	18.4	C	617	926
4	0.81	22.06	3.9	20.0	C	560	839
5	0.34	20.53	0.5	2.0	C	76	114

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	125	31	610	738	0.170	125	273	0.0	0.2	5.858	A
2	262	66	194	1002	0.262	261	540	0.0	0.4	4.849	A
3	506	127	325	1023	0.495	502	130	0.0	1.0	6.859	A
4	459	115	478	948	0.485	455	349	0.0	0.9	7.262	A
5	62	16	821	429	0.145	62	113	0.0	0.2	9.785	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	150	37	731	687	0.218	149	327	0.2	0.3	6.695	A
2	313	78	233	982	0.319	313	647	0.4	0.5	5.373	A
3	605	151	390	986	0.613	602	156	1.0	1.5	9.325	A
4	548	137	574	899	0.610	546	419	0.9	1.5	10.130	B
5	74	19	984	360	0.206	74	136	0.2	0.3	12.553	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	888	620	0.296	183	398	0.3	0.4	8.223	A
2	383	96	284	956	0.401	383	786	0.5	0.7	6.267	A
3	741	185	477	935	0.792	733	190	1.5	3.5	17.126	C
4	671	168	698	835	0.804	663	512	1.5	3.7	19.965	C
5	91	23	1196	272	0.335	90	165	0.3	0.5	19.744	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	183	46	898	616	0.298	183	402	0.4	0.4	8.321	A
2	383	96	286	955	0.401	383	795	0.7	0.7	6.293	A
3	741	185	479	935	0.792	740	191	3.5	3.6	18.327	C
4	671	168	705	831	0.808	670	514	3.7	3.9	22.055	C
5	91	23	1208	266	0.342	91	167	0.5	0.5	20.532	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	150	37	745	681	0.220	150	333	0.4	0.3	6.791	A
2	313	78	235	981	0.319	314	660	0.7	0.5	5.404	A
3	605	151	392	985	0.614	613	157	3.6	1.6	9.871	A
4	548	137	583	894	0.613	557	422	3.9	1.6	10.977	B
5	74	19	1003	353	0.211	75	138	0.5	0.3	13.029	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	125	31	618	735	0.171	126	276	0.3	0.2	5.912	A
2	262	66	196	1001	0.262	263	547	0.5	0.4	4.882	A
3	506	127	328	1022	0.495	509	131	1.6	1.0	7.049	A
4	459	115	484	945	0.486	462	352	1.6	1.0	7.497	A
5	62	16	832	424	0.147	63	115	0.3	0.2	9.968	A

Queue Variation Results for each time segment
16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3	0.96	0.55	1.00	1.40	1.45			N/A	N/A
4	0.93	0.55	1.00	1.40	1.45			N/A	N/A
5	0.17	0.00	0.00	0.17	0.17			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3	1.55	0.06	0.86	3.63	5.21			N/A	N/A
4	1.52	0.06	0.87	3.55	5.05			N/A	N/A
5	0.26	0.00	0.00	0.26	0.26			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.41	0.03	0.26	0.46	0.48			N/A	N/A
2	0.66	0.03	0.25	0.66	0.66			N/A	N/A
3	3.49	0.03	0.33	6.41	18.44			N/A	N/A
4	3.70	0.03	0.35	8.11	20.02			N/A	N/A
5	0.49	0.03	0.26	0.49	0.50			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.42	0.03	0.32	1.34	1.66			N/A	N/A
2	0.67	0.03	0.28	0.99	2.75			N/A	N/A
3	3.64	0.03	0.29	3.64	13.69			N/A	N/A
4	3.94	0.03	0.30	3.94	17.59			N/A	N/A
5	0.51	0.03	0.33	1.49	2.01			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3	1.63	0.05	0.48	4.23	6.68			N/A	N/A
4	1.63	0.05	0.46	4.28	6.87			N/A	N/A
5	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3	1.00	0.04	0.35	2.44	4.68			N/A	N/A
4	0.96	0.03	0.34	2.24	4.65			N/A	N/A
5	0.17	0.03	0.25	0.45	0.48			N/A	N/A

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
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Filename: Cross Rd Newhouse Ln.j9

Path: \\25.48.244.42\Job Files\SDD\Shropshire\SH5034(13)PD Albrighton (Consultation Response)\z SDD\Project Data\Junction Models\4 Cross Rd Newhouse Ln

Report generation date: 15/11/2024 12:38:38

-
- »2024 Base, AM
 - »2024 Base, PM
 - »2029 + Comm Dev, AM
 - »2029 + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev, AM
 - »2029 + Prop Dev + Comm Dev, PM
 - »2029 + Prop Dev + Comm Dev + Sens, AM
 - »2029 + Prop Dev + Comm Dev + Sens, PM
 - »2034 + Comm Dev, AM
 - »2034 + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev, AM
 - »2034 + Prop Dev + Comm Dev, PM
 - »2034 + Prop Dev + Comm Dev + Sens, AM
 - »2034 + Prop Dev + Comm Dev + Sens, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2024 Base								
Stream B-C	0.0	6.23	0.01	A	0.0	6.19	0.03	A
Stream B-A	0.1	8.83	0.07	A	0.1	8.31	0.07	A
Stream C-AB	0.1	5.03	0.05	A	0.0	5.07	0.02	A
2029 + Comm Dev								
Stream B-C	0.0	6.30	0.01	A	0.0	6.25	0.03	A
Stream B-A	0.1	9.01	0.08	A	0.1	8.48	0.07	A
Stream C-AB	0.1	5.04	0.05	A	0.0	5.04	0.02	A
2029 + Prop Dev + Comm Dev								
Stream B-C	0.0	6.56	0.01	A	0.0	6.47	0.03	A
Stream B-A	0.1	9.91	0.09	A	0.1	9.03	0.08	A
Stream C-AB	0.1	4.90	0.05	A	0.0	5.00	0.02	A
2029 + Prop Dev + Comm Dev + Sens								
Stream B-C	0.0	6.59	0.01	A	0.0	6.51	0.03	A
Stream B-A	0.1	10.02	0.09	B	0.1	9.13	0.08	A
Stream C-AB	0.1	4.87	0.05	A	0.0	4.99	0.02	A
2034 + Comm Dev								
Stream B-C	0.0	6.32	0.01	A	0.0	6.28	0.03	A
Stream B-A	0.1	9.10	0.08	A	0.1	8.55	0.08	A
Stream C-AB	0.1	5.03	0.05	A	0.0	5.04	0.02	A
2034 + Prop Dev + Comm Dev								
Stream B-C	0.0	6.59	0.01	A	0.0	6.50	0.04	A
Stream B-A	0.1	10.00	0.09	B	0.1	9.12	0.08	A
Stream C-AB	0.1	4.90	0.06	A	0.0	4.99	0.02	A
2034 + Prop Dev + Comm Dev + Sens								
Stream B-C	0.0	6.61	0.01	A	0.0	6.54	0.04	A
Stream B-A	0.1	10.12	0.09	B	0.1	9.22	0.08	A
Stream C-AB	0.1	4.86	0.06	A	0.0	4.99	0.02	A

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

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

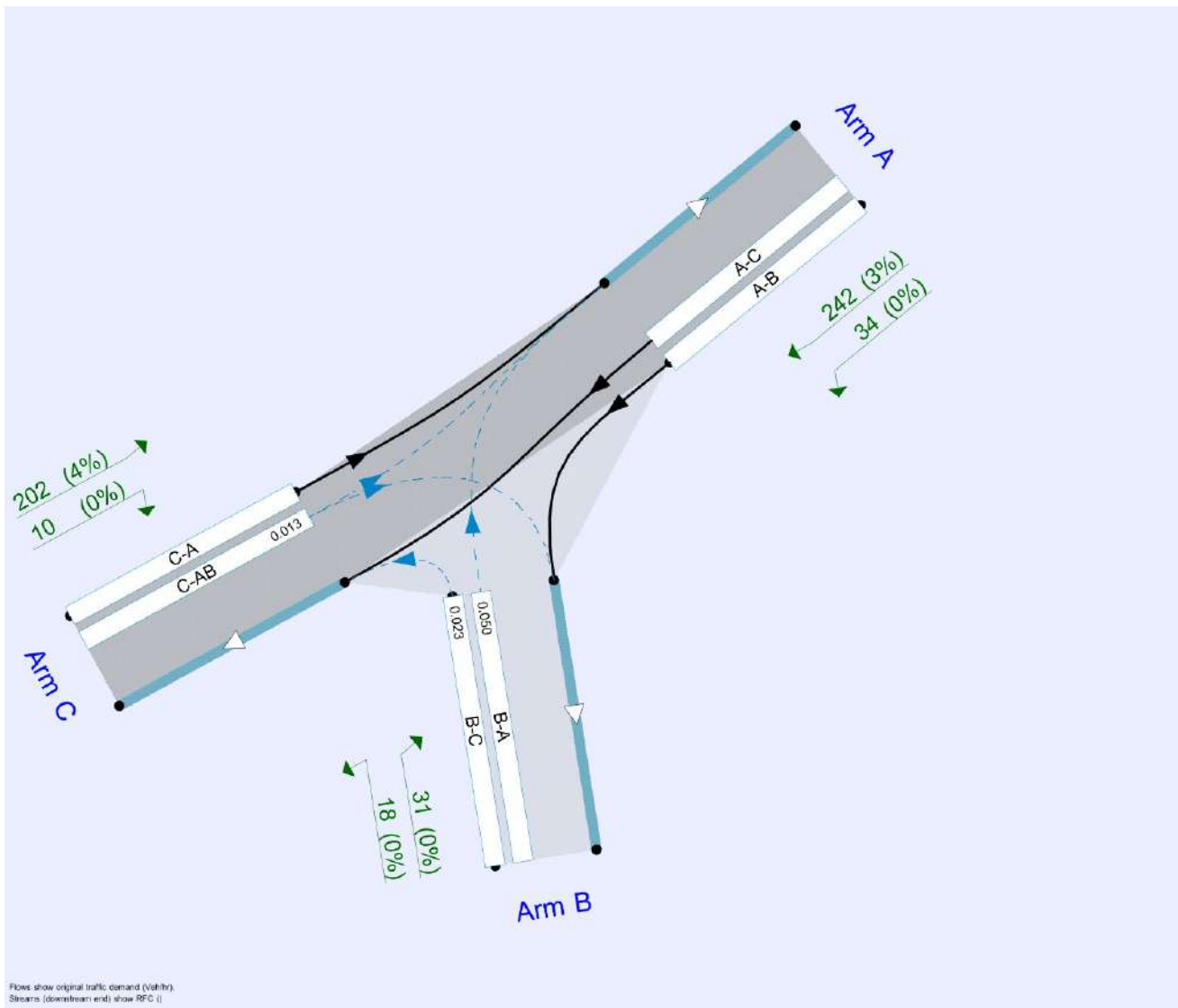
File summary

File Description

Title	South Albrighton
Location	Cross Rd / Newhouse Ln
Site number	SH5034-13PD
Date	13/11/2024
Version	
Status	Existing
Identifier	
Client	Boningale Homes
Jobnumber	SH5034-13PD
Enumerator	WL
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓		
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓		
D3	Proposed Development	AM	ONE HOUR	07:45	09:15	15			
D4	Proposed Development	PM	ONE HOUR	16:45	18:15	15			
D5	Committed Development	AM	ONE HOUR	07:45	09:15	15			
D6	Committed Development	PM	ONE HOUR	16:45	18:15	15			
D7	Sensitivity	AM	ONE HOUR	07:45	09:15	15			
D8	Sensitivity	PM	ONE HOUR	16:45	18:15	15			
D9	2029 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G1) + D5
D10	2029 + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2 * G2) + D6
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D9 + D3
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D10 + D4
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D11 + D7
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D12 + D8
D15	2034 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G3) + D5
D16	2034 + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2 * G4) + D6
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D15 + D3
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D16 + D4
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D17 + D7
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D18 + D8

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2024 - 2029 AM		1.0407
G2	2024 - 2029 PM		1.0397
G3	2024 - 2034 AM		1.0760
G4	2024 - 2034 PM		1.0740

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cross Road (E)		Major
B	Newhouse Lane (S)		Minor
C	Cross Road (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.90			204.0	✓	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	9.90	4.40	2.80	2.40	2.30	✓	1.00	15	31

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	510	0.093	0.236	0.148	0.337
B-C	628	0.097	0.244	-	-
C-B	692	0.269	0.269	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	147	100.000
B		ONE HOUR	✓	35	100.000
C		ONE HOUR	✓	188	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	41	106
	B	30	0	5
	C	164	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	2
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.23	0.0	0.5	A	5	7
B-A	0.07	8.83	0.1	0.5	A	28	41
C-AB	0.05	5.03	0.1	0.5	A	28	42
C-A						145	217
A-B						38	56
A-C						97	146

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.94	598	0.006	4	0.0	0.0	6.058	A
B-A	23	6	463	0.049	22	0.0	0.1	8.169	A
C-AB	22	5	738	0.029	22	0.0	0.0	5.027	A
C-A	120	30			120				
A-B	31	8			31				
A-C	80	20			80				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	592	0.008	4	0.0	0.0	6.129	A
B-A	27	7	454	0.059	27	0.1	0.1	8.434	A
C-AB	27	7	747	0.036	27	0.0	0.0	4.995	A
C-A	142	36			142				
A-B	37	9			37				
A-C	95	24			95				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	583	0.009	5	0.0	0.0	6.229	A
B-A	33	8	441	0.075	33	0.1	0.1	8.823	A
C-AB	35	9	760	0.046	35	0.0	0.1	4.959	A
C-A	172	43			172				
A-B	45	11			45				
A-C	117	29			117				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	583	0.009	6	0.0	0.0	6.230	A
B-A	33	8	441	0.075	33	0.1	0.1	8.825	A
C-AB	35	9	760	0.046	35	0.1	0.1	4.962	A
C-A	172	43			172				
A-B	45	11			45				
A-C	117	29			117				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	592	0.008	5	0.0	0.0	6.132	A
B-A	27	7	454	0.059	27	0.1	0.1	8.439	A
C-AB	27	7	747	0.036	27	0.1	0.1	5.008	A
C-A	142	36			142				
A-B	37	9			37				
A-C	95	24			95				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.94	598	0.006	4	0.0	0.0	6.059	A
B-A	23	6	463	0.049	23	0.1	0.1	8.178	A
C-AB	22	5	738	0.029	22	0.0	0.0	5.033	A
C-A	120	30			120				
A-B	31	8			31				
A-C	80	20			80				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.07	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	190	100.000
B		ONE HOUR	✓	46	100.000
C		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	32	158
	B	29	0	17
	C	139	9	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	6.19	0.0	0.5	A	16	23
B-A	0.07	8.31	0.1	0.5	A	27	40
C-AB	0.02	5.07	0.0	0.5	A	10	15
C-A						126	189
AB						29	44
AC						145	217

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	619	0.021	13	0.0	0.0	5.933	A
B-A	22	5	489	0.045	22	0.0	0.0	7.694	A
C-AB	8	2	718	0.011	8	0.0	0.0	5.070	A
C-A	103	26			103				
AB	24	6			24				
AC	119	30			119				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	611	0.025	15	0.0	0.0	6.040	A
B-A	26	7	479	0.054	26	0.0	0.1	7.948	A
C-AB	10	2	723	0.014	10	0.0	0.0	5.042	A
C-A	123	31			123				
AB	29	7			29				
AC	142	36			142				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	600	0.031	19	0.0	0.0	6.192	A
B-A	32	8	465	0.069	32	0.1	0.1	8.313	A
C-AB	13	3	731	0.017	13	0.0	0.0	5.005	A
C-A	150	38			150				
AB	35	9			35				
AC	174	43			174				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	600	0.031	19	0.0	0.0	6.193	A
B-A	32	8	465	0.069	32	0.1	0.1	8.315	A
C-AB	13	3	731	0.017	13	0.0	0.0	5.008	A
C-A	150	38			150				
A-B	35	9			35				
A-C	174	43			174				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	15	4	611	0.025	15	0.0	0.0	6.043	A
B-A	26	7	479	0.054	26	0.1	0.1	7.951	A
C-AB	10	2	723	0.014	10	0.0	0.0	5.051	A
C-A	123	31			123				
A-B	29	7			29				
A-C	142	36			142				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	619	0.021	13	0.0	0.0	5.938	A
B-A	22	5	489	0.045	22	0.1	0.0	7.703	A
C-AB	8	2	718	0.011	8	0.0	0.0	5.074	A
C-A	103	26			103				
A-B	24	6			24				
A-C	119	30			119				

Queue Variation Results for each time segment
16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D9	2029 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G1) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	167	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	200	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	43	124
	B	31	0	5
	C	175	25	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	2	
	0	0	0	
C	5	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.30	0.0	0.5	A	5	7
B-A	0.08	9.01	0.1	0.5	A	29	43
C-AB	0.05	5.04	0.1	0.5	A	29	44
C-A						154	231
A-B						39	59
A-C						114	171

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.98	594	0.007	4	0.0	0.0	6.099	A
B-A	24	6	458	0.051	23	0.0	0.1	8.279	A
C-AB	23	6	739	0.031	23	0.0	0.0	5.028	A
C-A	127	32			127				
A-B	32	8			32				
A-C	94	23			94				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	587	0.008	5	0.0	0.0	6.180	A
B-A	28	7	448	0.063	28	0.1	0.1	8.575	A
C-AB	28	7	748	0.038	28	0.0	0.1	4.995	A
C-A	151	38			151				
A-B	38	10			38				
A-C	112	28			112				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	578	0.010	6	0.0	0.0	6.295	A
B-A	34	9	434	0.079	34	0.1	0.1	9.013	A
C-AB	37	9	762	0.048	37	0.1	0.1	4.958	A
C-A	183	46			183				
A-B	47	12			47				
A-C	137	34			137				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	577	0.010	6	0.0	0.0	6.295	A
B-A	34	9	434	0.079	34	0.1	0.1	9.015	A
C-AB	37	9	762	0.048	37	0.1	0.1	4.966	A
C-A	183	46			183				
A-B	47	12			47				
A-C	137	34			137				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	587	0.008	5	0.0	0.0	6.181	A
B-A	28	7	448	0.063	28	0.1	0.1	8.580	A
C-AB	28	7	748	0.038	29	0.1	0.1	5.007	A
C-A	151	38			151				
A-B	38	10			38				
A-C	112	28			112				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.98	594	0.007	4	0.0	0.0	6.101	A
B-A	24	6	458	0.051	24	0.1	0.1	8.288	A
C-AB	23	6	739	0.031	23	0.1	0.0	5.036	A
C-A	127	32			127				
A-B	32	8			32				
A-C	94	23			94				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.07	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2029 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D10	2029 + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2 * G2) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	205	100.000
B		ONE HOUR	✓	48	100.000
C		ONE HOUR	✓	165	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	A	B	C
From	A	0	33
	B	30	0
	C	156	9

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
C	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	6.25	0.0	0.5	A	16	24
B-A	0.07	8.48	0.1	0.5	A	28	42
C-AB	0.02	5.04	0.0	0.5	A	11	16
C-A						141	211
A-B						31	46
A-C						157	236

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	616	0.022	13	0.0	0.0	5.968	A
B-A	23	6	484	0.047	23	0.0	0.0	7.791	A
C-AB	8	2	723	0.012	8	0.0	0.0	5.039	A
C-A	116	29			116				
A-B	25	6			25				
A-C	129	32			129				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	608	0.026	16	0.0	0.0	6.083	A
B-A	27	7	473	0.057	27	0.0	0.1	8.067	A
C-AB	10	3	729	0.014	10	0.0	0.0	5.004	A
C-A	138	34			138				
A-B	30	7			30				
A-C	154	38			154				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	595	0.033	19	0.0	0.0	6.249	A
B-A	33	8	458	0.073	33	0.1	0.1	8.476	A
C-AB	13	3	739	0.018	13	0.0	0.0	4.958	A
C-A	168	42			168				
A-B	37	9			37				
A-C	189	47			189				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	595	0.033	19	0.0	0.0	6.250	A
B-A	33	8	458	0.073	33	0.1	0.1	8.478	A
C-AB	13	3	739	0.018	13	0.0	0.0	4.964	A
C-A	168	42			168				
A-B	37	9			37				
A-C	189	47			189				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	607	0.026	16	0.0	0.0	6.085	A
B-A	27	7	473	0.057	27	0.1	0.1	8.071	A
C-AB	10	3	729	0.014	10	0.0	0.0	5.012	A
C-A	138	34			138				
A-B	30	7			30				
A-C	154	38			154				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	616	0.022	13	0.0	0.0	5.970	A
B-A	23	6	484	0.047	23	0.1	0.0	7.798	A
C-AB	8	2	723	0.012	8	0.0	0.0	5.045	A
C-A	116	29			116				
A-B	25	6			25				
A-C	129	32			129				

Queue Variation Results for each time segment
16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D11	2029 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D9 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	250	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	A	B	C
From	A	0	43
	B	31	0
	C	256	25

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	2	
	0	0	0	
	5	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.56	0.0	0.5	A	5	7
B-A	0.09	9.91	0.1	0.5	A	29	43
C-AB	0.05	4.90	0.1	0.5	A	33	50
C-A						224	336
A-B						39	59
A-C						190	285

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.98	578	0.007	4	0.0	0.0	6.267	A
B-A	24	6	433	0.054	23	0.0	0.1	8.773	A
C-AB	25	6	761	0.033	25	0.0	0.0	4.891	A
C-A	186	47			186				
A-B	32	8			32				
A-C	156	39			156				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	568	0.008	5	0.0	0.0	6.388	A
B-A	28	7	418	0.067	28	0.1	0.1	9.219	A
C-AB	32	8	776	0.041	32	0.0	0.1	4.836	A
C-A	220	55			220				
A-B	38	10			38				
A-C	186	47			186				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	554	0.010	6	0.0	0.0	6.564	A
B-A	34	9	398	0.086	34	0.1	0.1	9.901	A
C-AB	43	11	797	0.053	43	0.1	0.1	4.767	A
C-A	266	67			266				
A-B	47	12			47				
A-C	228	57			228				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	554	0.010	6	0.0	0.0	6.564	A
B-A	34	9	398	0.086	34	0.1	0.1	9.905	A
C-AB	43	11	797	0.054	43	0.1	0.1	4.773	A
C-A	266	67			266				
A-B	47	12			47				
A-C	228	57			228				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	568	0.008	5	0.0	0.0	6.389	A
B-A	28	7	418	0.067	28	0.1	0.1	9.225	A
C-AB	32	8	776	0.041	32	0.1	0.1	4.849	A
C-A	220	55			220				
A-B	38	10			38				
A-C	186	47			186				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.98	578	0.007	4	0.0	0.0	6.272	A
B-A	24	6	433	0.054	24	0.1	0.1	8.785	A
C-AB	25	6	761	0.033	25	0.1	0.0	4.898	A
C-A	186	47			186				
A-B	32	8			32				
A-C	156	39			156				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2029 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D12	2029 + Prop Dev + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D10 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	270	100.000
B		ONE HOUR	✓	48	100.000
C		ONE HOUR	✓	207	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	33	236
	B	30	0	18
	C	198	9	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
C	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	6.47	0.0	0.5	A	16	24
B-A	0.08	9.03	0.1	0.5	A	28	42
C-AB	0.02	5.00	0.0	0.5	A	11	17
C-A						178	268
A-B						31	46
A-C						217	325

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	603	0.022	13	0.0	0.0	6.101	A
B-A	23	6	467	0.049	22	0.0	0.1	8.103	A
C-AB	9	2	730	0.012	9	0.0	0.0	4.991	A
C-A	147	37			147				
A-B	25	6			25				
A-C	178	44			178				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	592	0.027	16	0.0	0.0	6.249	A
B-A	27	7	452	0.060	27	0.1	0.1	8.471	A
C-AB	11	3	739	0.015	11	0.0	0.0	4.945	A
C-A	175	44			175				
A-B	30	7			30				
A-C	212	53			212				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	576	0.034	19	0.0	0.0	6.466	A
B-A	33	8	432	0.077	33	0.1	0.1	9.027	A
C-AB	15	4	751	0.019	15	0.0	0.0	4.884	A
C-A	213	53			213				
A-B	37	9			37				
A-C	260	65			260				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	576	0.034	19	0.0	0.0	6.466	A
B-A	33	8	432	0.077	33	0.1	0.1	9.032	A
C-AB	15	4	751	0.019	15	0.0	0.0	4.890	A
C-A	213	53			213				
A-B	37	9			37				
A-C	260	65			260				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	592	0.027	16	0.0	0.0	6.250	A
B-A	27	7	452	0.060	27	0.1	0.1	8.475	A
C-AB	11	3	739	0.015	11	0.0	0.0	4.954	A
C-A	175	44			175				
A-B	30	7			30				
A-C	212	53			212				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	603	0.022	13	0.0	0.0	6.103	A
B-A	23	6	467	0.049	23	0.1	0.1	8.111	A
C-AB	9	2	730	0.012	9	0.0	0.0	4.997	A
C-A	147	37			147				
A-B	25	6			25				
A-C	178	44			178				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D13	2029 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D11 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	256	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	295	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	43	213
	B	31	0	5
	C	270	25	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	2	
	0	0	0	
	5	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.59	0.0	0.5	A	5	7
B-A	0.09	10.02	0.1	0.5	B	29	43
C-AB	0.05	4.87	0.1	0.5	A	34	51
C-A						236	355
A-B						39	59
A-C						196	294

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.98	577	0.007	4	0.0	0.0	6.280	A
B-A	24	6	431	0.055	23	0.0	0.1	8.831	A
C-AB	26	6	767	0.033	25	0.0	0.0	4.857	A
C-A	196	49			196				
A-B	32	8			32				
A-C	161	40			161				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	567	0.008	5	0.0	0.0	6.404	A
B-A	28	7	415	0.068	28	0.1	0.1	9.296	A
C-AB	33	8	783	0.042	33	0.0	0.1	4.794	A
C-A	232	58			232				
A-B	38	10			38				
A-C	192	48			192				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	552	0.010	6	0.0	0.0	6.585	A
B-A	34	9	394	0.087	34	0.1	0.1	10.011	B
C-AB	44	11	805	0.054	44	0.1	0.1	4.719	A
C-A	281	70			281				
A-B	47	12			47				
A-C	235	59			235				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	552	0.010	6	0.0	0.0	6.585	A
B-A	34	9	394	0.087	34	0.1	0.1	10.015	B
C-AB	44	11	805	0.054	44	0.1	0.1	4.729	A
C-A	281	70			281				
A-B	47	12			47				
A-C	235	59			235				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	567	0.008	5	0.0	0.0	6.405	A
B-A	28	7	415	0.068	28	0.1	0.1	9.303	A
C-AB	33	8	783	0.042	33	0.1	0.1	4.810	A
C-A	232	58			232				
A-B	38	10			38				
A-C	192	48			192				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.98	577	0.007	4	0.0	0.0	6.282	A
B-A	24	6	431	0.055	24	0.1	0.1	8.845	A
C-AB	26	6	767	0.033	26	0.1	0.0	4.867	A
C-A	196	49			196				
A-B	32	8			32				
A-C	161	40			161				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2029 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D14	2029 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D12 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	282	100.000
B		ONE HOUR	✓	48	100.000
C		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	33	248
	B	30	0	18
	C	204	9	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	6.51	0.0	0.5	A	16	24
B-A	0.08	9.13	0.1	0.5	A	28	42
C-AB	0.02	4.99	0.0	0.5	A	12	17
C-A						184	276
AB						31	46
AC						228	342

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	601	0.022	13	0.0	0.0	6.126	A
B-A	23	6	463	0.049	22	0.0	0.1	8.160	A
C-AB	9	2	731	0.012	9	0.0	0.0	4.987	A
C-A	151	38			151				
AB	25	6			25				
AC	187	47			187				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	589	0.027	16	0.0	0.0	6.280	A
B-A	27	7	448	0.060	27	0.1	0.1	8.545	A
C-AB	11	3	739	0.015	11	0.0	0.0	4.940	A
C-A	180	45			180				
AB	30	7			30				
AC	223	56			223				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	573	0.034	19	0.0	0.0	6.507	A
B-A	33	8	427	0.078	33	0.1	0.1	9.130	A
C-AB	15	4	752	0.020	15	0.0	0.0	4.878	A
C-A	220	55			220				
AB	37	9			37				
AC	273	68			273				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	5	573	0.034	19	0.0	0.0	6.508	A
B-A	33	8	427	0.078	33	0.1	0.1	9.135	A
C-AB	15	4	752	0.020	15	0.0	0.0	4.882	A
C-A	220	55			220				
A-B	37	9			37				
A-C	273	68			273				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	589	0.027	16	0.0	0.0	6.284	A
B-A	27	7	448	0.060	27	0.1	0.1	8.549	A
C-AB	11	3	739	0.015	11	0.0	0.0	4.951	A
C-A	180	45			180				
A-B	30	7			30				
A-C	223	56			223				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	3	601	0.022	13	0.0	0.0	6.128	A
B-A	23	6	464	0.049	23	0.1	0.1	8.167	A
C-AB	9	2	731	0.012	9	0.0	0.0	4.992	A
C-A	151	38			151				
A-B	25	6			25				
A-C	187	47			187				

Queue Variation Results for each time segment
16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D15	2034 + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	(D1 * G3) + D5

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	172	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	44	128
	B	32	0	5
	C	180	26	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	2	
	0	0	0	
	5	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.32	0.0	0.5	A	5	7
B-A	0.08	9.10	0.1	0.5	A	30	44
C-AB	0.05	5.03	0.1	0.5	A	31	46
C-A						159	238
A-B						40	61
A-C						118	176

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	593	0.007	4	0.0	0.0	6.112	A
B-A	24	6	456	0.053	24	0.0	0.1	8.324	A
C-AB	24	6	740	0.032	24	0.0	0.0	5.022	A
C-A	131	33			131				
A-B	33	8			33				
A-C	96	24			96				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	586	0.008	5	0.0	0.0	6.196	A
B-A	29	7	446	0.065	29	0.1	0.1	8.636	A
C-AB	30	7	751	0.040	30	0.0	0.1	4.991	A
C-A	156	39			156				
A-B	40	10			40				
A-C	115	29			115				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	576	0.010	6	0.0	0.0	6.315	A
B-A	36	9	431	0.082	35	0.1	0.1	9.093	A
C-AB	38	10	765	0.050	38	0.1	0.1	4.953	A
C-A	189	47			189				
A-B	49	12			49				
A-C	141	35			141				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	576	0.010	6	0.0	0.0	6.316	A
B-A	36	9	431	0.082	36	0.1	0.1	9.097	A
C-AB	38	10	765	0.050	38	0.1	0.1	4.959	A
C-A	189	47			189				
A-B	49	12			49				
A-C	141	35			141				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	586	0.008	5	0.0	0.0	6.199	A
B-A	29	7	446	0.065	29	0.1	0.1	8.641	A
C-AB	30	7	751	0.040	30	0.1	0.1	5.001	A
C-A	156	39			156				
A-B	40	10			40				
A-C	115	29			115				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	593	0.007	4	0.0	0.0	6.116	A
B-A	24	6	456	0.053	24	0.1	0.1	8.337	A
C-AB	24	6	740	0.032	24	0.1	0.0	5.029	A
C-A	131	33			131				
A-B	33	8			33				
A-C	96	24			96				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D16	2034 + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	(D2 * G4) + D6

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	211	100.000
B		ONE HOUR	✓	49	100.000
C		ONE HOUR	✓	170	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	34	177
	B	31	0	18
From	C	160	10	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	6.28	0.0	0.5	A	17	25
B-A	0.08	8.55	0.1	0.5	A	29	43
C-AB	0.02	5.04	0.0	0.5	A	11	17
C-A						145	217
AB						32	47
AC						162	243

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	3	615	0.022	14	0.0	0.0	5.987	A
B-A	23	6	483	0.049	23	0.0	0.1	7.834	A
C-AB	9	2	724	0.012	9	0.0	0.0	5.034	A
C-A	119	30			119				
AB	26	6			26				
AC	133	33			133				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	606	0.027	16	0.0	0.0	6.106	A
B-A	28	7	471	0.059	28	0.1	0.1	8.123	A
C-AB	11	3	731	0.015	11	0.0	0.0	4.998	A
C-A	142	35			142				
AB	31	8			31				
AC	159	40			159				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	5	593	0.034	20	0.0	0.0	6.279	A
B-A	34	9	455	0.075	34	0.1	0.1	8.551	A
C-AB	14	3	740	0.019	14	0.0	0.0	4.951	A
C-A	173	43			173				
AB	38	9			38				
AC	195	49			195				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	5	593	0.034	20	0.0	0.0	6.280	A
B-A	34	9	455	0.075	34	0.1	0.1	8.553	A
C-AB	14	3	740	0.019	14	0.0	0.0	4.955	A
C-A	173	43			173				
A-B	38	9			38				
A-C	195	49			195				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	606	0.027	16	0.0	0.0	6.108	A
B-A	28	7	471	0.059	28	0.1	0.1	8.128	A
C-AB	11	3	731	0.015	11	0.0	0.0	5.008	A
C-A	142	35			142				
A-B	31	8			31				
A-C	159	40			159				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	3	615	0.022	14	0.0	0.0	5.991	A
B-A	23	6	483	0.049	23	0.1	0.1	7.841	A
C-AB	9	2	724	0.012	9	0.0	0.0	5.040	A
C-A	119	30			119				
A-B	26	6			26				
A-C	133	33			133				

Queue Variation Results for each time segment
16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 + Prop Dev + Comm Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D17	2034 + Prop Dev + Comm Dev	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D15 + D3

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	255	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	44	211
	B	32	0	5
	C	261	26	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	2	
	0	0	0	
	5	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.59	0.0	0.5	A	5	7
B-A	0.09	10.00	0.1	0.5	B	30	44
C-AB	0.06	4.90	0.1	0.5	A	35	52
C-A						229	343
A-B						40	61
A-C						194	291

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	577	0.007	4	0.0	0.0	6.281	A
B-A	24	6	432	0.056	24	0.0	0.1	8.826	A
C-AB	26	7	763	0.034	26	0.0	0.0	4.886	A
C-A	190	48			190				
A-B	33	8			33				
A-C	159	40			159				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	567	0.009	5	0.0	0.0	6.405	A
B-A	29	7	416	0.070	29	0.1	0.1	9.289	A
C-AB	33	8	778	0.043	33	0.0	0.1	4.830	A
C-A	225	56			225				
A-B	40	10			40				
A-C	190	47			190				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	552	0.011	6	0.0	0.0	6.587	A
B-A	36	9	395	0.090	35	0.1	0.1	10.000	B
C-AB	45	11	800	0.056	44	0.1	0.1	4.762	A
C-A	272	68			272				
A-B	49	12			49				
A-C	232	58			232				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	552	0.011	6	0.0	0.0	6.587	A
B-A	36	9	395	0.090	36	0.1	0.1	10.005	B
C-AB	45	11	800	0.056	45	0.1	0.1	4.769	A
C-A	272	68			272				
A-B	49	12			49				
A-C	232	58			232				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	567	0.009	5	0.0	0.0	6.407	A
B-A	29	7	416	0.070	29	0.1	0.1	9.298	A
C-AB	33	8	778	0.043	33	0.1	0.1	4.845	A
C-A	225	56			225				
A-B	40	10			40				
A-C	190	47			190				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	577	0.007	4	0.0	0.0	6.283	A
B-A	24	6	432	0.056	24	0.1	0.1	8.838	A
C-AB	26	7	763	0.034	26	0.1	0.0	4.896	A
C-A	190	48			190				
A-B	33	8			33				
A-C	159	40			159				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 + Prop Dev + Comm Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D18	2034 + Prop Dev + Comm Dev	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D16 + D4

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	276	100.000
B		ONE HOUR	✓	49	100.000
C		ONE HOUR	✓	212	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	34	242
	B	31	0	18
	C	202	10	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	6.50	0.0	0.5	A	17	25
B-A	0.08	9.12	0.1	0.5	A	29	43
C-AB	0.02	4.99	0.0	0.5	A	12	18
C-A						183	274
A-B						32	47
A-C						222	333

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	3	602	0.023	14	0.0	0.0	6.120	A
B-A	23	6	465	0.050	23	0.0	0.1	8.150	A
C-AB	9	2	731	0.013	9	0.0	0.0	4.986	A
C-A	150	38			150				
A-B	26	6			26				
A-C	182	45			182				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	590	0.028	16	0.0	0.0	6.273	A
B-A	28	7	450	0.062	28	0.1	0.1	8.532	A
C-AB	12	3	740	0.016	12	0.0	0.0	4.939	A
C-A	179	45			179				
A-B	31	8			31				
A-C	217	54			217				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	5	574	0.035	20	0.0	0.0	6.498	A
B-A	34	9	429	0.080	34	0.1	0.1	9.114	A
C-AB	15	4	753	0.020	15	0.0	0.0	4.877	A
C-A	218	55			218				
A-B	38	9			38				
A-C	266	67			266				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	5	574	0.035	20	0.0	0.0	6.499	A
B-A	34	9	429	0.080	34	0.1	0.1	9.117	A
C-AB	15	4	753	0.020	15	0.0	0.0	4.881	A
C-A	218	55			218				
A-B	38	9			38				
A-C	266	67			266				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	590	0.028	16	0.0	0.0	6.275	A
B-A	28	7	450	0.062	28	0.1	0.1	8.536	A
C-AB	12	3	740	0.016	12	0.0	0.0	4.950	A
C-A	179	45			179				
A-B	31	8			31				
A-C	217	54			217				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	3	602	0.023	14	0.0	0.0	6.123	A
B-A	23	6	465	0.050	24	0.1	0.1	8.159	A
C-AB	9	2	731	0.013	9	0.0	0.0	4.992	A
C-A	150	38			150				
A-B	26	6			26				
A-C	182	45			182				

Queue Variation Results for each time segment
16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D19	2034 + Prop Dev + Comm Dev + Sens	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D17 + D7

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	261	100.000
B		ONE HOUR	✓	38	100.000
C		ONE HOUR	✓	301	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	44	217
	B	32	0	5
	C	275	26	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	2	
	0	0	0	
	5	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.61	0.0	0.5	A	5	7
B-A	0.09	10.12	0.1	0.5	B	30	44
C-AB	0.06	4.86	0.1	0.5	A	35	53
C-A						241	362
A-B						40	61
A-C						199	299

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	576	0.007	4	0.0	0.0	6.294	A
B-A	24	6	429	0.057	24	0.0	0.1	8.886	A
C-AB	27	7	768	0.035	26	0.0	0.0	4.852	A
C-A	200	50			200				
A-B	33	8			33				
A-C	163	41			163				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	565	0.009	5	0.0	0.0	6.421	A
B-A	29	7	413	0.070	29	0.1	0.1	9.368	A
C-AB	34	8	785	0.043	34	0.0	0.1	4.791	A
C-A	237	59			237				
A-B	40	10			40				
A-C	195	49			195				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	551	0.011	6	0.0	0.0	6.608	A
B-A	36	9	391	0.091	35	0.1	0.1	10.112	B
C-AB	46	11	808	0.056	46	0.1	0.1	4.716	A
C-A	286	72			286				
A-B	49	12			49				
A-C	239	60			239				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	1	551	0.011	6	0.0	0.0	6.608	A
B-A	36	9	391	0.091	36	0.1	0.1	10.117	B
C-AB	46	11	808	0.056	46	0.1	0.1	4.722	A
C-A	286	72			286				
A-B	49	12			49				
A-C	239	60			239				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	565	0.009	5	0.0	0.0	6.425	A
B-A	29	7	413	0.070	29	0.1	0.1	9.377	A
C-AB	34	9	785	0.043	34	0.1	0.1	4.807	A
C-A	237	59			237				
A-B	40	10			40				
A-C	195	49			195				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	576	0.007	4	0.0	0.0	6.296	A
B-A	24	6	429	0.057	24	0.1	0.1	8.898	A
C-AB	27	7	768	0.035	27	0.1	0.0	4.862	A
C-A	200	50			200				
A-B	33	8			33				
A-C	163	41			163				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 + Prop Dev + Comm Dev + Sens, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Demand Set Relationship	D11 - 2029 + Prop Dev + Comm Dev, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D20	2034 + Prop Dev + Comm Dev + Sens	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D18 + D8

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	288	100.000
B		ONE HOUR	✓	49	100.000
C		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	34	254
	B	31	0	18
	C	208	10	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A	B	C	
	0	0	3	
	0	0	0	
	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	6.54	0.0	0.5	A	17	25
B-A	0.08	9.22	0.1	0.5	A	29	43
C-AB	0.02	4.99	0.0	0.5	A	12	18
C-A						188	282
A-B						32	47
A-C						233	349

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	3	599	0.023	14	0.0	0.0	6.145	A
B-A	23	6	462	0.051	23	0.0	0.1	8.207	A
C-AB	9	2	732	0.013	9	0.0	0.0	4.982	A
C-A	155	39			155				
A-B	26	6			26				
A-C	191	48			191				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	587	0.028	16	0.0	0.0	6.305	A
B-A	28	7	446	0.063	28	0.1	0.1	8.607	A
C-AB	12	3	741	0.016	12	0.0	0.0	4.934	A
C-A	184	46			184				
A-B	31	8			31				
A-C	228	57			228				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	5	570	0.035	20	0.0	0.0	6.540	A
B-A	34	9	425	0.081	34	0.1	0.1	9.219	A
C-AB	15	4	754	0.020	15	0.0	0.0	4.871	A
C-A	225	56			225				
A-B	38	9			38				
A-C	279	70			279				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	5	570	0.035	20	0.0	0.0	6.541	A
B-A	34	9	425	0.081	34	0.1	0.1	9.222	A
C-AB	15	4	754	0.020	15	0.0	0.0	4.875	A
C-A	225	56			225				
A-B	38	9			38				
A-C	279	70			279				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	16	4	587	0.028	16	0.0	0.0	6.309	A
B-A	28	7	446	0.063	28	0.1	0.1	8.613	A
C-AB	12	3	741	0.016	12	0.0	0.0	4.946	A
C-A	184	46			184				
A-B	31	8			31				
A-C	228	57			228				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	14	3	599	0.023	14	0.0	0.0	6.150	A
B-A	23	6	462	0.051	24	0.1	0.1	8.215	A
C-AB	9	2	732	0.013	9	0.0	0.0	4.987	A
C-A	155	39			155				
A-B	26	6			26				
A-C	191	48			191				

Queue Variation Results for each time segment
16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A