Proposed Residential Development
Jacks, Takeley

Transport Assessment

For

Weston Homes

motion

Document Control Sheet

Proposed Residential Development

Jacks, Takeley

Weston Homes

This document has been issued and amended as follows:

Date	Issue	Prepared by	Approved by
12/09/2022	Draft	CM	JR
26/10/2022	Final	CM	JR
03/04/2023	Final Rev A	CM	JR

Motion
9 Greyfriars Road
Reading
RG1 1NU
T 0118 206 2932
E info@motion.co.uk
W [redacted]

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1.0 Introduction

Preamble

1.1 This Transport Assessment Report (TAR) has been prepared on behalf of Weston Homes to consider transport and highways matters relating to a planned residential development on land at Warish Farm, Takeley (the Application Site).

1.2 The Application Site is located north of Takeley, within the administrative boundaries of Uttlesford District Council (UDC) and Essex County Council (ECC). The Application Site forms part of a wider landholding illustrated below. Jacks is located east of Smiths Green Lane while 7 Acres is located to the rear of Weston's Business Centre, east of Parsonage Road. This TAR considers the transport effects arising from the Jacks parcel. A separate planning application is being explored for the 7 Acres parcel of land which comprises commercial floorspace.

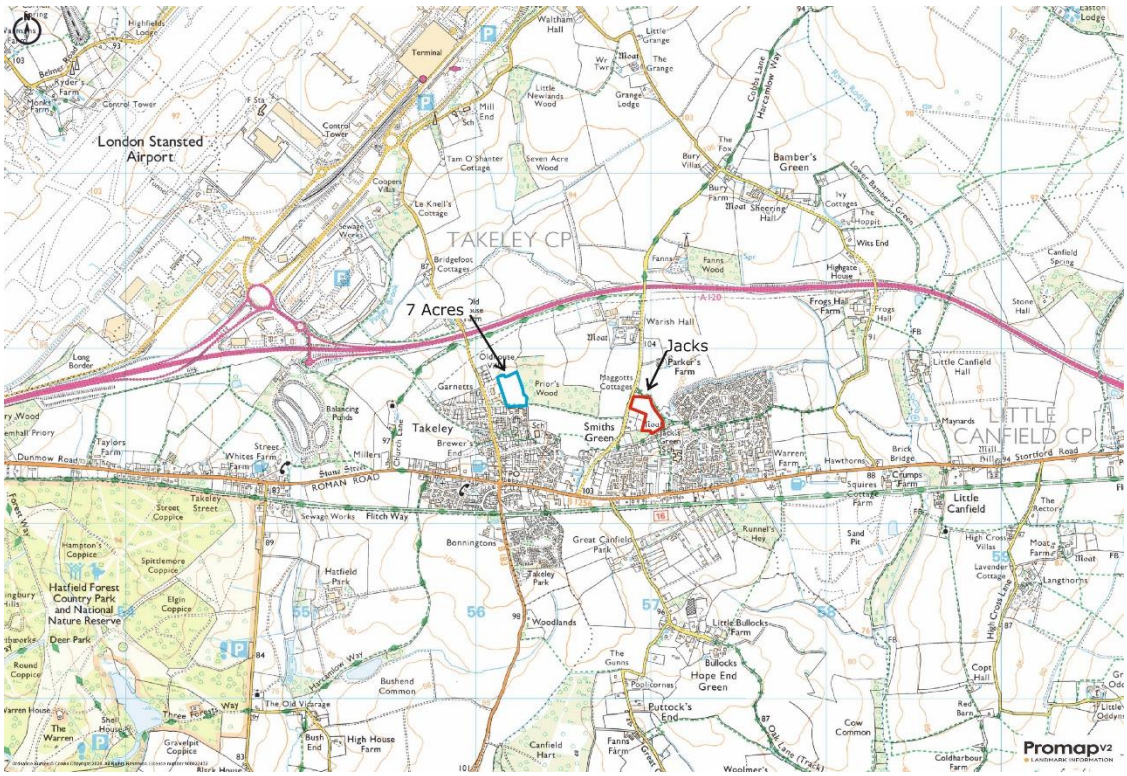


Figure 1.1 - Application Site Location Plan

Proposed Development

1.3 The development (the Proposed Development) comprises, inter alia, the provision of the following:

- 40 residential dwellings (the Proposed Development)

1.4 A separate planning application is being explored for the 7 Acres parcel of land which comprises, inter alia, 3,568m^2 of industrial floorspace (flexible use class E (for light industrial purposes only), B2 and B8 use classes). While this will be subject of a separate planning application, this TAR includes these proposals in order to understand the cumulative transport effects of the two development proposals in order to provide a robust assessment.

1.5 At present the Application Site is under agricultural use and benefits from an existing point of access. It is however accepted that significant improvements will be required to serve a residential development such as that proposed.

1.6 A total of 40 dwellings are proposed (the Proposed Development). A separate application has been submitted for the 7 Acres parcel, comprising a medical centre and 3,000m^2 of industrial floorspace (flexible use class E (for light industrial purposes only), B2 and B8 use classes). While the subject of a separate application, these proposals are included as a sensitivity test for the purposes of this report.

Assessment Criteria and Transport Impact Tests

1.7 The National Planning Policy Framework (NPPF), which was published in July 2021 sets out a presumption in favour of sustainable development that recognises the importance of transport policies in facilitating sustainable development, and that planning decisions should have regard to local circumstances.

1.8 Paragraph 2 of the NPPF states:

"The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements."

1.9 Paragraph 110 of the NPPF states:

1.10 "In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

1.11 a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

1.12 b) safe and suitable access to the site can be achieved for all users;

1.13 c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and

1.14 *d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree. "*Paragraph 111 sets out the test that a determining authority should apply when determining the suitability of a planning application in terms of transport and highways stating that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

1.15 These four criteria (paragraph 110) and subsequent tests (paragraph 111) have been applied to the assessments presented in this TAR in order to determine if the Proposed Development is acceptable in transport terms.

Document Scope and Structure

1.16 In this context the TAR is structured as follows:

- Section 2 provides a summary of the relevant national, County wide and local transport policy and assessment guidance of relevance to the Proposed Development;
- Section 3 sets out baseline conditions for sustainable means of travel and current highway conditions, including baseline modelling;
- Section 4 describes the Proposed Development; and,

- Section 5 presents the baseline traffic forecasting, Proposed Development trip generation, traffic distribution and traffic assignment methodologies and outcomes;

1.17 A summary and conclusion is provided at Section 6 which is that:

- The Application Site is spatially well located to access sustainable transport modes and the Proposed Development has been designed in order to promote the uptake of these;
- The Proposed Development has been design led to achieve safe and suitable access for all users but with a focus on safe, suitable and convenient access for pedestrians and cyclists; and
- potential impacts from the Proposed Development on the transport network have been assessed and shown to be able to be cost effectively mitigated to an acceptable degree.

1.18 In essence the Proposed Development provides the opportunity to provide new homes at a location that is accessible to public transport, to which safe and suitable access can be achieved and in circumstances in which potential residual cumulative impacts can be mitigated to an acceptable degree.

1.19 In accordance with paragraph 111 of NPPF, there are therefore no transport or highway reasons why planning permission should be withheld or refused.

2.0 Relevant Transport Policy

National Planning Policy Framework

2.1 The National Planning Policy Framework (NPPF) sets out a presumption in favour of sustainable development. It recognises the importance of transport policies in facilitating sustainable development, and that planning decisions should have regard to local circumstances.

2.2 Paragraph 2 of the NPPF states that:

"The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements."

2.3 The NPPF presumes in favour of sustainable development and is a material consideration in planning decisions.

2.4 Section 9 of the NPPF deals with 'Promoting Sustainable Transport'. Paragraph 103 states that:

"Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

2.5 Paragraph 106 details the responsibilities of councils to set parking standards in accordance with the infrastructure of the local area as follows:

"Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport. In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."

2.6 Paragraph 110 addresses the relationship between development and sustainable transport as follows:

2.7 Paragraph 110 addresses the relationship between development and sustainable transport as follows:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

2.8 Paragraph 111 sets out the test that a determining authority should apply when determining the suitability of a planning application in terms of transport and highways stating that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

2.9 The above guidance sets the overarching framework within which the suitability of all planning applications should be considered and forms the basis for designing and assessing the Proposed Development.

Uttlesford District Council Development Plan Documents

2.10 Planning applications within Uttlesford are currently assessed against the policies contained within the Uttlesford Local Plan, adopted in January 2005. A summary of the transportation policies which are relevant to the proposals are as follows:

- *Policy GEN 1 – Access:* Development must provide access arrangements that are safe, take account of the needs of vulnerable road users, discourage private car use and provide sufficient capacity for the anticipated demand.
- *Policy GEN 6 – Infrastructure Provision to Support Development:* Development must provide infrastructure made necessary by the development, additionally contributions may be required to mitigate cumulative impacts.
- *Policy GEN 8* – Vehicle Parking Standards: Development will not be permitted unless appropriate parking provision is made as set out in the 'Vehicle Parking Standards' SPD.

2.11 UDC has adopted the parking standards contained with the ECC document entitled 'Parking Standards – Design and Good Practice', the relevant standards are reproduced below. Residential standards are minimums while the commercial standards are maximums.

<table>
<tr><th>Use</th><th>Car</th><th>Cycle</th><th>Two-Wheeler</th><th>Disabled</th></tr>
<tr><td>1 bedroom</td><td>1 space per dwelling</td><td rowspan="2">1 secure covered space per dwelling. None if garage or secure area is provided within dwelling curtilage</td><td rowspan="2">N/A</td><td rowspan="2">N/A if parking is within dwelling curtilage, otherwise as Visitor/Unallocated</td></tr>
<tr><td>2+ bedroom</td><td>2 spaces per dwelling</td></tr>
<tr><td>Visitor/Unallocated</td><td>0.25 spaces per dwelling (rounded up to the nearest whole number)</td><td>If no garage or secure area provided the 1 covered secure space per dwelling in a secure area plus 1 per 8 dwellings for visitors</td><td rowspan="3">1 space plus 1 per 20 car spaces (for 1st 100 spaces) the 1 per 30 car spaces</td><td>200 vehicle bays or less – 3 bays or 6% of total, whichever is greater. Over 200 vehicle bays – 4 bays plus 4% of total capacity</td></tr>
<tr><td>B2</td><td>1 space per 50m^2</td><td>1 space per 250m^2 for staff plus 1 per 500m^2 for visitors</td><td rowspan="2">200 vehicle bays or less - 2 bays or 5% of total, whichever is greater. Over 200 vehicle bays - 6 bays plus 2% of total capacity</td></tr>
<tr><td>B8</td><td>1 space per 150m^2</td><td>1 space per 500m^2 for staff plus 1 per 1000m^2 for visitors</td></tr>
</table>

Table 2.1 – ECC Parking Standards

2.12 Additionally, UDC reference ECC's document entitled 'Highways Development Management', a summary of the relevant policies contained therein is as follows:

- *Policy DM 1 – General Policy:* Development is required to provide safe and suitable access that complies with relevant standards that does not present a risk to the safety of the highway network.
- *Policy DM 6 – Estate Roads:* Estate roads will be designed in accordance with current standards with a particular emphasis on ensuring a high quality built environment and public realm.
- *Policy DM 7 – Application of Design Standards:* All works within the highway must comply with current national and ECC design standards appropriate to the category of road.
- *Policy DM 8 – Vehicle Parking Standards:* Development Proposals must comply with ECC's current parking standard document.
- *Policy DM 9 – Accessibility and Transport Sustainability:* Developers must seek to minimise private vehicle trips.
- *Policy DM 10 – Travel Plans:* ECC will require the provision of a Travel Plan and monitoring fee, all residential dwellings will be provided with a travel information pack.

3.0 Baseline Conditions

Accessibility to Non-Car Travel

3.1 It is generally accepted that walking and cycling provide important alternatives to the private car and should also be encouraged to form part of longer journeys via public transport. Indeed, it is noteworthy that the Institute of Highways and Transportation (IHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:

- Most people will walk to a destination that is less than one mile (Planning for Walking, 2015);
- The bicycle is a potential mode of transport for all journeys under five miles (Planning for Cycling, 2015); and,
- Walking distances to bus stops should not exceed 400 metres, with people being prepared to walk twice as far to rail stations (Planning for Walking, 2015).

3.2 Notwithstanding the above, it should be noted that Manual for Streets (MfS) identifies 'walkable neighbourhoods' as being "characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential area which residents may access comfortably on foot". However, it is important to recognise that MfS does not consider 800 metres to be a maximum walking distance.

3.3 Figure 3.1 below shows a map of the local area including the local road network and public transport nodes as well as a selection of key local services and amenities.

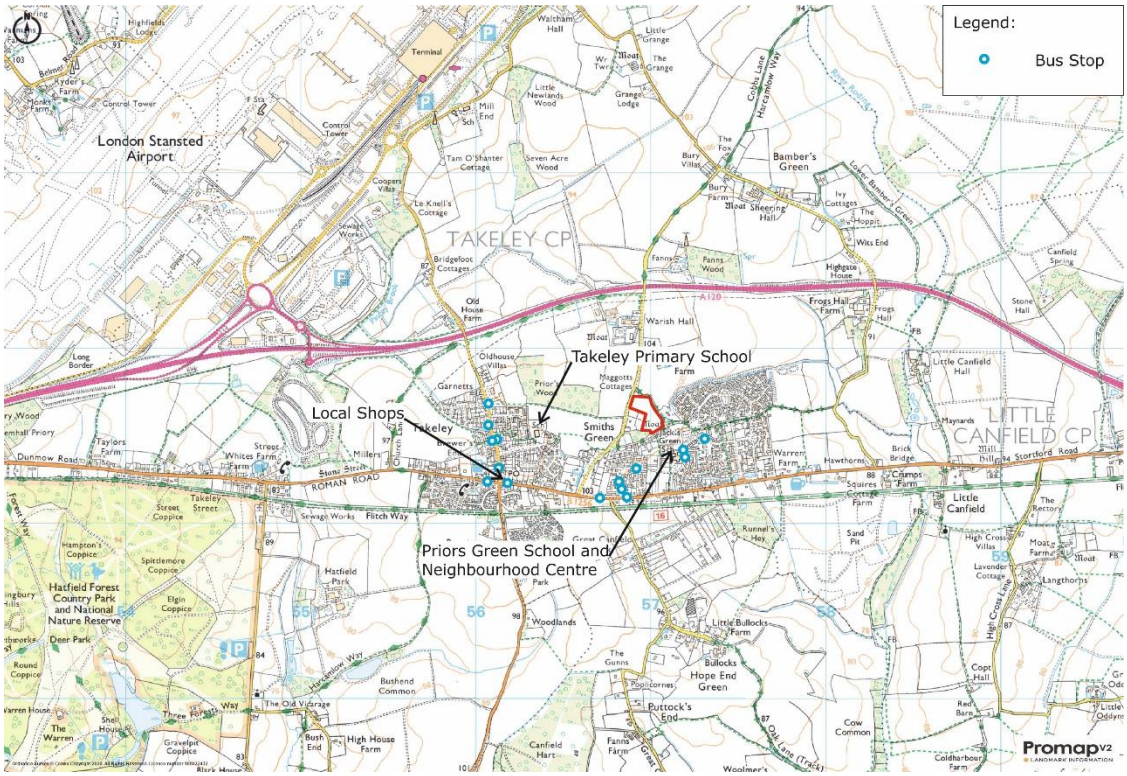


Figure 3.1: Local Area

3.4 Details on each of these sustainable modes of travel are set out below.

Accessibility by Foot and by Bicycle

3.5 Parsonage Road is provided with footways on both sides of the carriageway between the Application Site and the signalised junction with Dunmow Road (the B1256) to the south. This provides access to local shops and the wider footway network serving Takeley.

3.6 Smith's Green is not equipped with footways, it is however possible to access Jacks Lane from the rear of the Jacks site. This local byway provides a link to the recent Little Canfield development, including Priors Green School, local bus stops and the neighbourhood centre.

3.7 Parsonage Road and Smiths Green Lane are generally suitable for cyclists, both being subject to 30 mph speed limits and primarily serving local traffic. More widely, the Flitch Way follows the path of a disused railway to the south of Dunmow Road. It forms part of National Cycle Route 16 and links Takeley to Great Dunmow and Braintree and also the intersection with National Route 50. Smiths Green Lane forms part of the on-road route linked with the National Cycle Network that runs north to Bambers Green, Molehill Green and network of smaller villages within Uttlesford.

3.8 The majority of both Takeley and Little Canfield are accessible by foot from each of the three parcels within a two-kilometre walk. Walking catchments from each are illustrated at **Appendix A**. A cycling catchment is also included.

3.9 Table 3.1 provides a summary of local services, facilities and amenities in relation to the Application Site, together with the associated travel times by sustainable transport modes. Standard walk (i.e. 1.4 m/s) and cycle speeds (i.e. 12 mph or 5.4 m/s) referenced in the Institute of Highways and Transportation's document entitled 'Providing for Journeys on Foot' and the Department for Transport's 'Local Transport Note 2/08 – Cycle Infrastructure Design' have been used.

Destination	**Distance (metres)**	**Typical Journey Times (minutes)**		
		Foot	**Cycle**	**Bus/Train**
Public Transport Interchanges				
Dunmow Road Bus Stops	700	9	3	N/A
Bishops Stortford Railway Station	8,800	N/A	N/A	31
Community Facilities				
Priors Green Community Hall	500	6	2	N/A
Holy Trinity Church	1,950	23	6	N/A
Health Facilities				
Yogi Pharmacy	950	11	3	N/A
Herts & Essex Community Hospital	7,600	N/A	N/A	27
Dunmow Community Clinic	7,500	N/A	N/A	24
Education Facilities				
Takeley Primary School	550	7	3	N/A
Roseacres Primary School	800	8	3	N/A
Birchwood High School	7,100	N/A	N/A	31
The Hertfordshire and Essex High School	8,900	N/A	N/A	38
Local Retail Outlets				
Londis	950	11	3	N/A
Takeley News	950	11	3	N/A
Red Chilli Fish and Chips	900	10	3	N/A
Open Spaces				

Destination	Distance (metres)	Typical Journey Times (minutes)		
		Foot	Cycle	Bus/Train
Takeley Sports Field	1,500	18	5	N/A
Takeley Football Club	1,100	15	4	N/A
Clarendon Road Park	850	11	3	N/A
Priors Green Community Hall	500	6	2	N/A
Key Employment Areas				
Takeley Business Centre	900	10	3	N/A
Bishops Stortford Town Centre	8,800	N/A	N/A	35
Stansted Airport	3,500	N/A	N/A	19

Typical Journey Times to Key local Services

Pedestrian and Cycle Network Assessment

The local Pedestrian and Cycle Network has been assessed using the LTN 1/20 cycle infrastructure design published by the department of transport. The LTN 1/20 provides guidance on planning for cycling, space for cycling within highways and cycle lanes and cycle tracks.

There is a currently a plan to implement a new cycle route along Parsonage Road between Four Ashes junction and Stansted Airport. This plan is not fixed and several options are being considered as to how best to implement the new cycle route. The applicant is willing to make a financial contribution towards the delivery of such a plan, proportionate to the scale of development. Where this new cycle route passes through land in the applicant's control, the applicant commits to making reasonable endeavours to facilitate the delivery of the proposals.

Public Rights of Way Assessment

3.10 The plan provided at **Appendix B** illustrates the existing public rights of way (PRoW) of relevance to the Proposed Development. These comprise footpaths reference 48-40, 48-41 and 48-25 None of these cross the Application Site.

3.11 PRoWs 48-40 and 48-41 are poorly maintained and in particular footpath 48-41 is indiscernible on the ground.

3.12 The Proposed Development would make a contribution towards resurfacing both these PRoWs to a specification to be agreed with Essex County Council. This would return footpath 48-41 to a definable route on the ground that the public can readily access and use.

3.13 In addition, the Proposed Development will provide new cycle and pedestrian routes which will have permissive rights for the public.

Accessibility by Public Transport

3.14 Takeley is served by bus routes 42A, 133 and 508, which are accessible from stops on Parsonage Road, Dunmow Road and within the Little Canfield development. A summary of local bus routes and frequencies is provided below in Table 3.2.

Service	Route	Frequency		
		Mon-Fri	Saturday	Sunday
42A	Galleywood – Chelmsford – Broomfield Hospital – Little Waltham – Great Waltham – Barnston - Great Dunmow – Takeley – Stansted Airport	Hourly	Hourly	Every 2 Hours
133	Colchester – Marks Tey – Bradwell – Braintree – Rayne – Little Dunmow – Great Dunmow – Takeley – Stansted Airport	Hourly	Hourly	Hourly
508	Harlow Town Centre – Sawbridgeworth – Bishop's Stortford – Takeley – Stansted Airport	Hourly	Hourly	No Service

Table 3.2 – Local Bus Services

3.15 Bishops Stortford station is located eight kilometres west of the Application Site, while this is beyond reasonable walk and cycle distances for functional journeys, it is accessible within 30 minutes via bus route 508 which serves the stop near the Four Ashes junction.

3.16 In addition to the above, Stansted Airport serves as a major public transport interchange catering for rail, national coach, regional coach and local bus services and is just a six minute bus journey from the stops on Parsonage Road. There are approximately 10 departures per hour, four to London Liverpool Street, two to Stratford, two to Stansted Airport and two to Cambridge. A summary of the routes is provided in Table 3.3.

Destination	Route	Frequency
London	Bishops Stortford – Harlow – Broxbourne – Edmonton Green – Seven Sisters – Hackney Downs – Bethnal Green – London Liverpool Street	Every 15 minutes
Stratford	Bishops Stortford – Harlow – Broxbourne – Waltham Cross – Tottenham Hale - Stratford	Every 30 minutes
Stansted Airport	Bishops Stortford – Stansted Mountfitchet – Stansted Airport	Every 30 minutes
Cambridge	Bishops Stortford – Elsenham – Great Chesterford – Shelford - Cambridge	Every 30 minutes

Table 3.3 – Rail Services from Bishop's Stortford

Accessibility to Non-Car Travel Summary

3.17 The above review demonstrates that the Application Site is spatially well located to encourage people travelling to and from the Application Site to make journeys by walking, cycling and public transport.

3.18 The Proposed Development therefore presents an opportunity to provide new residence at a location that is already accessible by a variety of modes of transport and would therefore have the potential to reduce reliance upon the private car.

Highway Network

3.19 The various elements of the Proposed Development will be accessed via Parsonage Road and Smiths Green. Parsonage Road has a north-south alignment and is one of the primary roads within Takeley. It forms a crossroads with Dunmow Road (the B1256) in the centre of Takeley, known as the Four Ashes Crossroad. To the north, Parsonage Road provides access to Stansted Airport as well as routes to Stansted Mountfitchet and Saffron Walden.

3.20 Smiths Green Lane a country lane that runs between Dunmow Road and Bamber's Green. The southern section has residential development on both sides, set back a considerable distance from the carriageway and separated by common land. To the north, the road runs through more open countryside with sporadic residential and agricultural development.

3.21 Dunmow Road runs east-west though Takeley, forming junctions with both Parsonage Road and Smiths Green Lane. It was formerly the A120 trunk road, having been downgraded when the new dual carriageway that bypasses Takeley to the north was opened in 2003. It provides links to Great Dunmow to the east and both Bishop's Stortford and the M11 to the west.

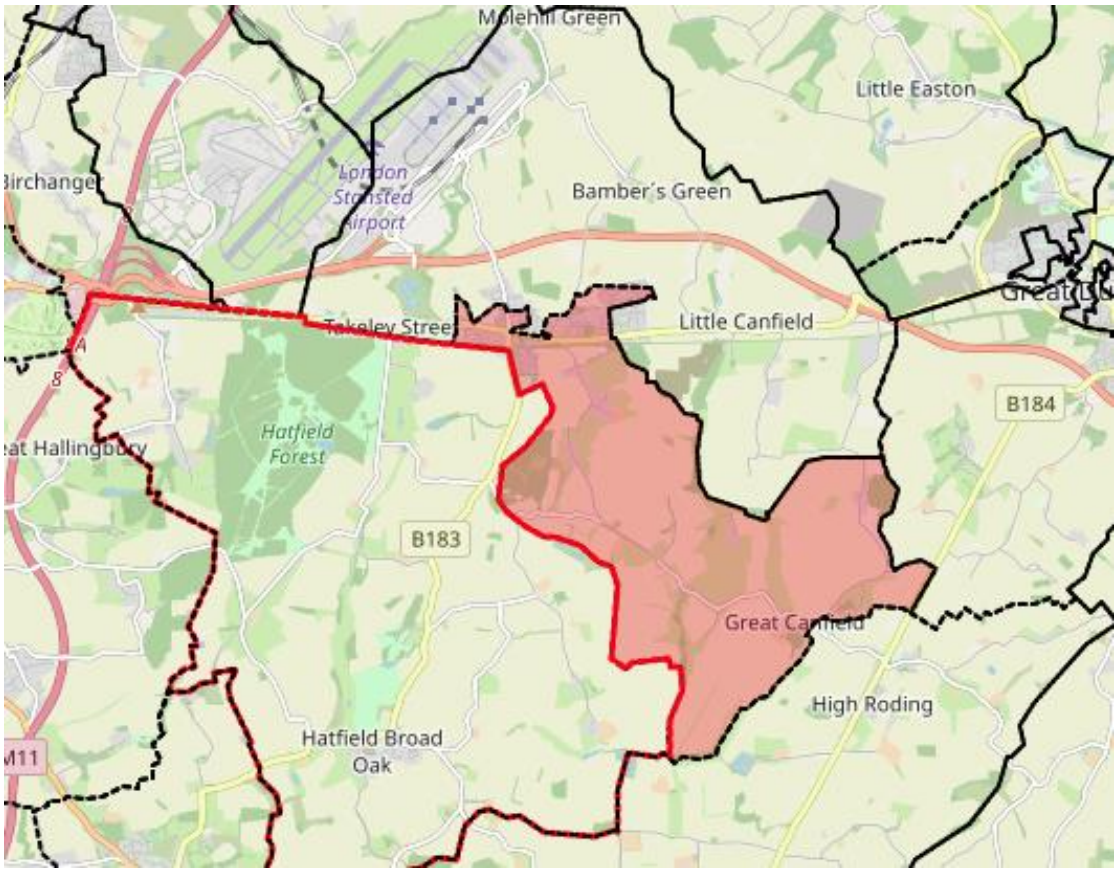
3.22 Street lighting provision within Takeley is intermittent and most noticeably there is no street lighting on Parsonage Road.

Baseline Travel Patterns

3.23 In order to assess the relative attractiveness of the sustainable modes of transport that the Application Site has access to, the 2011 Census Data results associated with residents living in the local area has been interrogated. Details of the data extracted from the 2011 Census is summarised in Table 3.4.

Mode	Study Area (Uttlesford 006C LSOA)	Uttlesford
Public Transport	10.5%	11.8%
• *Rail*	*8.2%*	*10.2%*
• *Bus*	*2.3%*	*1.6%*
Car/van driver	78.9%	71.3%
Car/van passenger	4.0%	4.0%
Taxi	0.5%	0.3%
Motorcycle	0.4%	0.6%
Pedal Cycle	1.2%	1.2%
On foot	3.9%	10.1%
Other	0.7%	0.6%
TOTAL	**100%**	**100%**

Table 3.4 – Travel to Work Data (2011 Census)



Uttlesford 006C

3.24 This area was selected on the basis that it includes most of the existing built up area. Alternatives, he Uttlesford 006 MSOA for example, are predominantly rural and are therefore unlikely to provide an accurate representation of travel habits within Takeley.

3.25 It is acknowledged that the majority of the site does not actually fall within this area. That said, the area does include much of the existing neighbouring residential development. In any event, it should be noted this data is provided for context and that the trip generation figures do not rely on it.

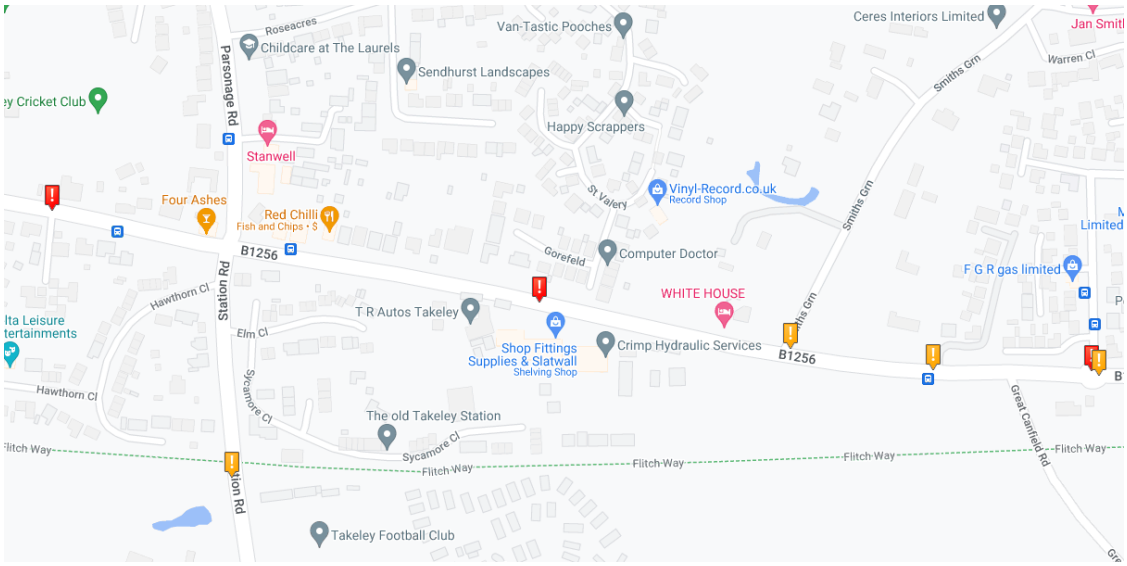
3.26 As with the rest of Uttlesford, Table 3.4 indicates that the predominant mode of transport for travelling to work amongst existing residents is the private car. However, as approximately 16% of people travel to work via the more sustainable modes of transport (i.e. public transport, walking and cycling), it is considered that the sustainable transportation options introduced above provide existing residents of this area of Uttlesford with a choice of transportation modes for work based trips. Whilst there is also likely to be a growing propensity for working at home, meaning there is potential for the overall number of trips to reduce, particularly at peak times.

Road Safety

3.27 ID42-015 of the NPPG recommends that:

"an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period in the proposed site has been identified as within a high accident area."

Personal Injury Accident (PIA) data recorded within the immediate vicinity of the Application Site has been obtained from the *Crashmap* website for the last available five-year period covering 2017 to 2021. A copy of the road safety reports covering the study area indicated below is provided at **Appendix C**.



Road Safety Study Area

3.28 A total of 7 accidents have been identified within the study area. Of these:

- 2 were at or in the approach to the Four Ashes crossroad; and,
- 5 were located at various locations along the B2156 (including one at the junction of Smiths Green).

3.29 No collisions were recorded on Parsonage Road (south of the A120) during this period.

3.30 Based on the evidence presented above, it is concluded that the local highway network does not suffer from significant defects that are likely to result in an abnormally high accident rate. As a result, there is not a need to consider this matter in any further detail as part of this assessment.

Traffic Data

Baseline Flows Clarification and Flow Diagrams

3.31 Base traffic flows are generally taken from the TA submitted in support of application UTT/18/3538/OP (Land North of Canfield Drive). This data is used for all the junctions modelled on Dunmow Road but does not extend north along Parsonage Road. The relevant flow diagrams from the original TA are included at **Appendix D**.

3.32 Additional data has been taken from applications UTT/19/0462/FUL (Land West of Hall Road) and UTT/17/1854/FUL (Skyway House) in order to model the Hall Road mini-roundabout and the Westons Business Park access. The relevant flow diagrams are included at **Appendix E**.

3.33 The Skyway House data is used for turning movements into and out of the access, the 'with development' flows are therefore used. No adjustment to the base year is necessary as traffic flows associated with the development are unlikely to change to any significant degree.

Traffic Survey (Smiths Green)

3.34 A traffic survey was conducted at the junction between Smiths Green and Dunmow Road on Tuesday 28th September 2021. This data, included at **Appendix F** has been used to assess the performance of this junction.

3.35 2018 Baseline traffic flows derived from this data are illustrated on **Figures 3.3** and **3.4**.

Baseline Modelling

3.36 The following tables provide a summary of the performance of both junctions under baseline conditions. The full junction modelling outputs are included at **Appendix G**. It should be noted that the LinSig model for the Four Ashes Crossroad is based on the one submitted as part of the TA associated with Land North of Canfield Drive. ECC Highways offered no objection to this development and accepted the modelling as presented.

Validated/ Optimised	AM Peak			PM Peak		
	% Deg Sat	Delay	PRC	% Deg Sat	Delay	PRC
Validated	96.8	28.62	-7.6	82.8	23.47	8.7
Optimised	76.5	19.77	17.7	67.6	20.33	33.1

Table 3.5 – Four Ashes Modelling Summary (2018 Baseline)

Junction	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
Westons Access	0.22	11.18	A	0.21	12.13	A

Table 3.6 – Westons Business Centre Modelling Summary (2018 Baseline)

Junction	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
Hall Road Mini Rbt	0.68	19.19	B	0.55	15.22	B

Table 3.7 – Hall Road Mini Roundabout (2018 Baseline)

Junction	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
Dunmow Road/Roding Drive	0.48	9.45	A	0.70	12.86	A

Table 3.8 – Dunmow Road/Roding Drive (2018 Baseline)

Junction	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
Dunmow Road/Warwick Road	0.42	6.09	A	0.32	5.13	A

Table 3.9 - Dunmow Road/Warwick Road (2018 Baseline)

Scenario	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
2021 Baseline	0.06	11.45	A	0.07	13.86	A

Table 3.10 – Smiths Green/Dunmow Road (2021 Baseline)

3.37 When considering the above results, it should be noted LinSig assumes that a degree of saturation of 100% on a link indicates traffic flows are equal to its capacity. Notwithstanding this, it is generally accepted a negative Practical Reserve Capacity (PRC) is considered to be representative of a junction operating over its practical capacity and may be subject to periods of congestion/delay.

3.38 Similarly, the IHT indicates that Ratio of Flow to Capacity (RFC) values of 0.85 to 0.90 have historically been considered to reflect uncongested design thresholds, whilst an RFC of 1 indicates that a junction is operating at capacity. As the results presented above indicate that all junctions are operating with an RFC of less than 1, it is evident that all of the assessment junctions operate within capacity, assuming opportunities to optimise signals timings at the Four Ashes Crossroads are taken up.

4.0 Proposed Development

4.1 The proposed development comprises 40 residential dwellings, accessed from Smiths Green Lane. The proposed layout is included at **Appendix H**.

Vehicular Access

4.2 from the proposed vehicular access from Smiths Green Lane would take the form of a simple priority junction leading to a 5.5 metre carriageway which forms a loop within the development.

4.3 Drawings demonstrating that appropriate visibility can be achieved from each of these accesses is included at **Appendix I**. Visibility splays of 2.4 by 43 metres are provided, in accordance with the posted speed limit and Smiths Green Lane.

Pedestrian and Cycle Access

4.4 The development has been designed to be as permeable as possible for pedestrians and cyclists, connecting these to existing rights of way as necessary.

4.5 The primary access roads are equipped with two metre footways throughout the Application Site. The majority of the dwellings are accessed from cul-de-sacs which take the form of six metre wide shared spaces.

Parking

4.6 Car and cycle parking are provided in accordance with the policies set out in section 2.

4.7 A total of 90 residential car parking spaces are provided, which equates to an overall ratio of approximately 2.25 spaces per dwelling. In accordance with ECC guidance, single bedroom dwellings are provided with one space each and larger dwellings are provided with two spaces although within Uttlesford these are expressed as minimum standards.

4.8 Suitable provision is made for visitor parking within parking mews and on street. A total of 10 visitor parking spaces are included.

4.9 Residential cycle parking is provided either within garages of within the curtilage of the dwelling.

Servicing

4.10 The internal road network has been designed to accommodate the largest vehicles likely to access the Application Site on a regular basis. Swept path analysis, included at **Appendix J**, demonstrates that both a refuse vehicle and fire tender can access all parts of the Application Site.

4.11 In some locations, bin collection points are required to prevent refuse operatives being required to walk further than the maximum permitted distance. These are marked on the swept paths included at **Appendix J** and are located within both the residents' and refuse operatives' maximum recommended walk distance.

5.0 Development Impact Assessment

5.1 The following text deals with the impacts of both schemes, both alone and in combination. For ease of reference, junction modelling outputs for all scenarios are included.

Trip Generation

5.2 In order to assess the volume of traffic that is likely to be generated by the Proposed Development, the industry standard TRICS database has been interrogated to determine trip rates for privately owned houses.

5.3 The results of this assessment are summarised below, while the TRICS outputs are included at **Appendix K**. It should be noted that the analysis below considers a scheme including 40 dwellings and 3,500m^2 of commercial floorspace, the proposals have since been reduced to 3,000m^2 of commercial space. The assessment is therefore considered to be robust.

Time Period	Vehicle Trip Rates (Per unit)			Vehicle Trip Generation (40 units)		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
AM Peak (08:00-09:00)	0.131	0.367	0.498	5	15	20
PM Peak (17:00-18:00)	0.336	0.156	0.492	13	6	20
Daily (07:00-19:00)	2.262	2.283	4.545	90	91	182

Table 5.1 – Proposed Development Trip Generation (Residential)

Time Period	Trip Rates (per 100m^2)			Trips (3,500m^2)		
	Arrivals	Departures	Two Way	Arrivals	Departures	Two Way
Weekday Morning (08:00-09:00)	0.717	0.495	1.212	25	17	42
Weekday Evening (17:00-18:00)	0.238	0.599	0.837	8	21	29
Daily (07:00-19:00)	6.474	6.47	12.944	227	226	453

Table 5.2 – Industrial Trip Generation

Time Period	Trip Rates (per 100m^2)			Trips (387m^2)		
	Arrivals	Departures	Two Way	Arrivals	Departures	Two Way
Weekday Morning (08:00-09:00)	4.599	2.471	7.07	18	10	27
Weekday Evening (17:00-18:00)	1.894	2.813	4.707	7	11	18
Daily (07:00-19:00)	38.569	36.994	75.563	149	143	292

Table 5.3 – Health Centre Trip Generation

5.4 Table 5.4 provides a summary of the total amount of traffic the scheme is predicted to generate.

Time Period	Arrivals	Departures	Two Way
Weekday Morning (08:00-09:00)	48	42	89
Weekday Evening (17:00-18:00)	28	38	67
Daily (07:00-19:00)	466	460	927

Table 5.4 – Total Trip Generation

5.5 It is note that no allowance has been made for trip internalisation for example residents of the new development travelling to the health facilities and / or working at the employment area.

5.6 Similarly, no allowance has been made for existing health or employment journeys made by residents living in proximity to the Application Site who may divert to the new, closer facilities. In particular it is expected that a high proportion of these would be made by foot rather than car. Table 5.4 indicates that the Proposed Development has the potential to generate a total of 89 two-way vehicle movements in the AM peak period and 67 two-way vehicle movements in the PM peak period. The daily equivalent is generation of 927 two-way vehicle movements.

5.7 Vehicular activity of this magnitude equates to a maximum of just 1.5 additional vehicles per minute in the peak travel periods.

Background Traffic Growth

5.8 TEMPRO growth rates has been applied in order to account background traffic growth. The growth rates, included at **Appendix L**, account for growth between 2018 and 2027. The year in which the surveys were conducted and the expected date of completion respectively.

5.9 When examining these growth rates, it should be considered that:

- No adjustments have been made to job growth forecasts, so there is an element of double counting once the proposed development flows are added;
- Housing growth has been removed from the forecast because the proposed and committed developments will provide in excess of this quantity of housing; and,
- The National Trip Ends Model (NTEM), from which TEMPRO derives growth rates was last updated in 2017 and takes no account of the effects of the current pandemic, particularly the expected shift to home working and the reduction in activity at airports.

5.10 The growth rates applied are therefore considered to be a robust method of estimating background growth. Indeed, both AM and PM growth rates are in excess of 7%, equating to circa 1% per year across the eight year period. AADT data from DfT count point 941072, located on Dunmow Road between Canfield and the A120 indicates that traffic flows increased just 3% between 2015 and 2019, equating to approximately 0.75% per year. This data is included at **Appendix M** for reference.

5.11 It is acknowledged that this count point shows significantly higher levels of growth between 2008 and 2014, this period coincides with the development of Priors Green. Which is likely to have had a disproportionate effect on flows in this location when compared to other developments given that Dunmow Road is the primary route by which residents access Great Dunmow and the A120 eastbound.

5.12 **Figures 5.1** and **5.2** illustrate the 2027 baseline flows that are produced by applying these growth rates to the 2018 flows. It should be noted that no growth is applied to movements to and from Westons Business Centre as these flows are taken from the Skyway House TA and are representative of the completed and fully occupied Application Site.

5.13 It should further be noted that that the growth rates have been applied to the Smiths Green flows, collected in 2021. This is to ensure a robust assessment of the development impacts in light of any ongoing disruption to traffic patterns associated with the pandemic and to simplify the data presented.

5.14 Traffic associated with the following committed developments is included in all future scenarios:

- Land East of Parsonage Road, including the proposed care home (Refs: UTT/19/0393/OP and UTT/19/0394/OP);
- Land West of Parsonage Road (Ref: UTT/19/0393/OP);
- Land West of Woodside Way (Ref: UTT/13/2107/OP);
- Land East of Elsenham (Ref: UTT/19/0462/FUL); and,
- Isabel Road, Elsenham (Ref: UTT/19/2470/OP).

Distribution and Assignment

5.15 For the purposes of this assessment, it has been assumed that traffic associated with the proposed development would distribute onto the local highway network in accordance with 2011 Census data extracted from the Nomis website. Copies of the data extracted from the Nomis website is provided at **Appendix N**, whilst a summary of the distribution profiles are presented at **Figure 5.3** and **5.4**.

5.16 These development flows are added to the 2027 Baseline flows shown on **Figures 5.1** and **5.2** to produce 2026 With Development Flows illustrated on **Figures 5.5** and **5.6**.

Junction Modelling

5.17 The following tables provide a summary of the performance of both junctions under the 2026 Baseline and 2026 With Development scenarios. The full junction modelling outputs are included at **Appendix O**. As noted previously, the LinSig model for the Four Ashes Crossroad is based on the one submitted as part of the TA associated with Land North of Canfield Drive. ECCH offered no objection to this development and accepted the conclusions of this modelling.

Scenario	AM Peak			PM Peak		
	% Deg Sat	Delay	PRC	% Deg Sat	Delay	PRC
2026 Baseline	90.0	30.90	0.0	79.6	26.17	13.1
2026 With Development	93.6	36.80	-4.0	84.6	28.77	6.4

Table 5.4 – Four Ashes Modelling Summary

Scenario	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
2026 Baseline	0.25	11.95	A	0.24	13.26	A
2026 With Development	0.30	12.59	A	0.28	14.55	A

Table 5.5 – Westons Business Centre Modelling Summary

Scenario	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
2026 Baseline	0.89	49.08	D	0.76	22.49	C
2026 With Development	0.89	50.11	D	0.77	23.49	C

Table 5.6 – Hall Road Mini Roundabout Modelling Summary

Scenario	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
2026 Baseline	0.54	10.67	A	0.82	20.52	C
2026 With Development	0.56	11.00	A	0.83	21.41	C

Table 5.7 – Dunmow Road/Roding Drive Modelling Summary

Scenario	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
2026 Baseline	0.52	7.28	A	0.49	5.78	A
2026 With Development	0.52	7.35	A	0.49	5.85	A

Table 5.8 - Dunmow Road/Warwick Road Modelling Summary

Scenario	AM Peak			PM Peak		
	Max RFC	Max Delay	LoS	Max RFC	Max Delay	LoS
2026 Baseline	0.07	12.78	A	0.09	16.00	B
2026 With Development	0.36	16.56	B	0.13	18.98	B

Table 5.9 – Smiths Green Modelling Summary

5.18 The results presented above indicate that once development related traffic is added to the highway network the overall performance of junctions will be subject to relatively minor reductions in capacity and delays.

5.19 While these impacts are not likely to be considered 'severe' in their own right it is accepted that the Four Ashes junction is expected to operate with a negative PRC during the AM peak with the addition of development traffic. The results presented above are not reflective of the installation of a Microprocessor Optimised Signal Actuation (MOVA) system at the Four Ashes Crossroads.

5.20 Planning conditions attached to the Land West of Parsonage Road (Ref: UTT/19/0393/OP) consent required that MOVA be installed at the Four Ashes junction and will therefore be installed in due course. Microsimulation modelling of the system suggests that significant reductions in delay and queues are likely to be achieved. Given that the junction is predicted to operate with a minimum PRC of -4.0%, the junction is therefore expected to operate within typically accepted capacity thresholds with improved trip times once MOVA is installed, which is claimed to improve junction performance by 15 - 20%.

5.21 The Parsonage Road/Hall Road mini-roundabout is forecast to operate with a maximum RFC of 0.89 in both future AM peak scenarios. While this is above the 0.85 threshold typically considered to represent uncongested operation, it is still within the junction's maximum theoretical capacity. The impact of the Proposed Development is therefore de minimis in this location, leading to no change in RFC and

approximately one second increase in RFC. It is therefore concluded that the impact of the proposals in this location cannot be considered as being severe.

6.0 Summary and Conclusions

6.1 This Transport Assessment Report (TAR) has been prepared on behalf of Weston Homes to consider transport and highways matters relating to a planned mixed-use development on land at Jacks (the Application Site).

6.2 This Transport Assessment demonstrates that the Application Site benefits from access to a good network of pedestrian and cycle links, which connect the Application Site to the public transport network that serves the local area and a range of local facilities. On this basis, it is considered that the proposed development is ideally located to encourage people to travel to the Application Site by more sustainable modes of transport in accordance with the aims of the NPPF and Uttlesford Local Plan Policy GEN1.

6.3 It has been shown that the proposals are unlikely to have a material impact upon the local transport networks. Indeed, the results of our various analyses indicate that the proposals would not lead to a material increase in person trips during the peak travel periods or through the course of a typical day. It has also been shown that there is the potential to cost effectively offset the impact of the proposed development upon the local highway network, if required. In this regard it is evident that the proposals accord with Highways Development Management Policy DM1.

6.4 The proposed site access strategy has been designed in accordance with current best practice guidance and thus ensures that safe and suitable access for all can be provided.

6.5 The proposals make provision for car parking spaces that are consistent with anticipated demands for residents and visitors at the end of the current plan period. Given that the analyses undertaken to establish this position have had regard to local car ownership rates, it is clear that the proposed parking strategy accords with the guiding principles of the NPPF. Cycle parking will be provided in accordance with the adopted parking standards.

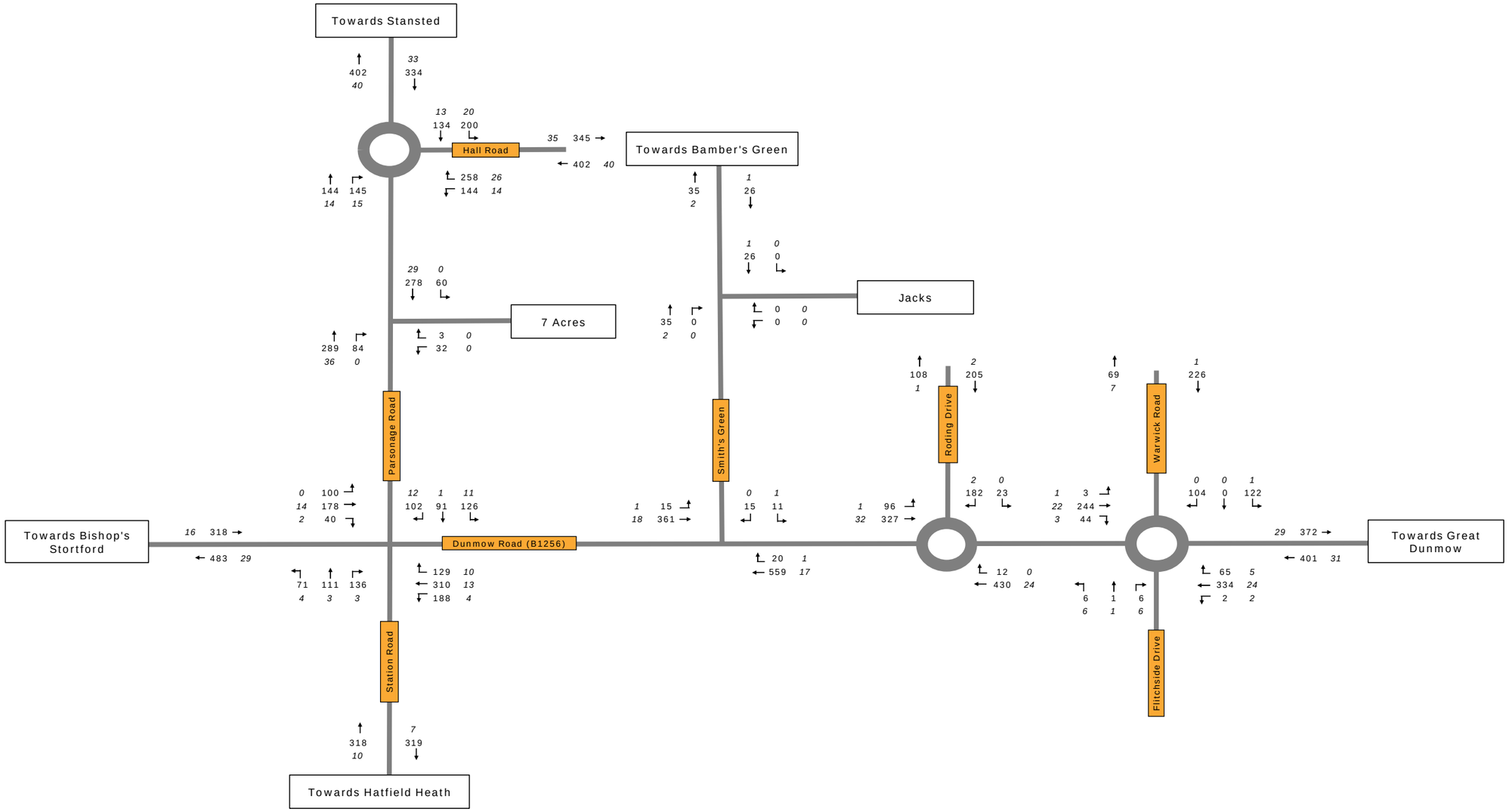
6.6 In this regard, it is considered that the proposals provide adequate car parking provision to meet anticipated demands and therefore will not result in the displacement of parking onto surrounding roads, whilst the use of bicycles will be encouraged. Indeed, it is noteworthy that a Travel Plan will be operated to encourage less reliance upon single occupancy vehicle trips.

6.7 In summary the report demonstrates that:

- The location of the Application Site accords with the relevant national and local transport planning policies;
- The Application Site benefits from access to a sustainable transport network that provides alternatives to the private car;
- An analysis of personal injury accident data records has identified no significant issues associated with the local highway network that are detrimental to road safety levels
- Appropriate provision can be made for access, parking and servicing in accordance with relevant guidance and standards; and,
- The proposed development will not lead to a residual severe impact upon the operation of the local transport networks.

6.8 On the basis of the above, it is concluded that the proposals accord with national and local transport related policies and can be accommodated without detriment to the operating capacity of the local transport networks.

Figures



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123 Total Vehicles
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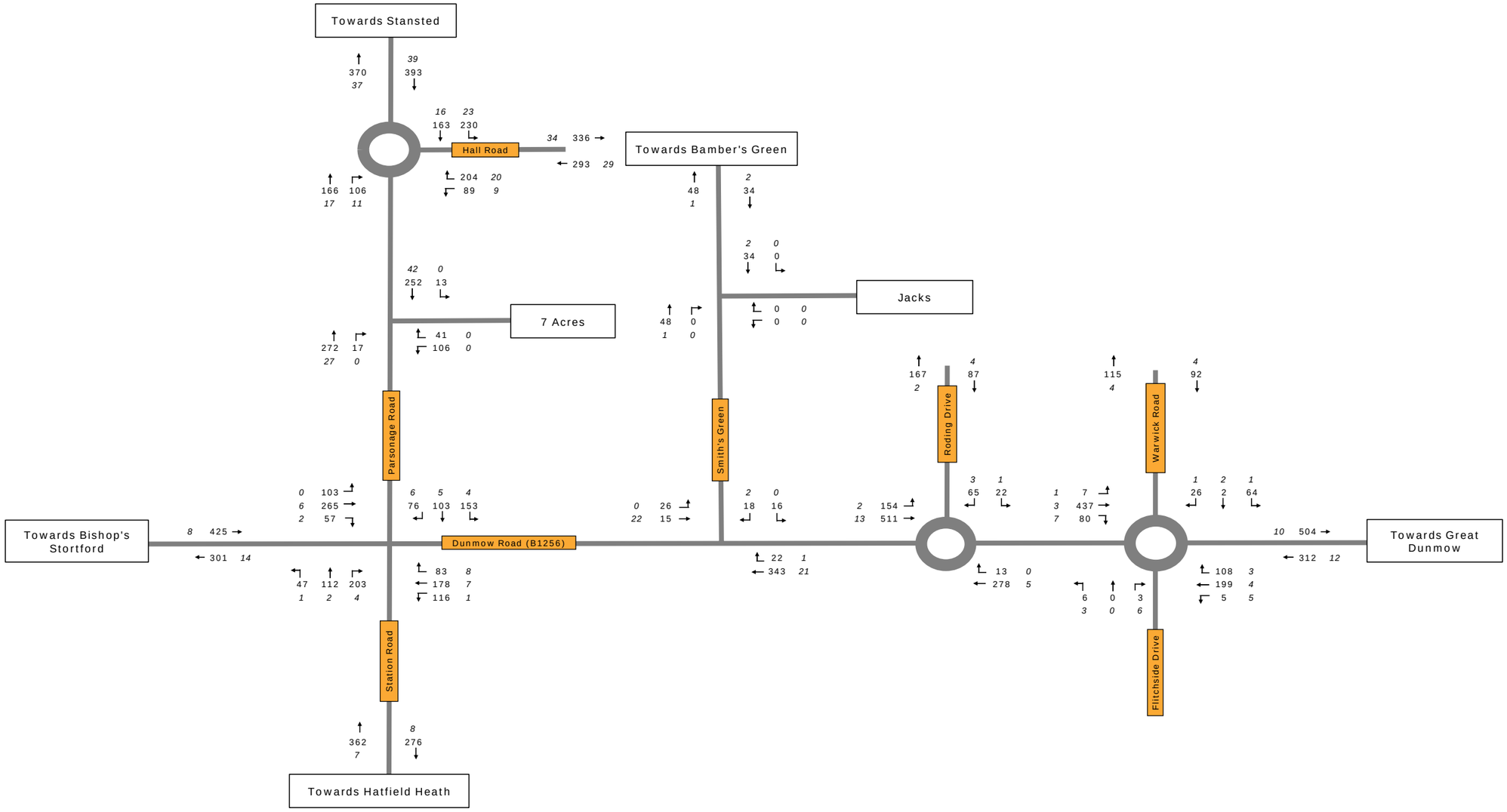
Notes:

Warish Farm, Takeley

2018 AM Peak Traffic Flows



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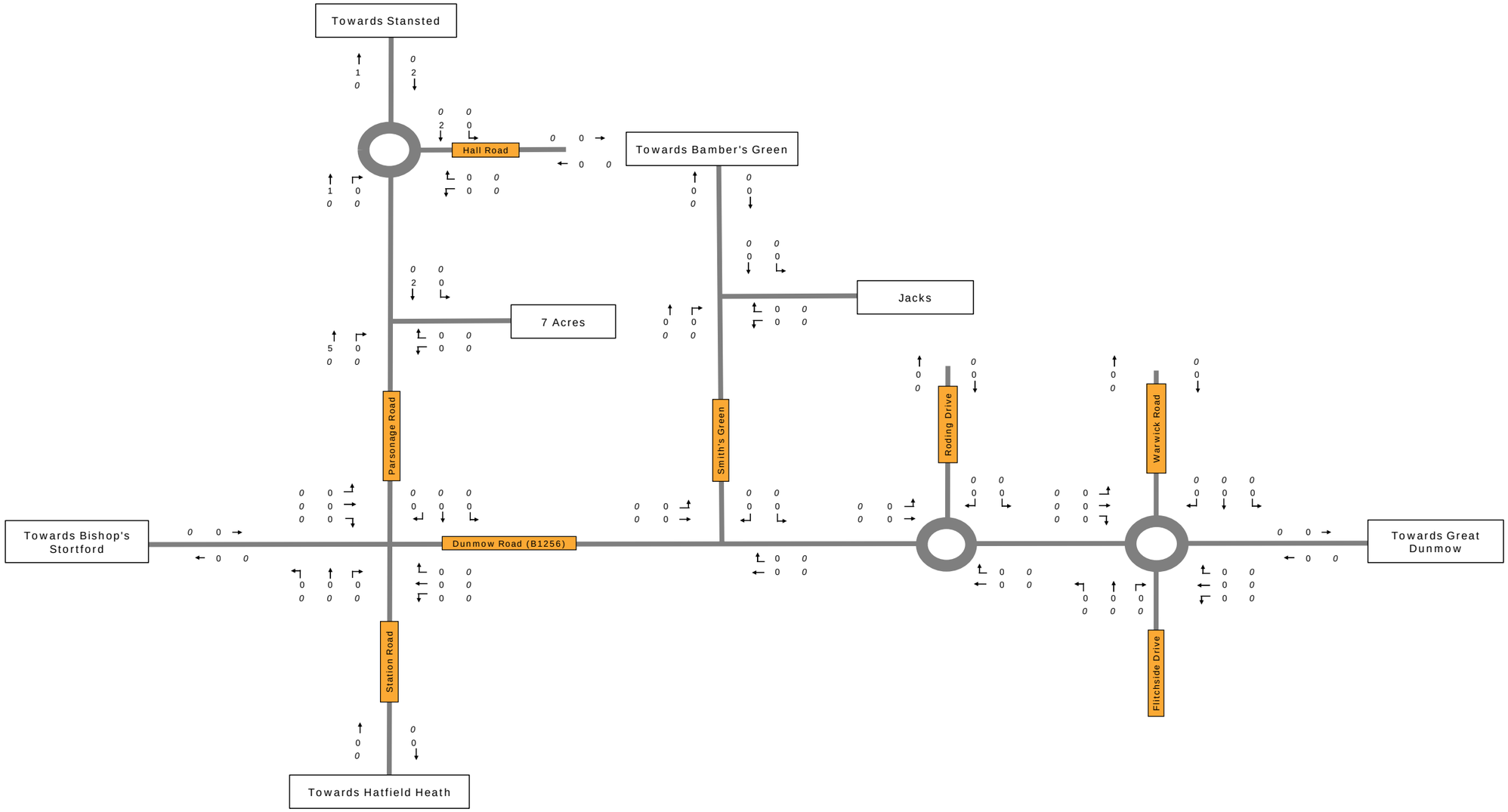

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Notes:

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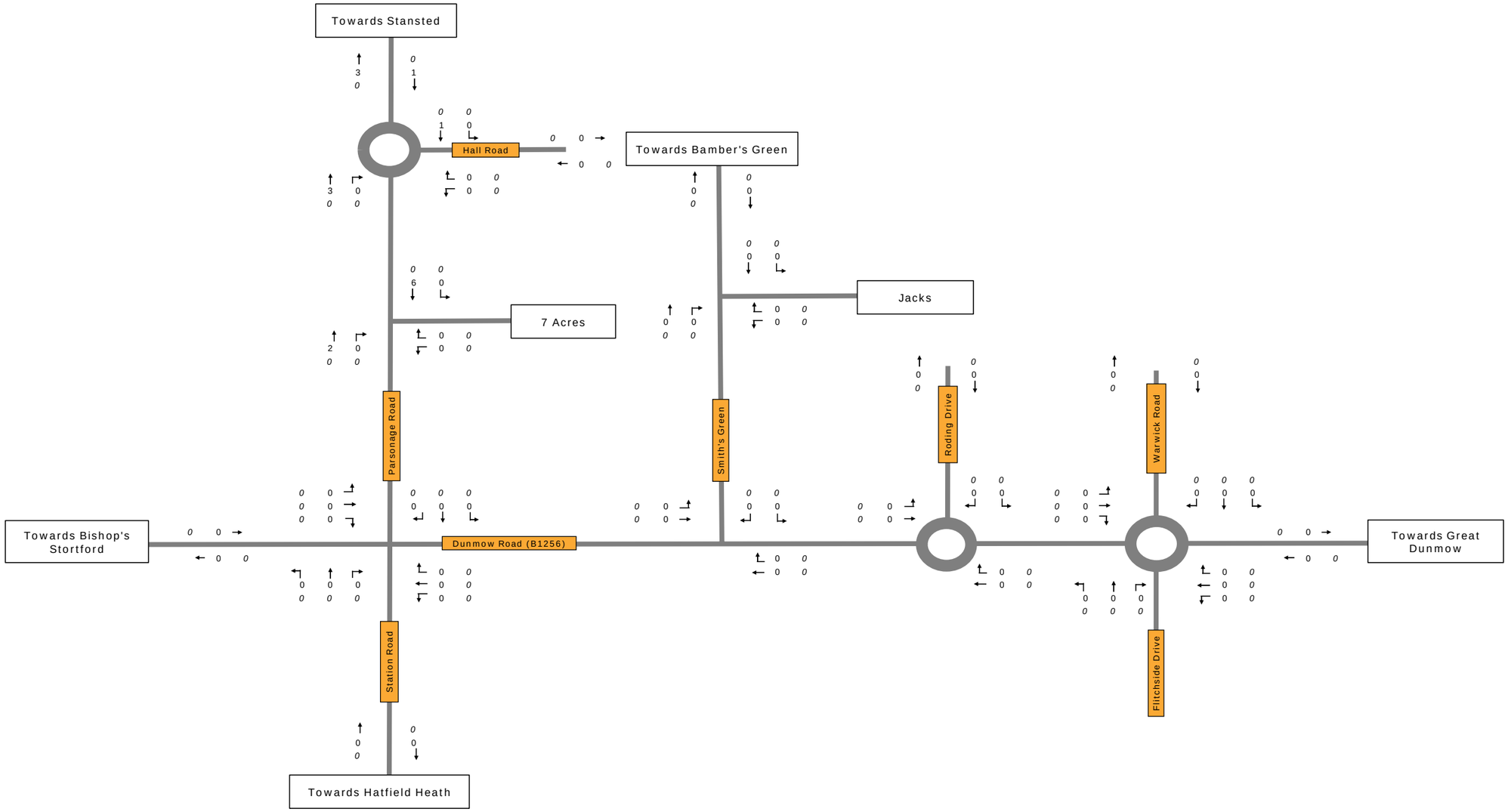
Care Home Dev Flows AM



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Notes:

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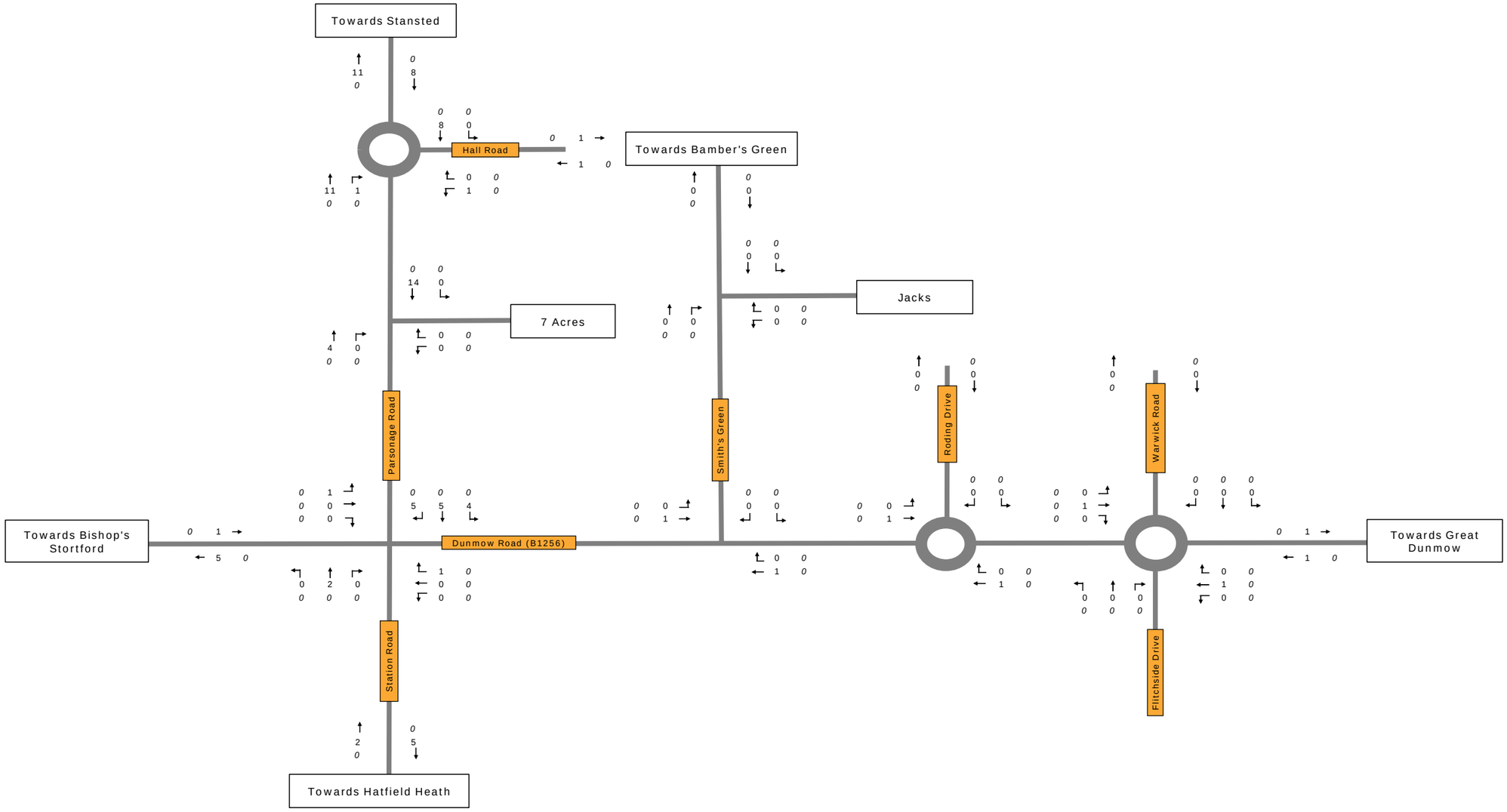

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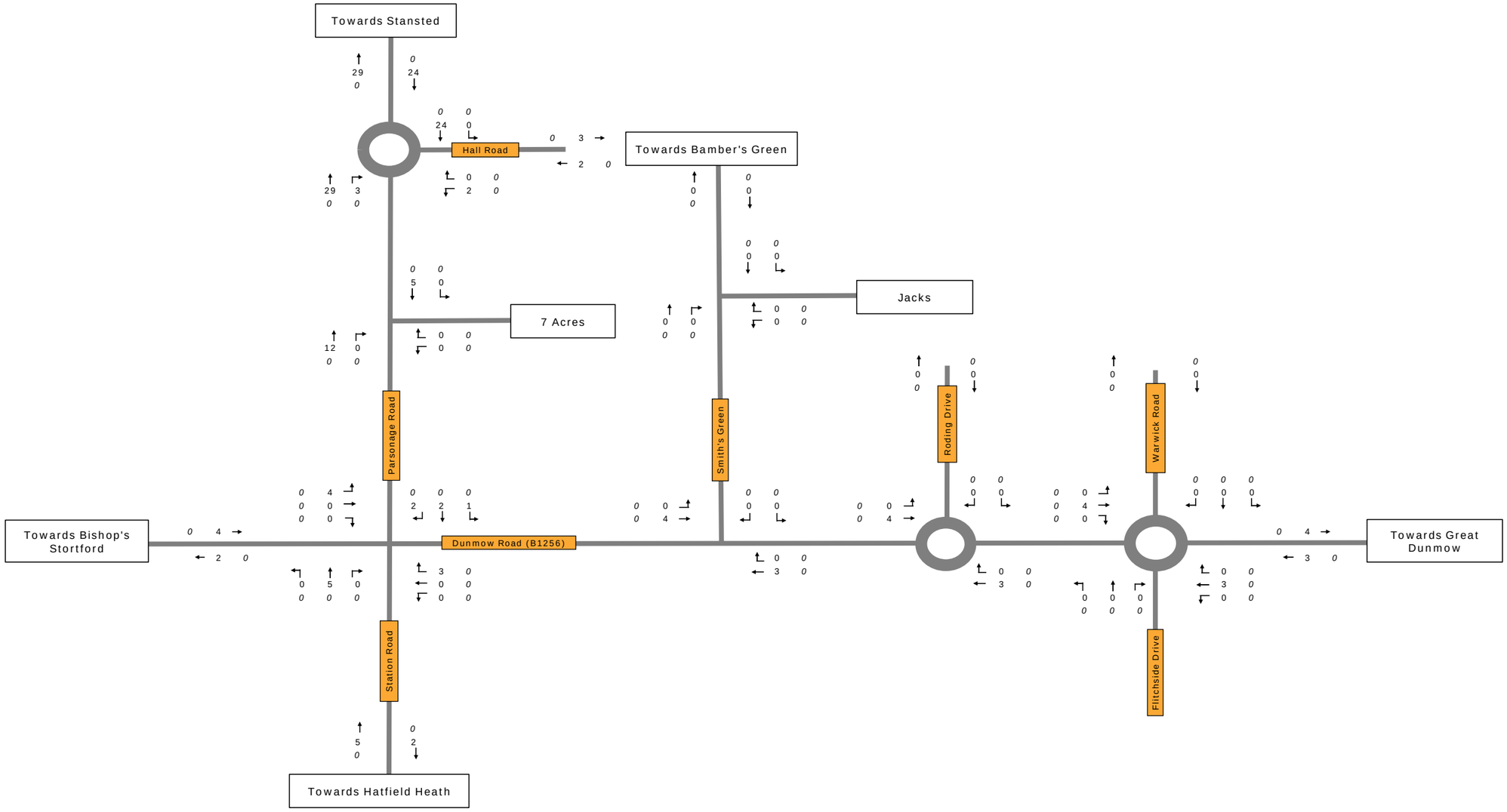
Warish Farm, Takeley

West of Parsonage Road Flows AM



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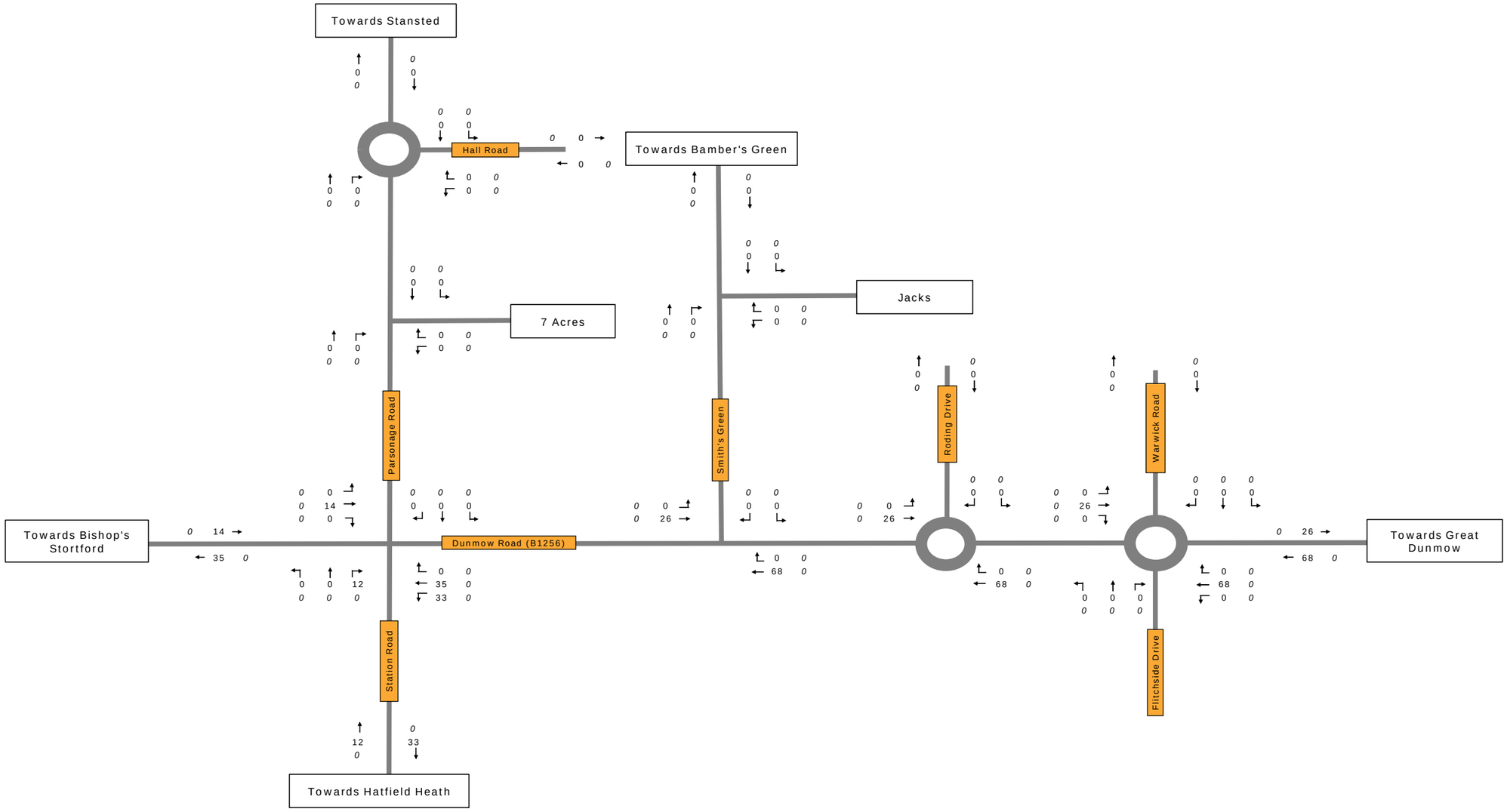
Notes:

Warish Farm, Takeley

West of Parsonage Road Flows PM



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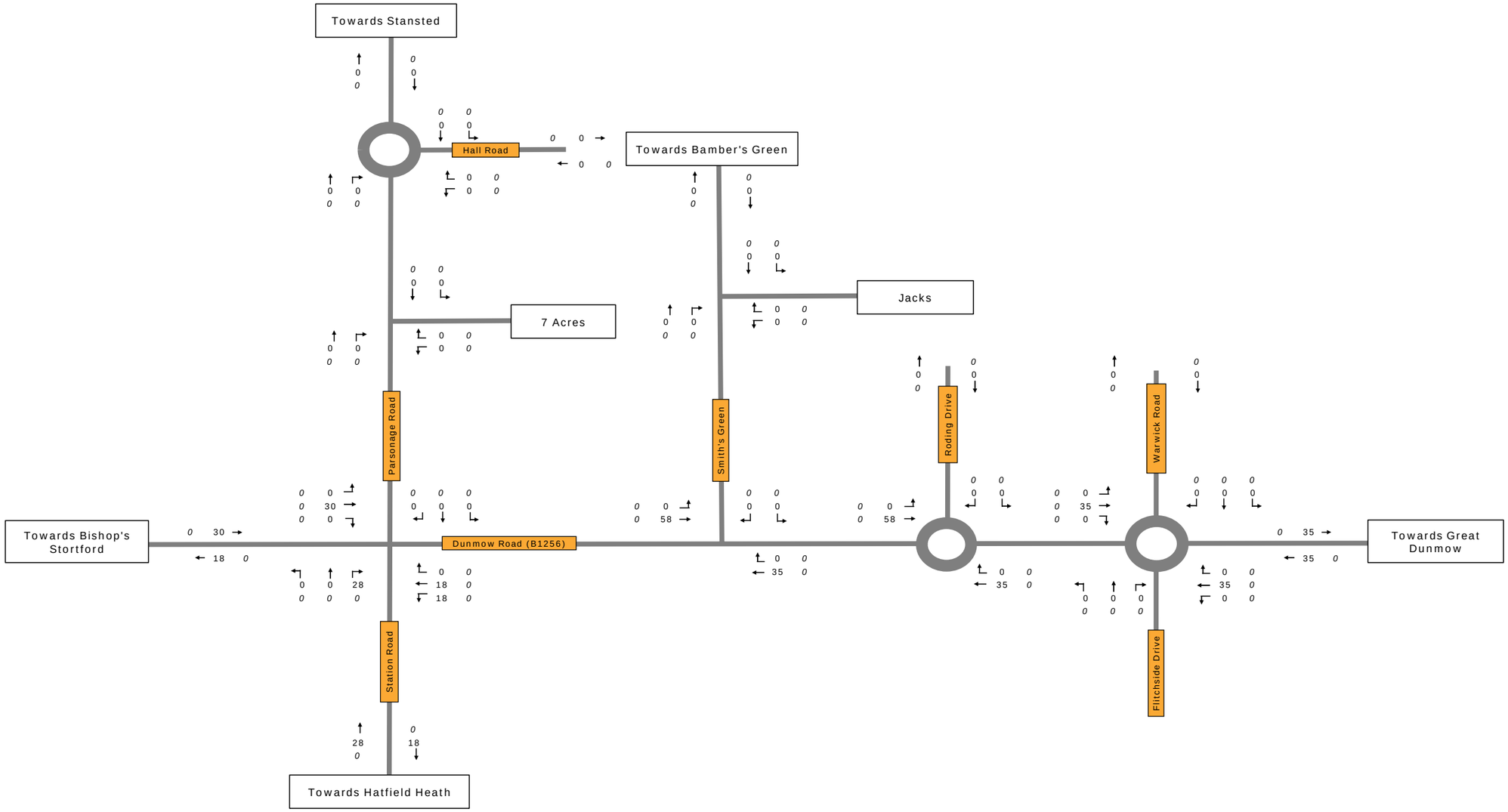
Warish Farm, Takeley

Land West of Woodside Way Flows AM



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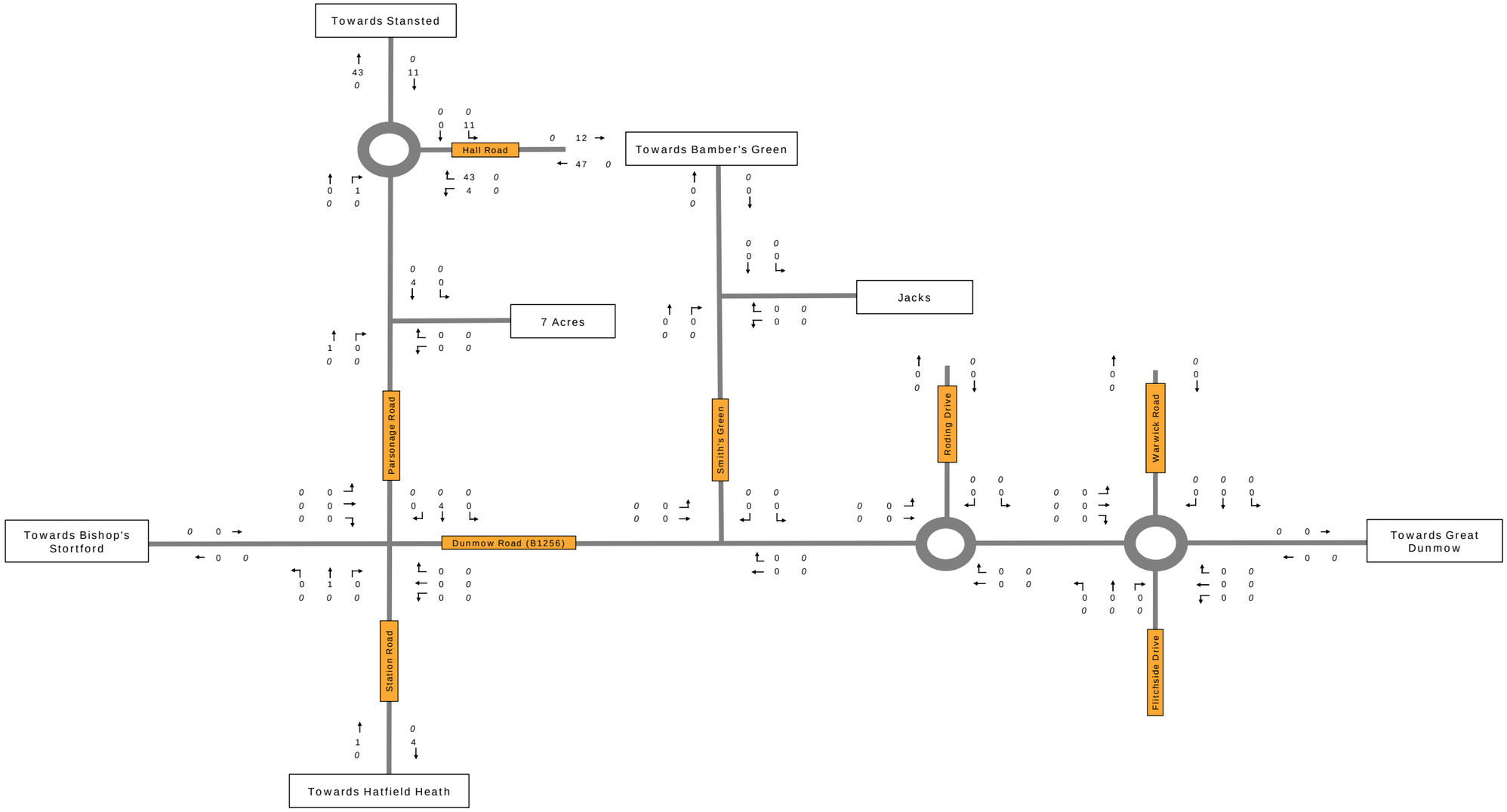
Notes:

Warish Farm, Takeley

Land West of Woodside Way Flows PM



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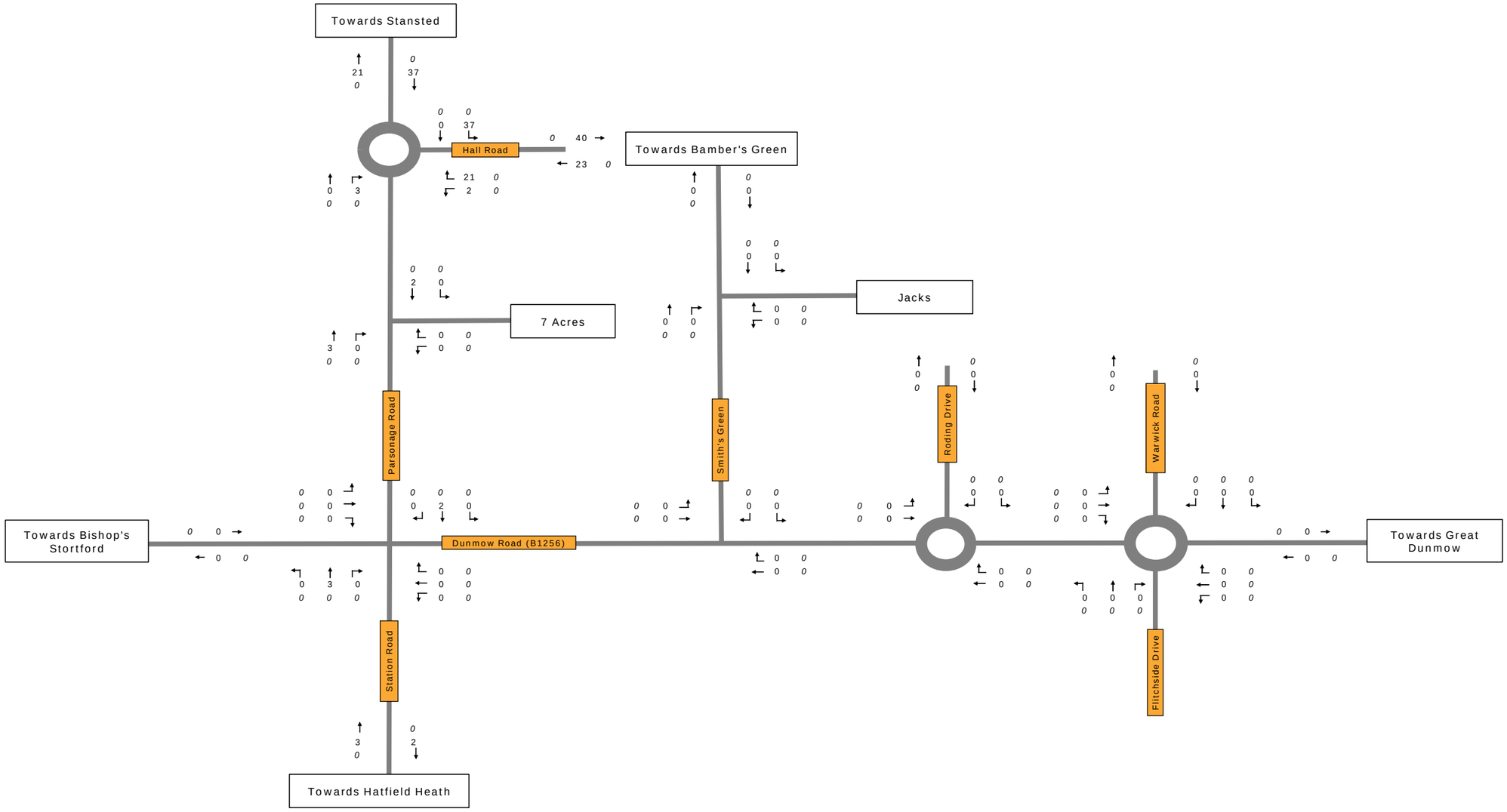
Warish Farm, Takeley

Land East of Elsenham Development Flows AM



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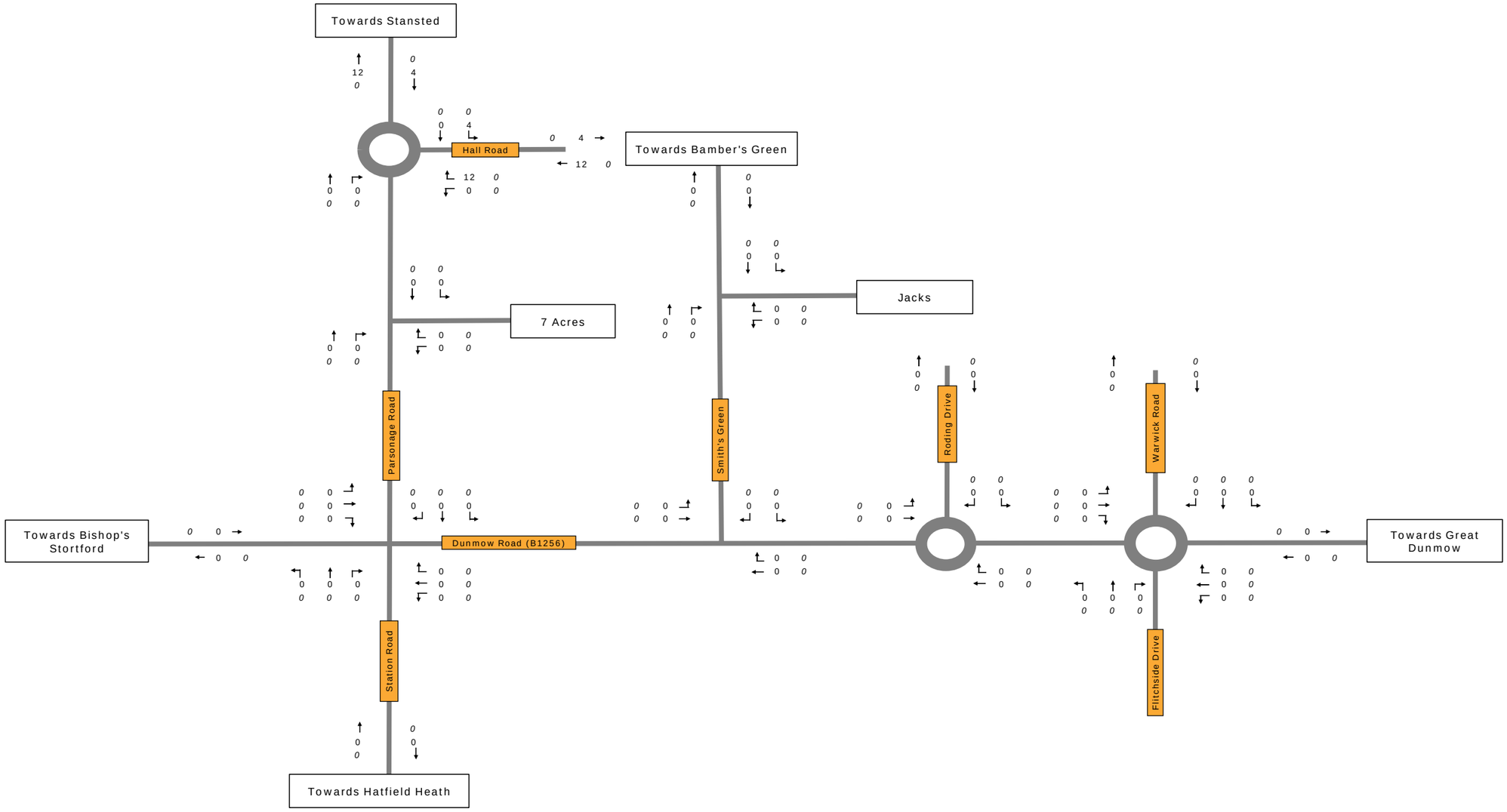
Notes:

Warish Farm, Takeley

Land East of Elsenham Development Flows PM



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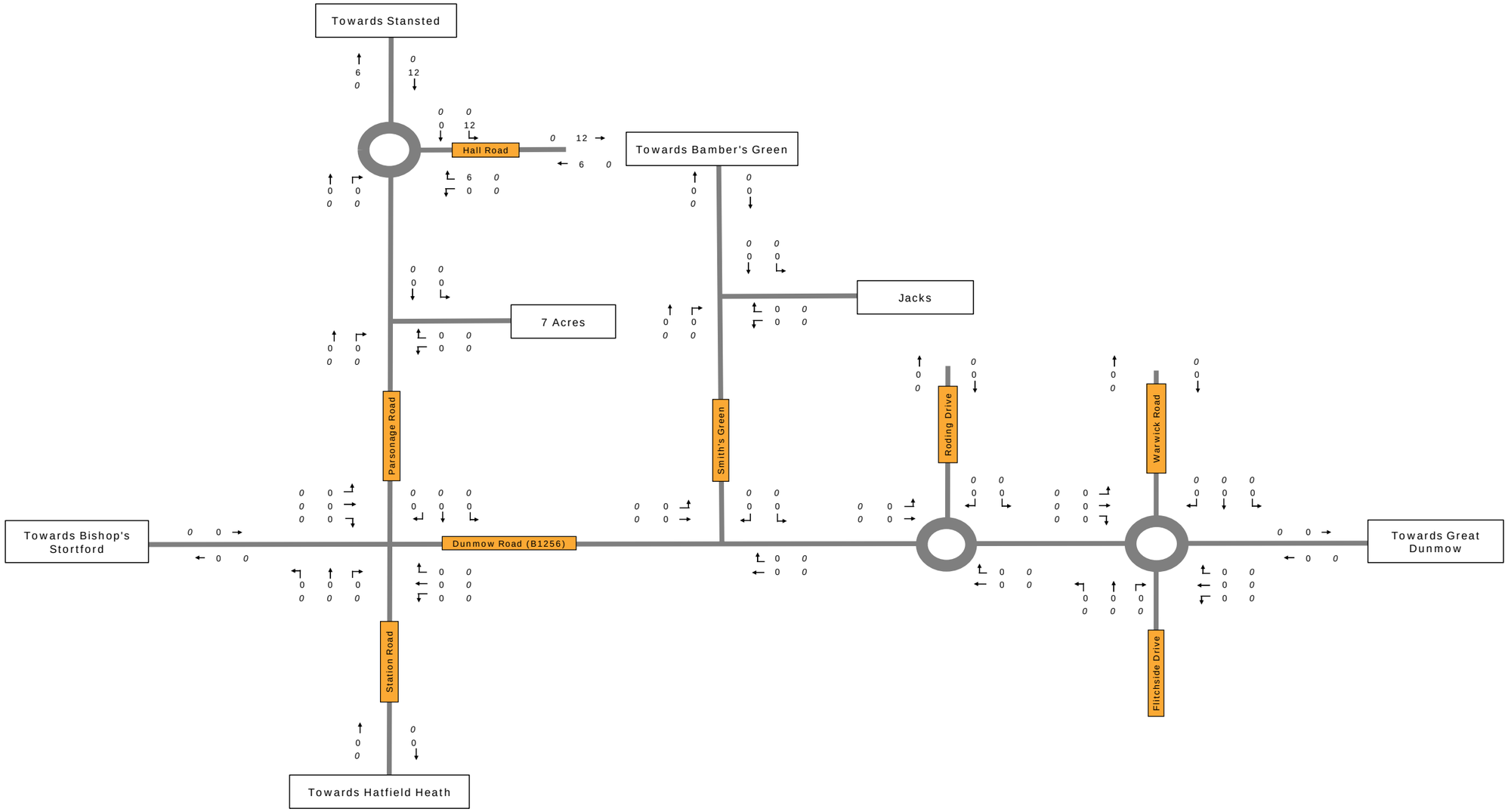
Notes:

Warish Farm, Takeley

Isabel Road Flows AM



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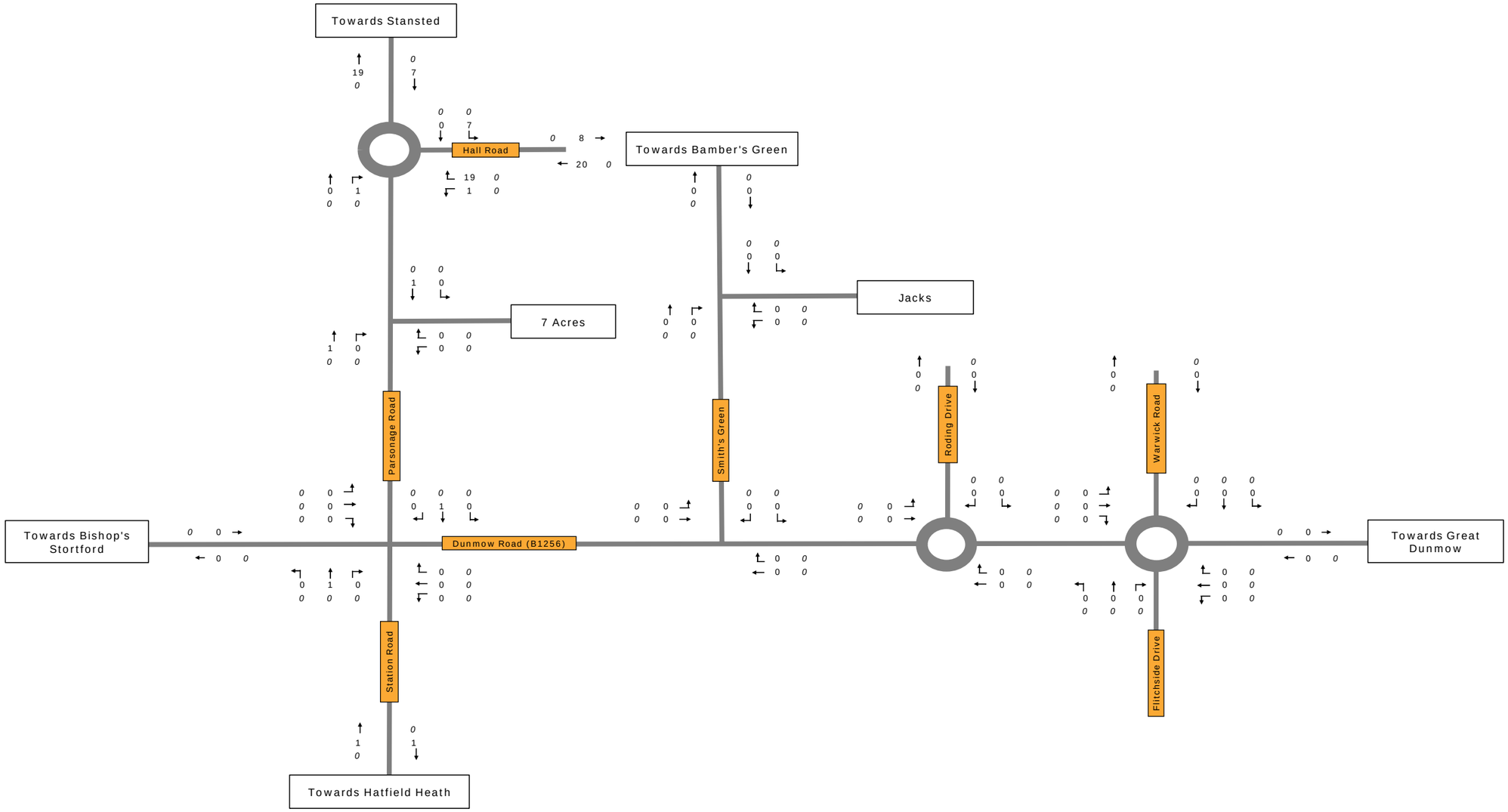
Notes:

Warish Farm, Takeley

Isabel Road Flows PM



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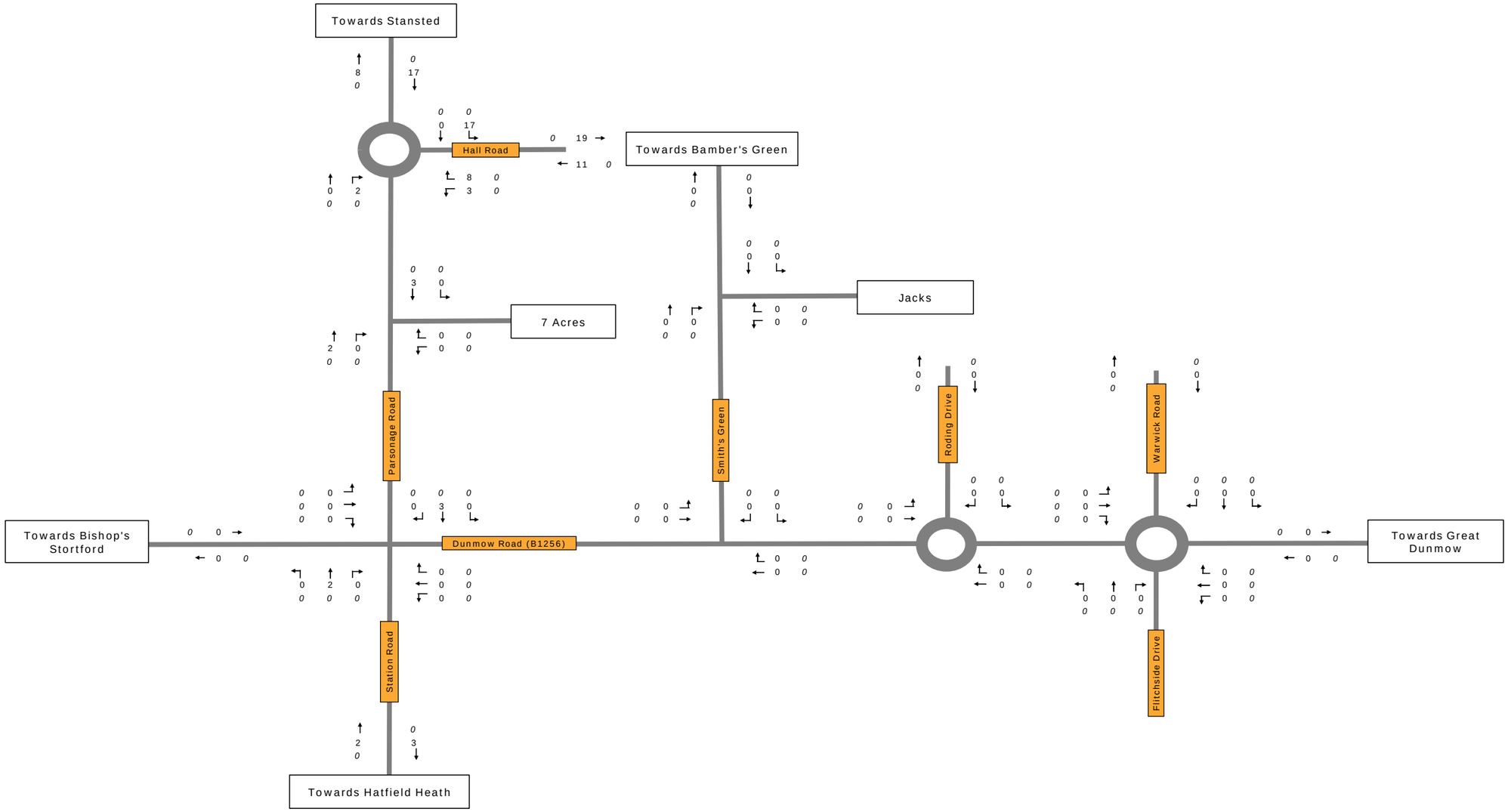
Notes:

Warish Farm, Takeley

Elsenham Hall Road Flows AM



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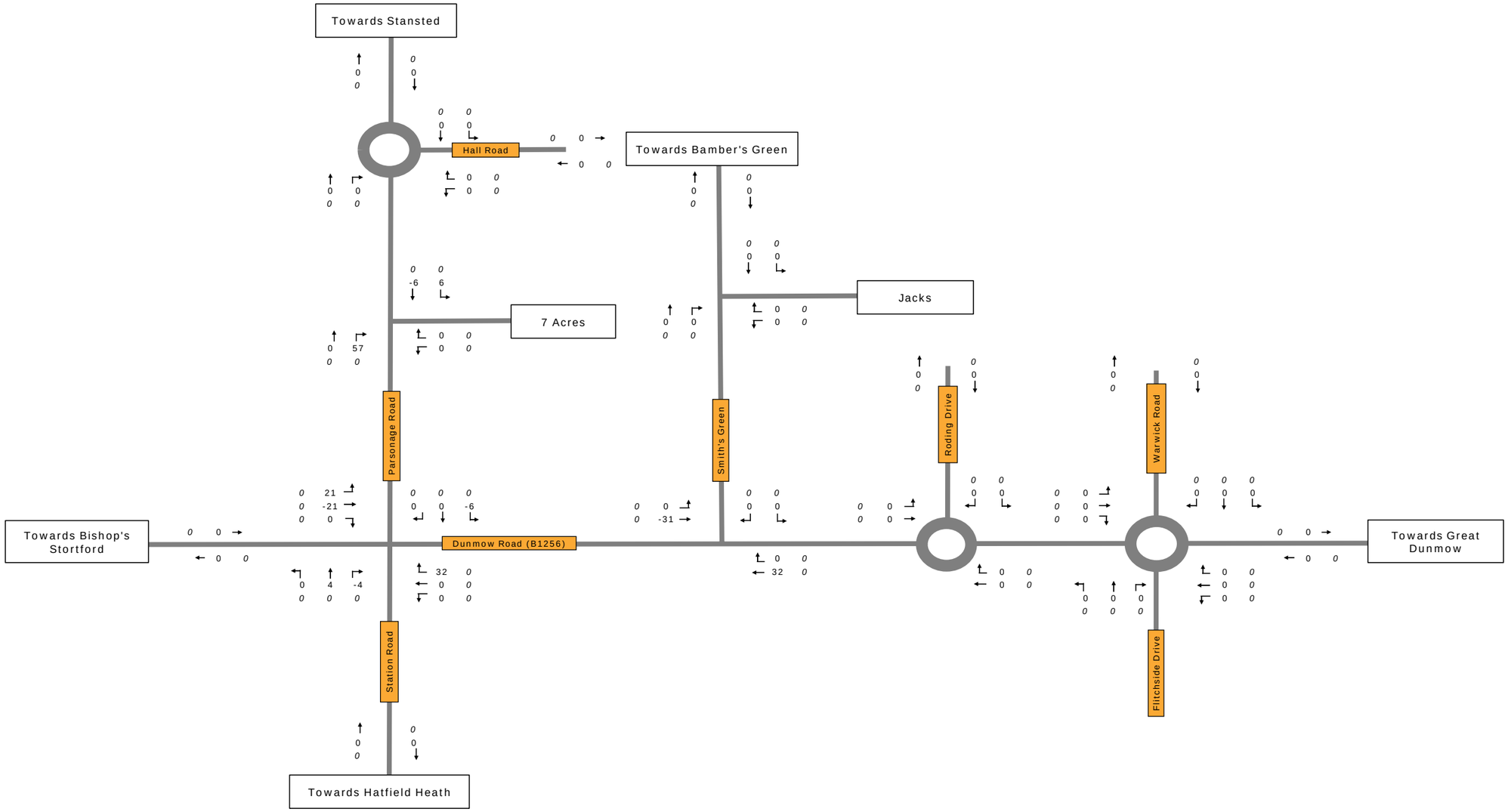
Notes:

Warish Farm, Takeley

Elsenham Hall Road Flows PM



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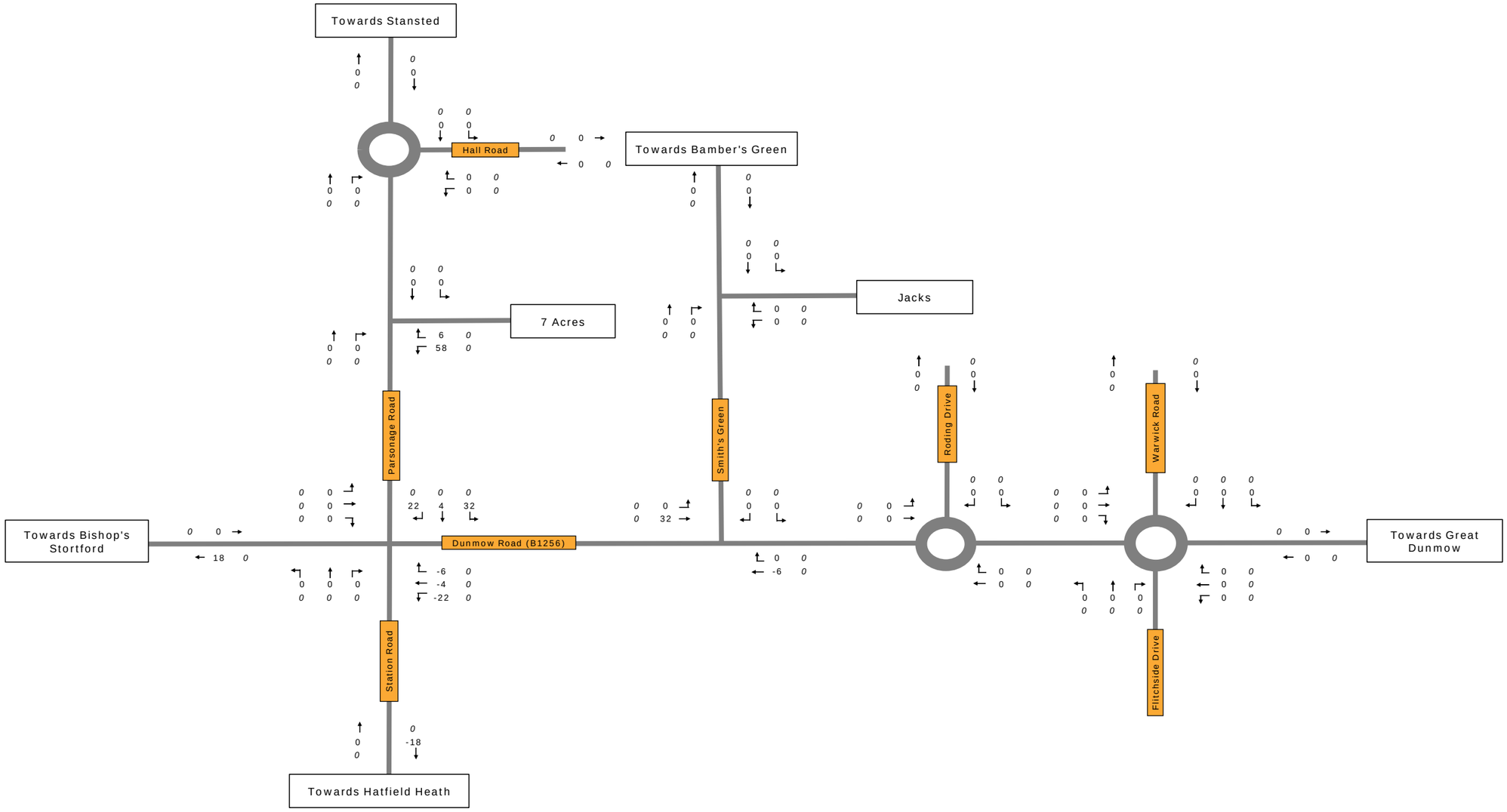
Notes:

Warish Farm, Takeley

Redistributed Car Park Flows AM



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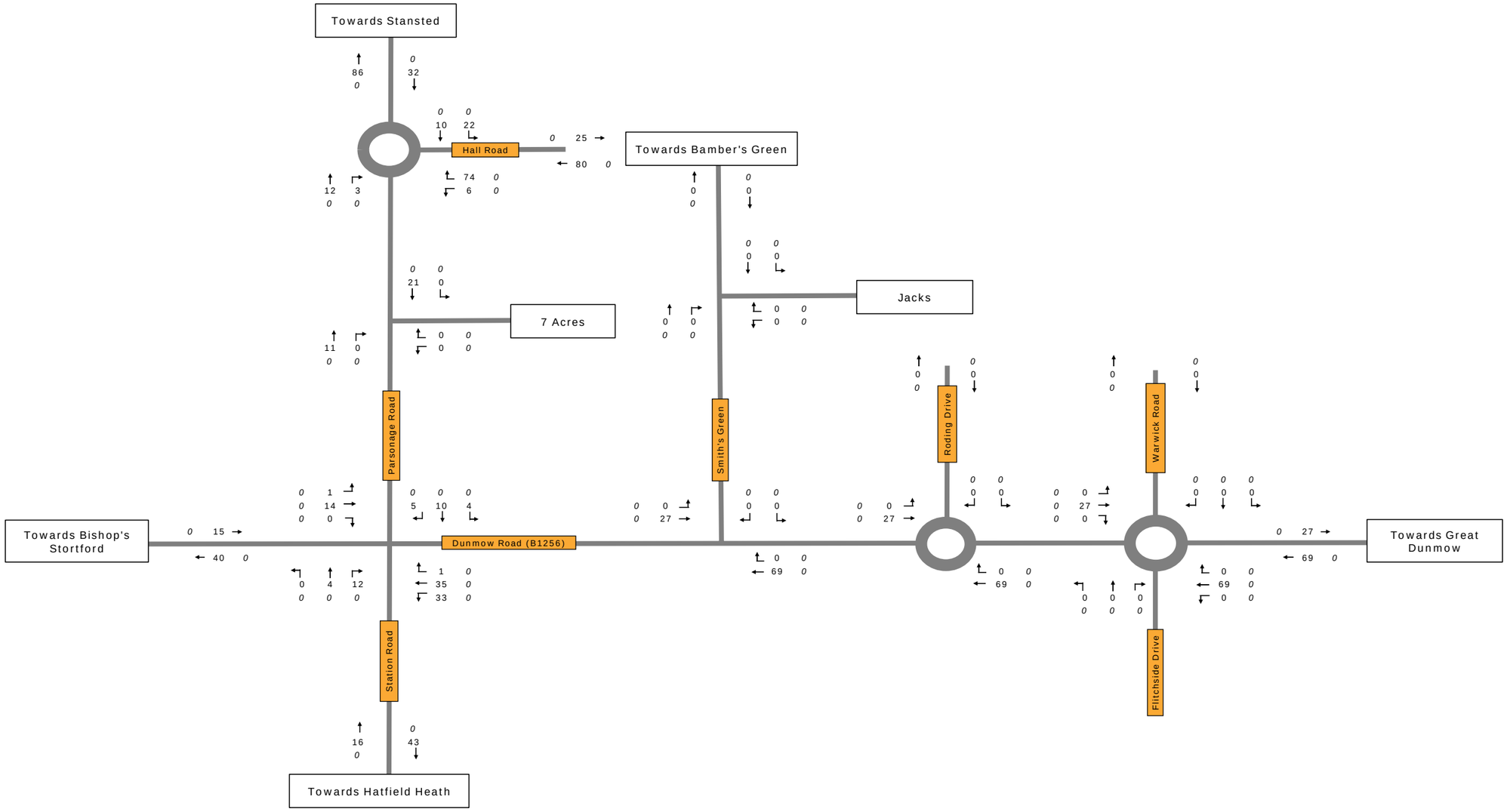
Notes:

Warish Farm, Takeley

Redistributed Car Park Flows PM



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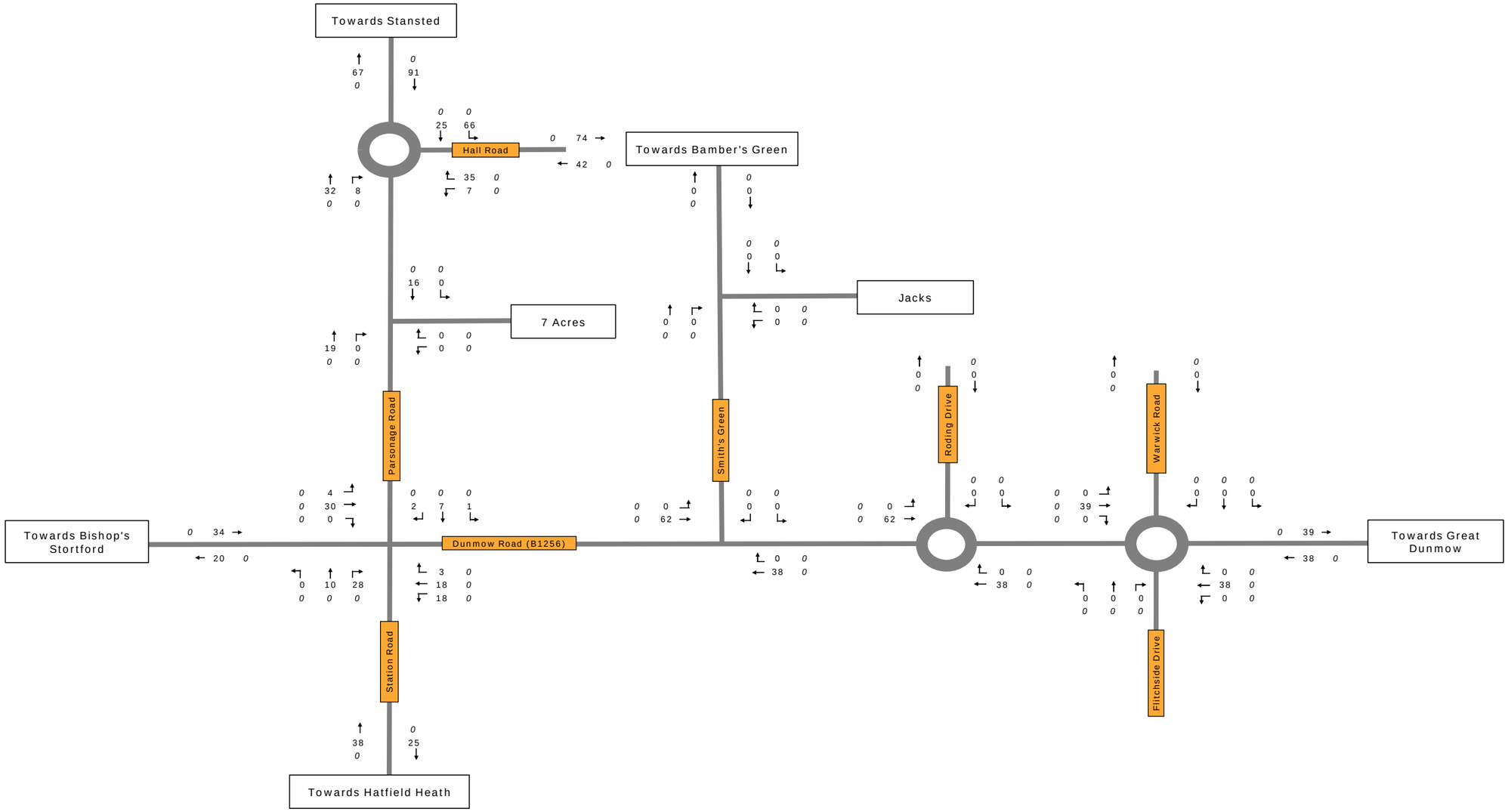
Notes:

Warish Farm, Takeley

Total Committed AM



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123 Total Vehicles
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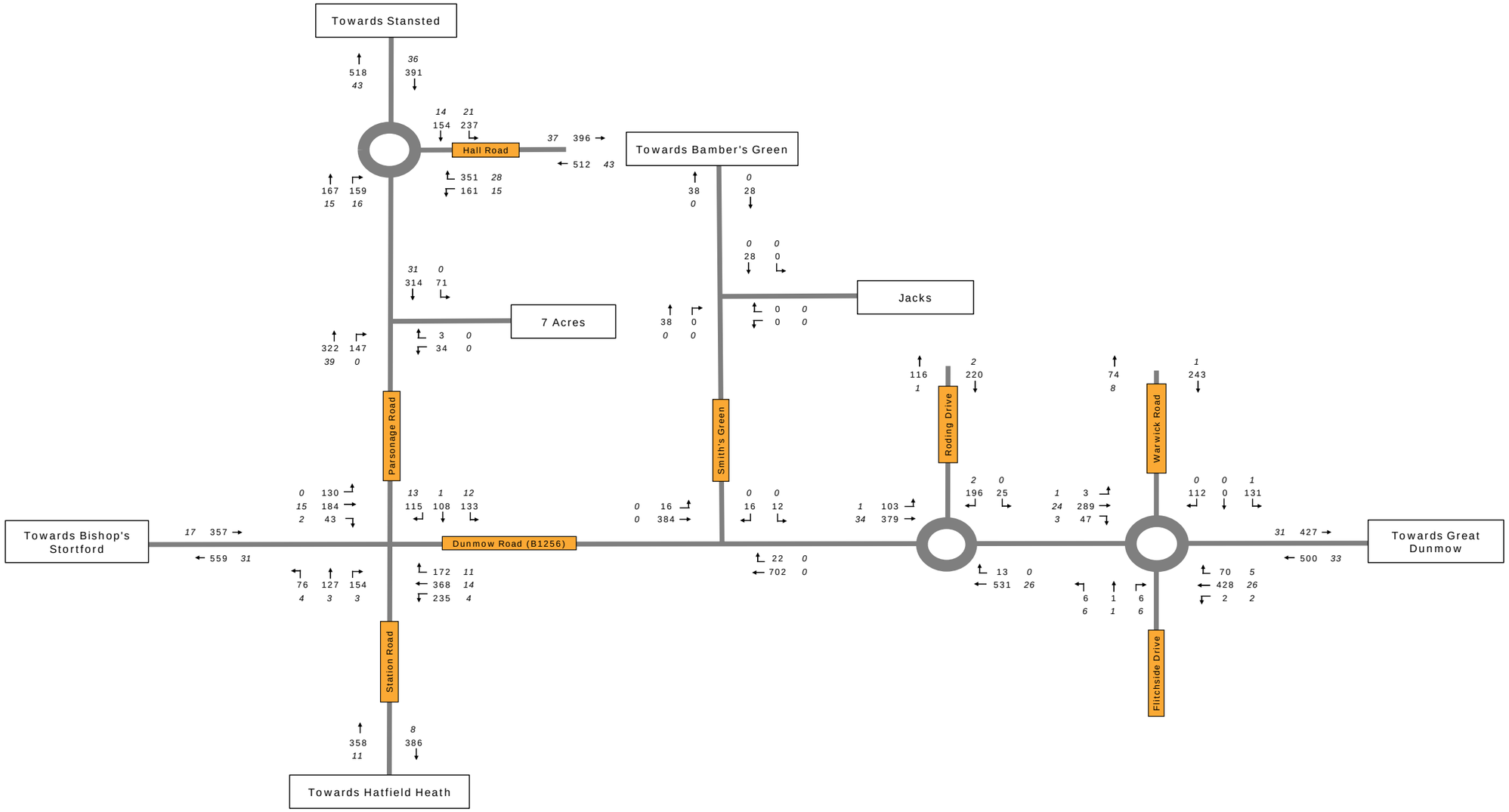
Notes:

Warish Farm, Takeley

Total Committed PM



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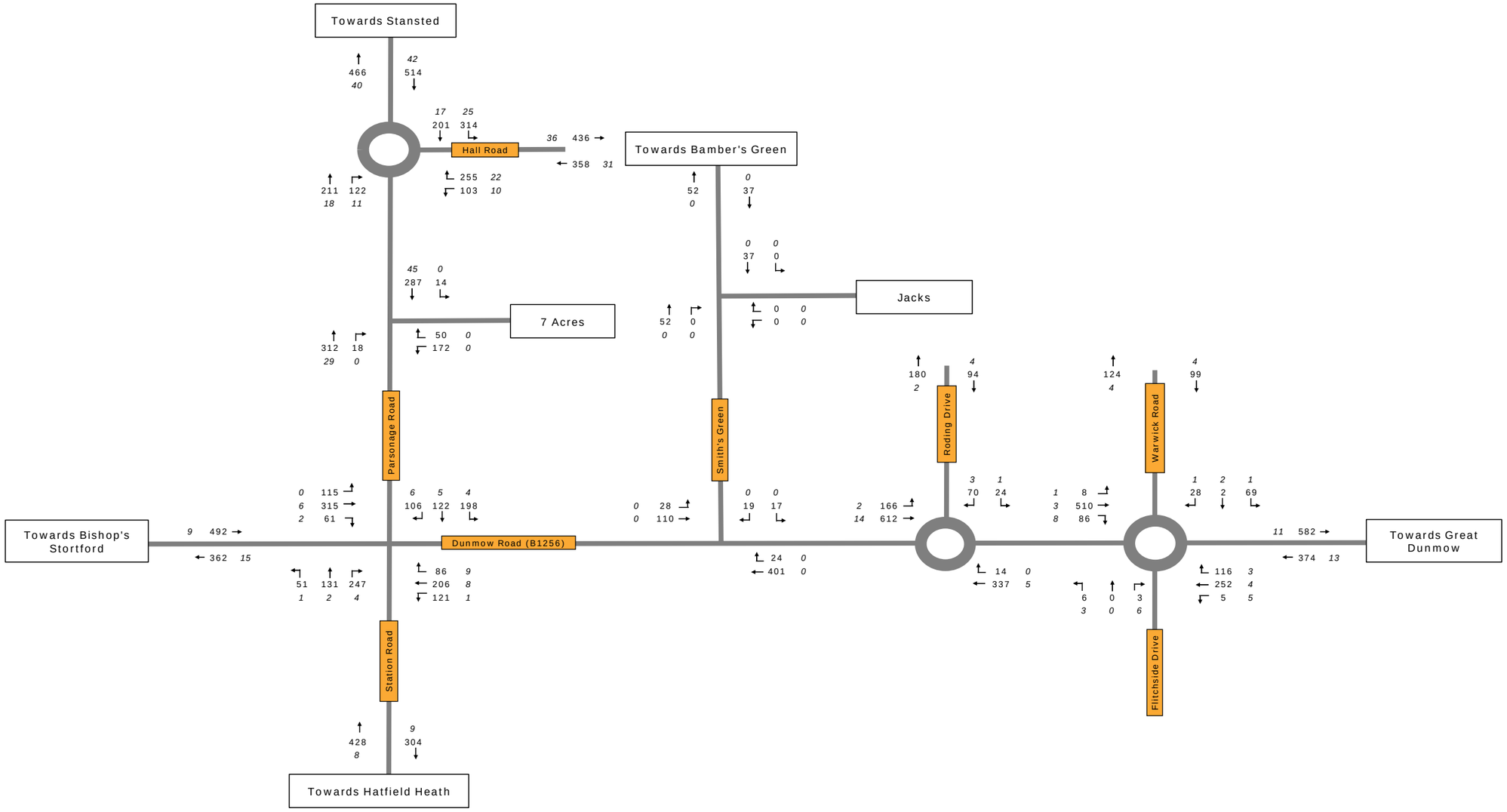
Notes:

Warish Farm, Takeley

2027 AM Peak Traffic Flows



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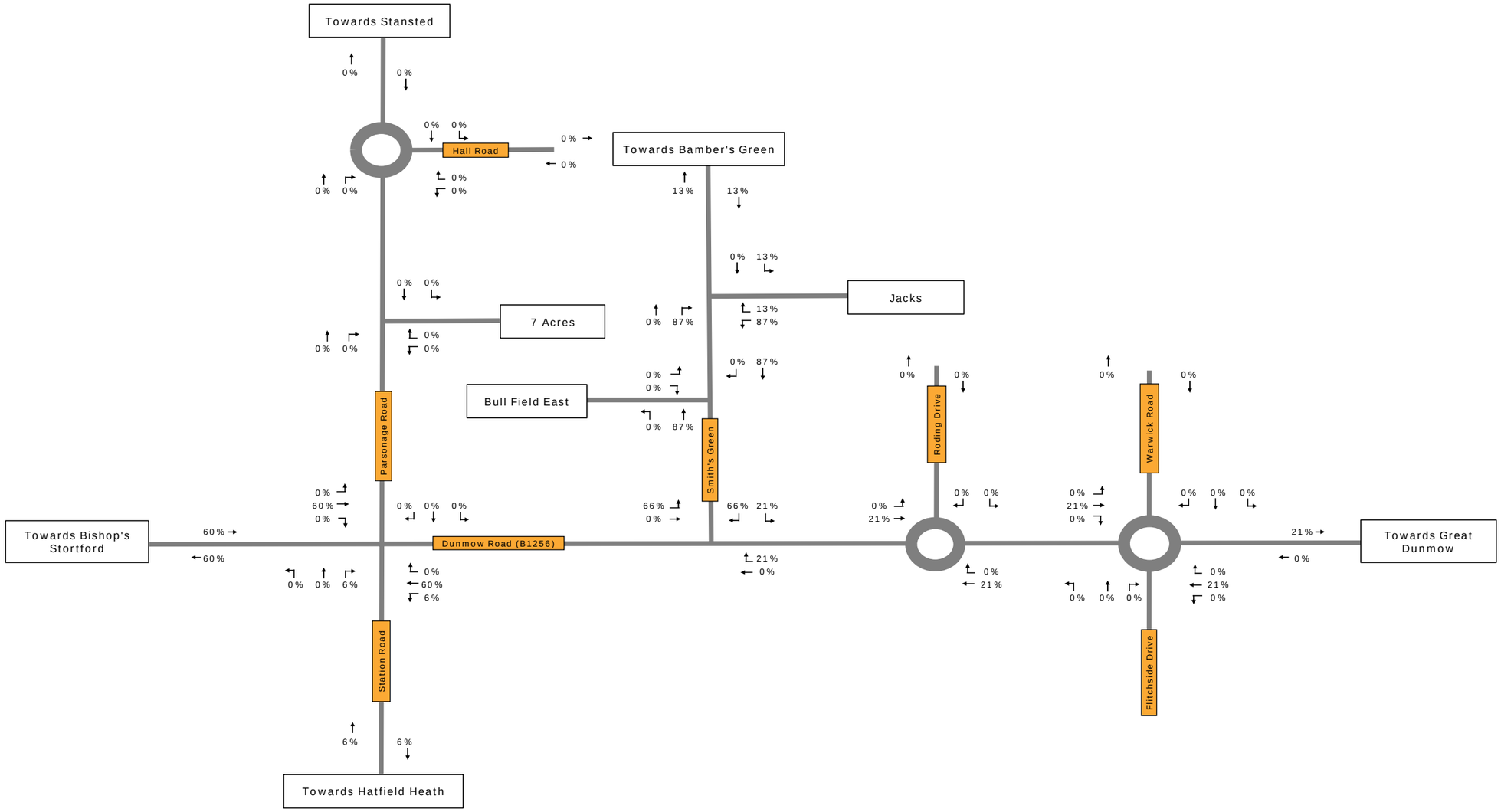
Notes:

Warish Farm, Takeley

2027 PM Peak Traffic Flows



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123 Total Vehicles
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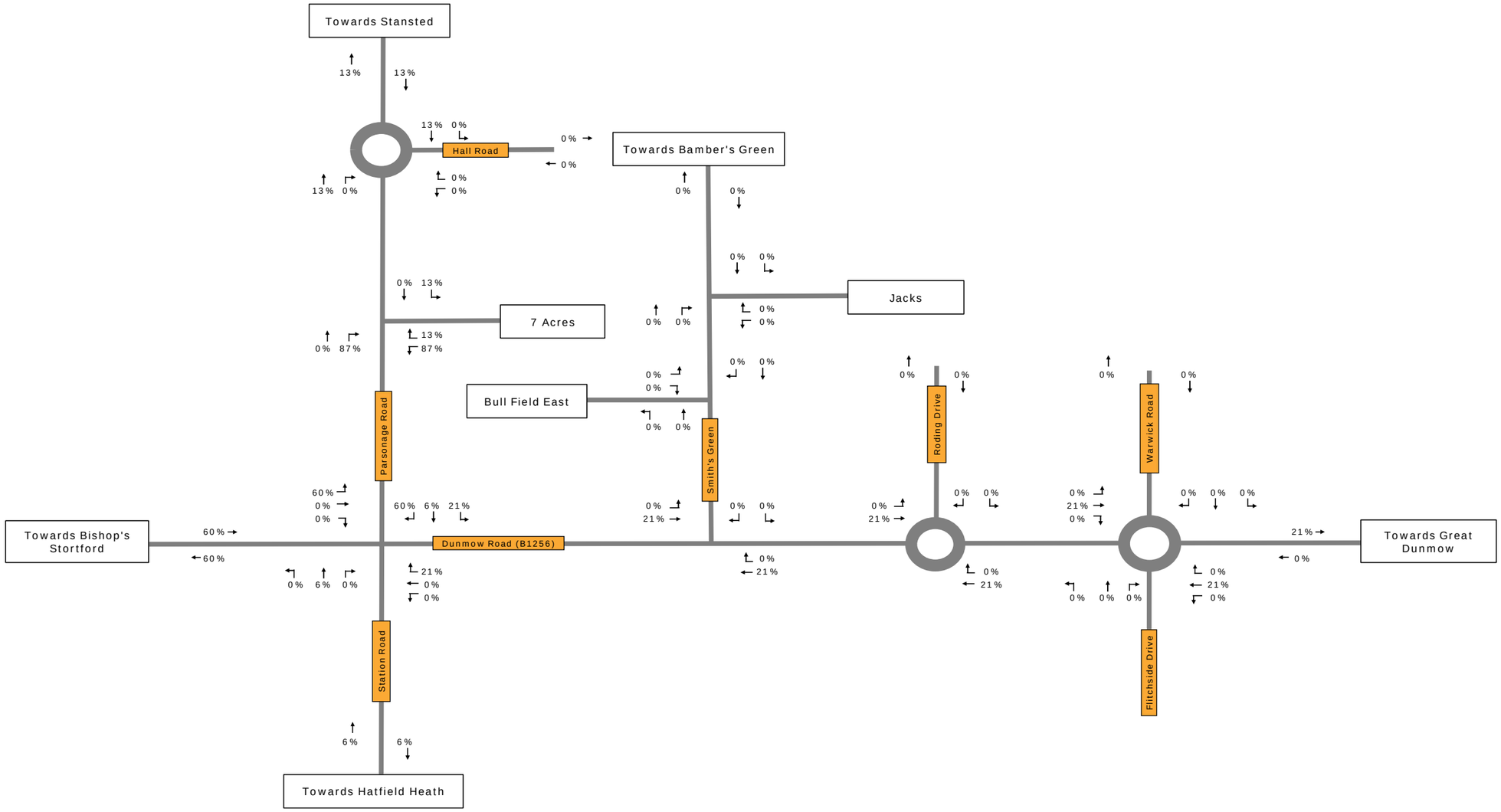
Notes:

Warish Farm, Takeley

Development Traffic Distribution - Jacks



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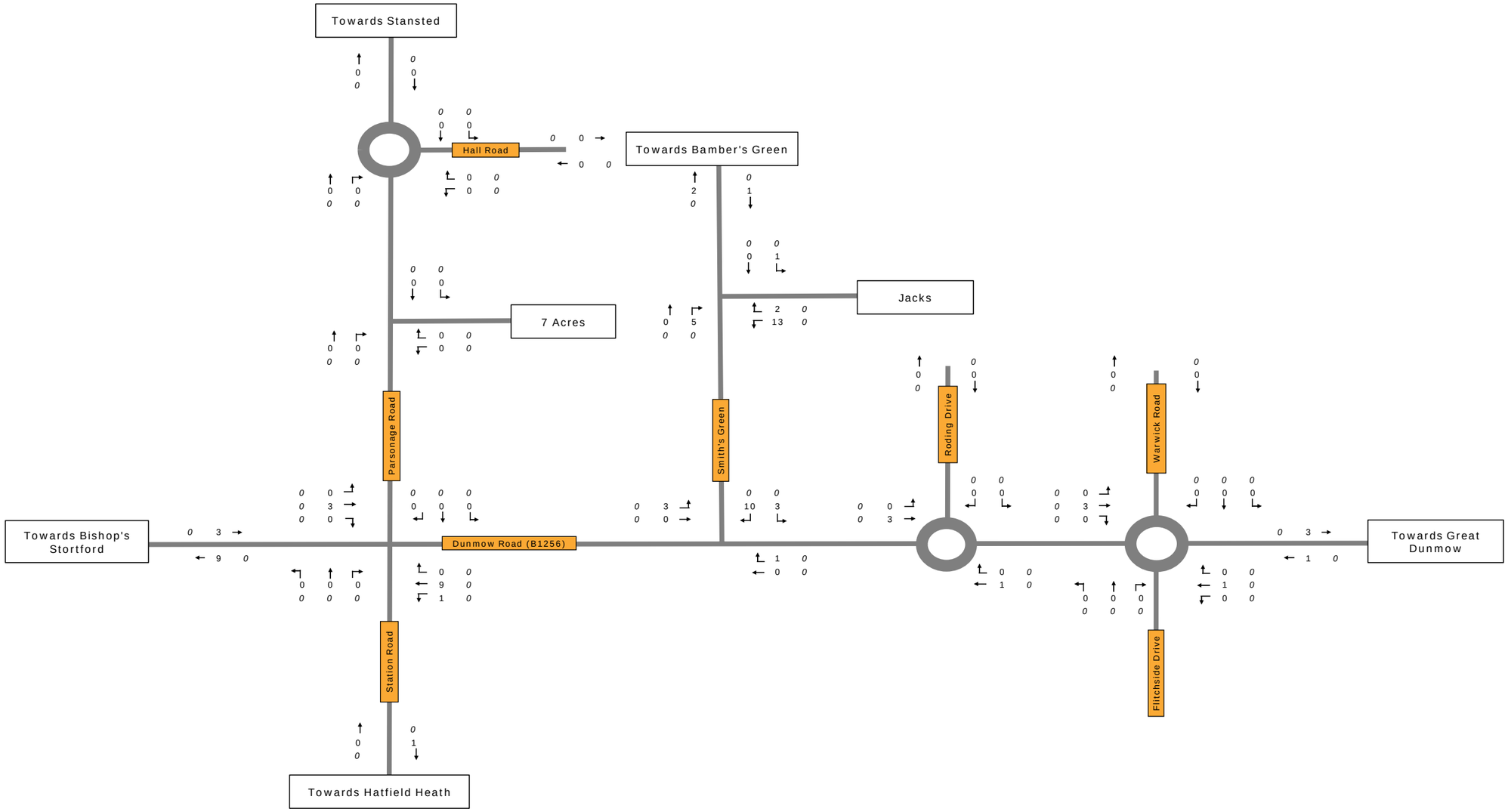
Notes:

Warish Farm, Takeley

Development Traffic Distribution - 7 Acres



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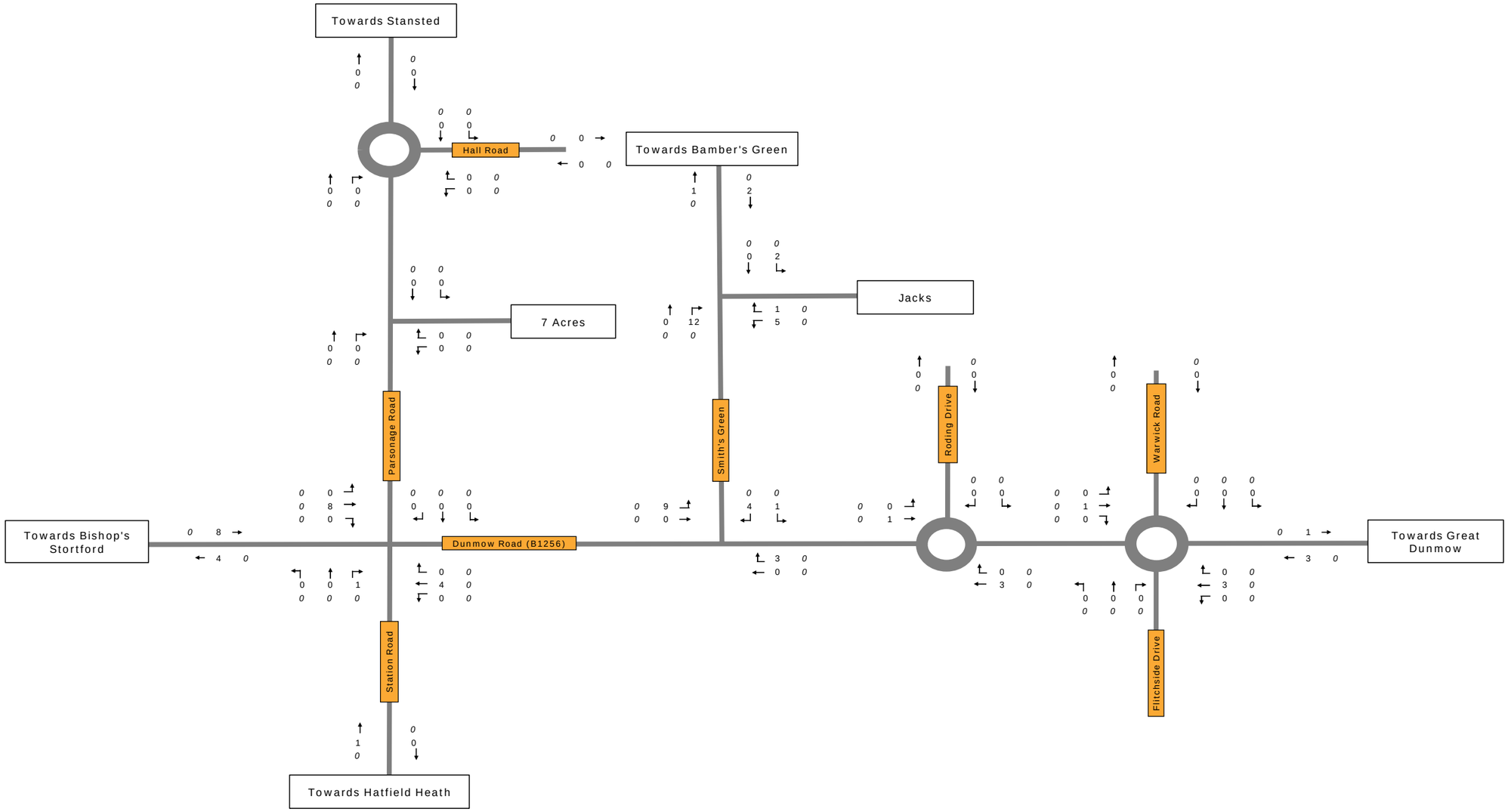
Notes:

Warish Farm, Takeley

Jacks Development Traffic Flows - AM Peak Hour



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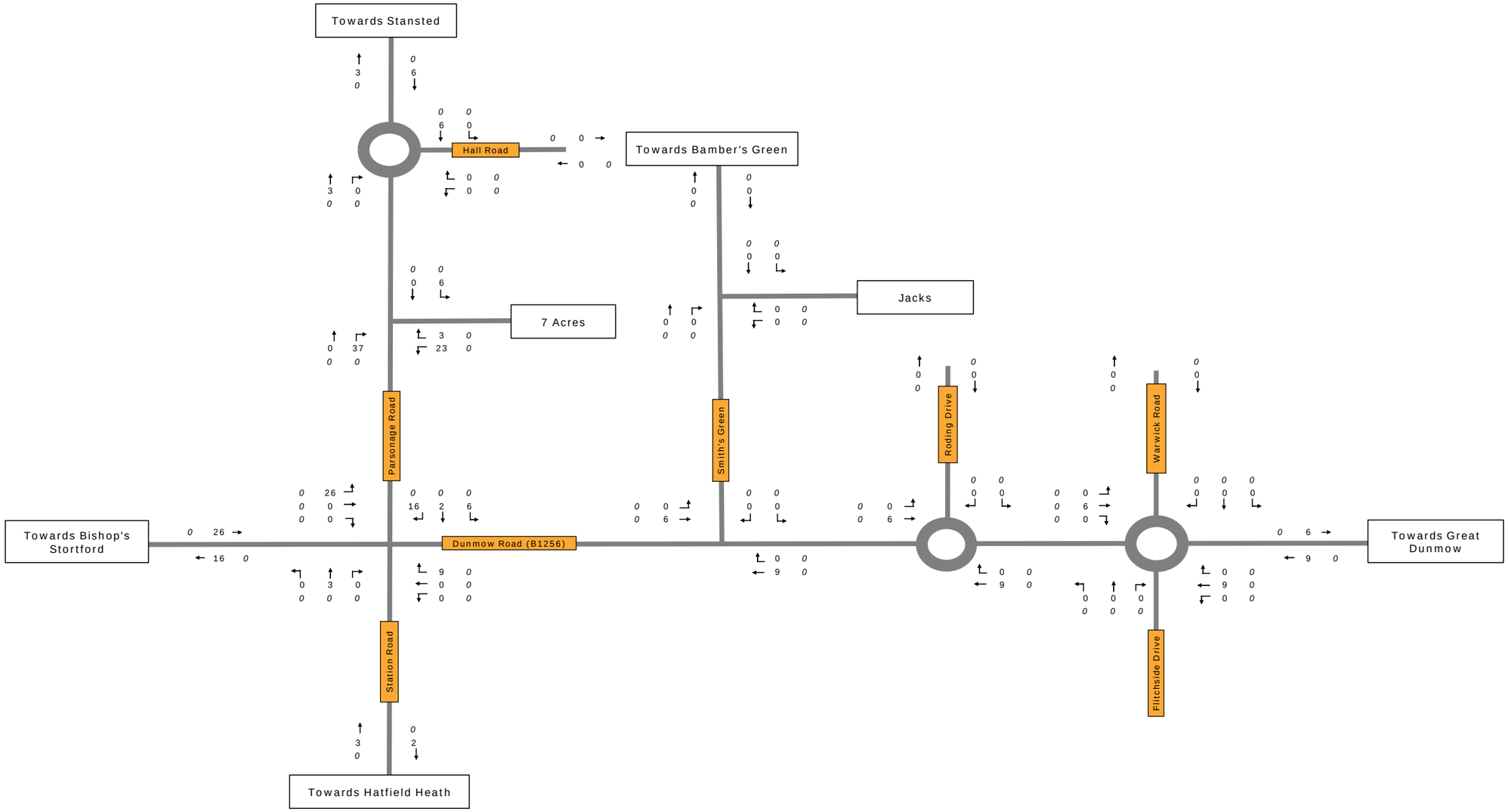
Notes:

Warish Farm, Takeley

Jacks Development Traffic Flows - PM Peak Hour



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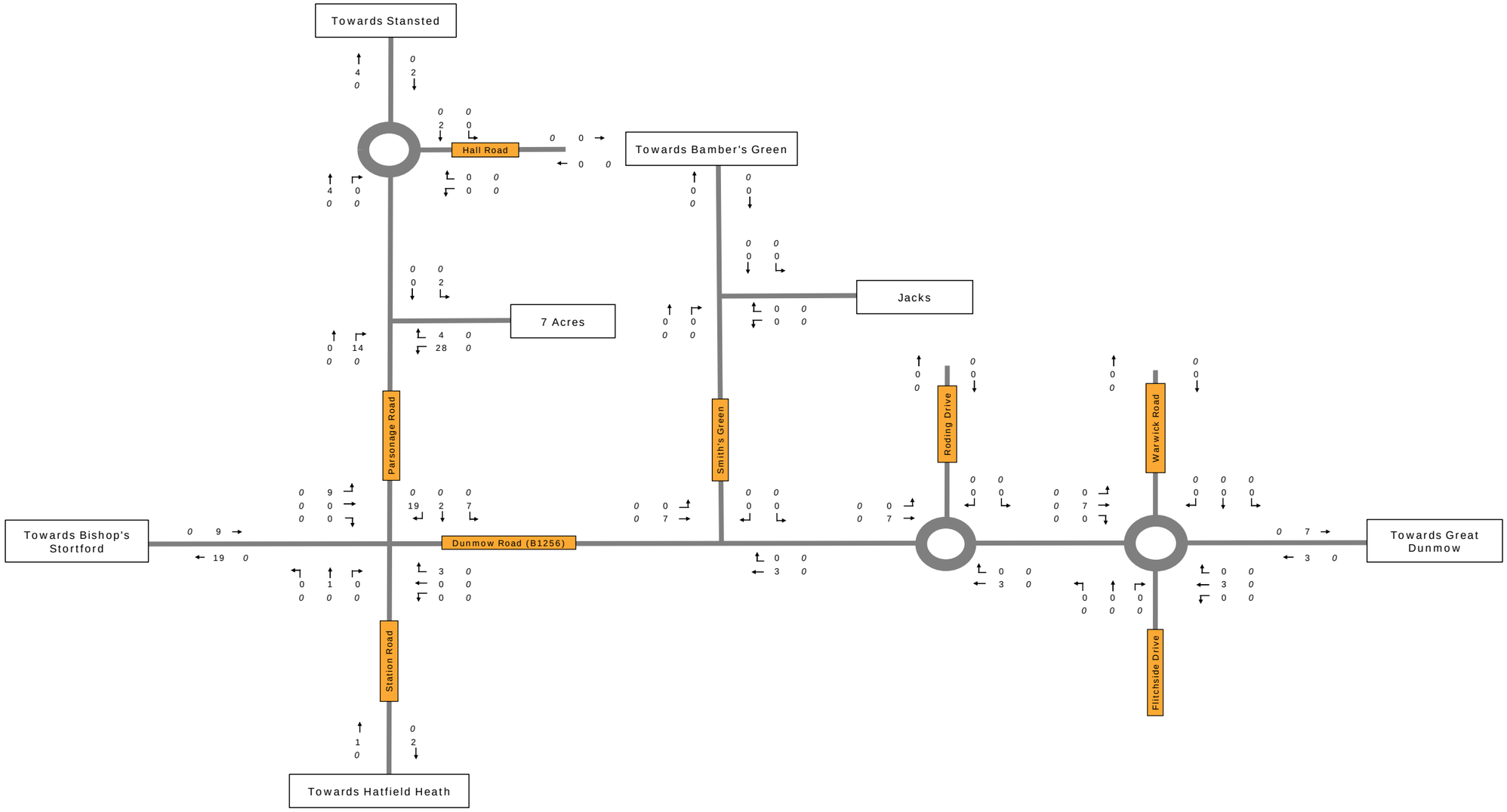
Notes:

Warish Farm, Takeley

7 Acres Development Traffic Flows - AM Peak Hour



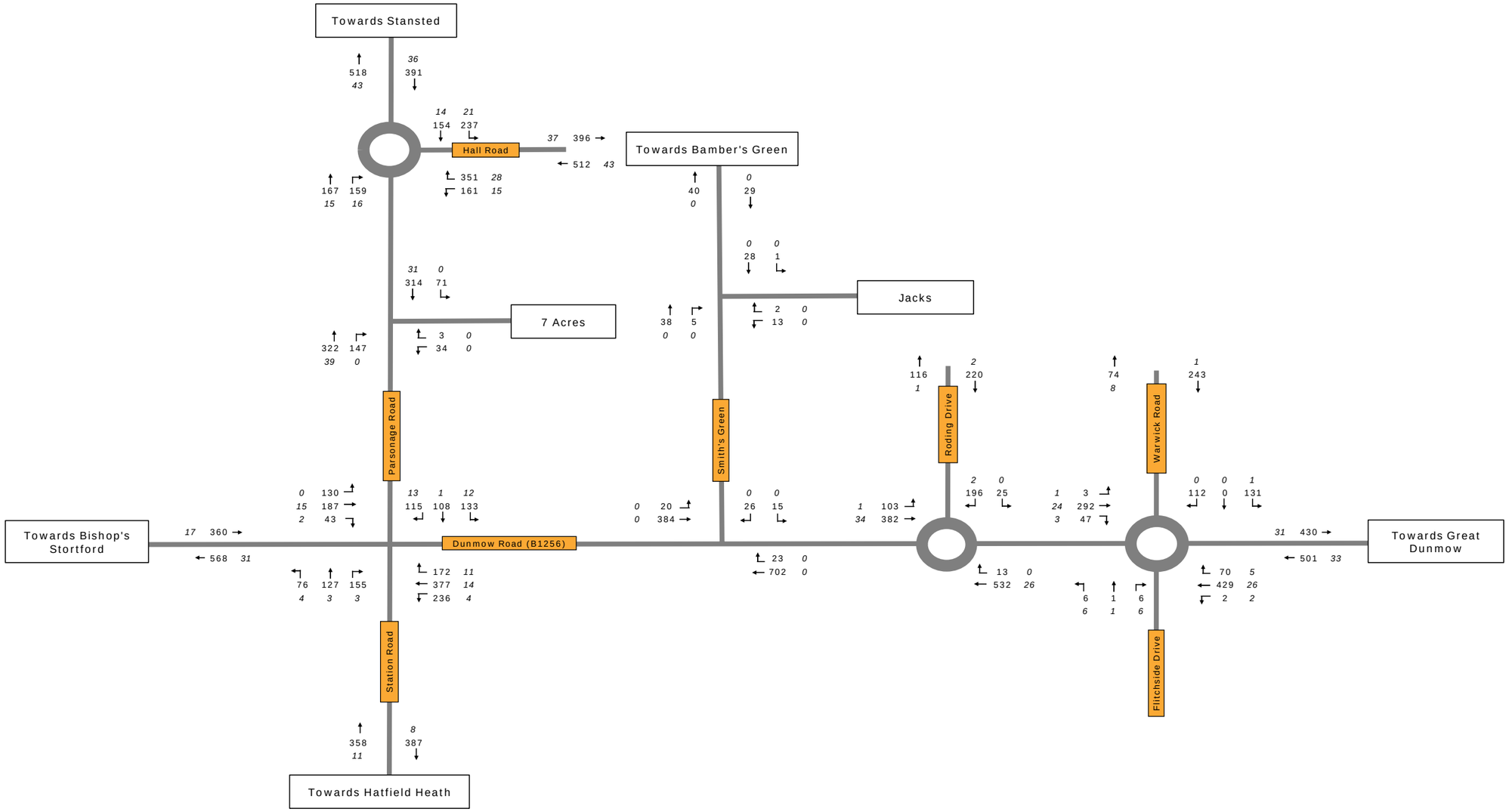
Key:

123 Total Vehicles
45 HGVs

Notes:

Warish Farm, Takeley

7 Acres Development Traffic Flows - PM Peak Hour



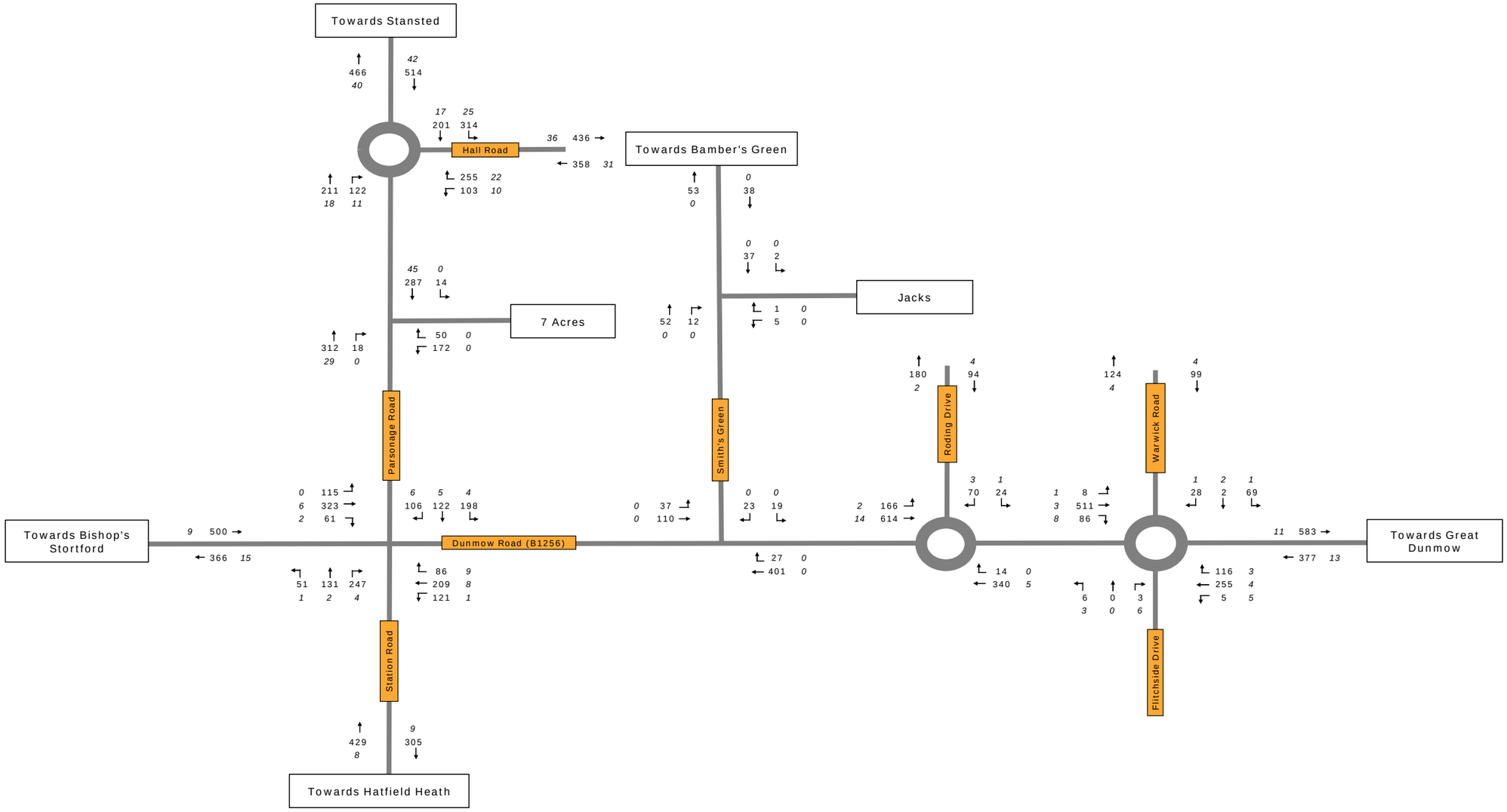
Key:

123 Total Vehicles
45 HGVs

Notes:

Warish Farm, Takeley

2027 With Jacks Development - AM Peak



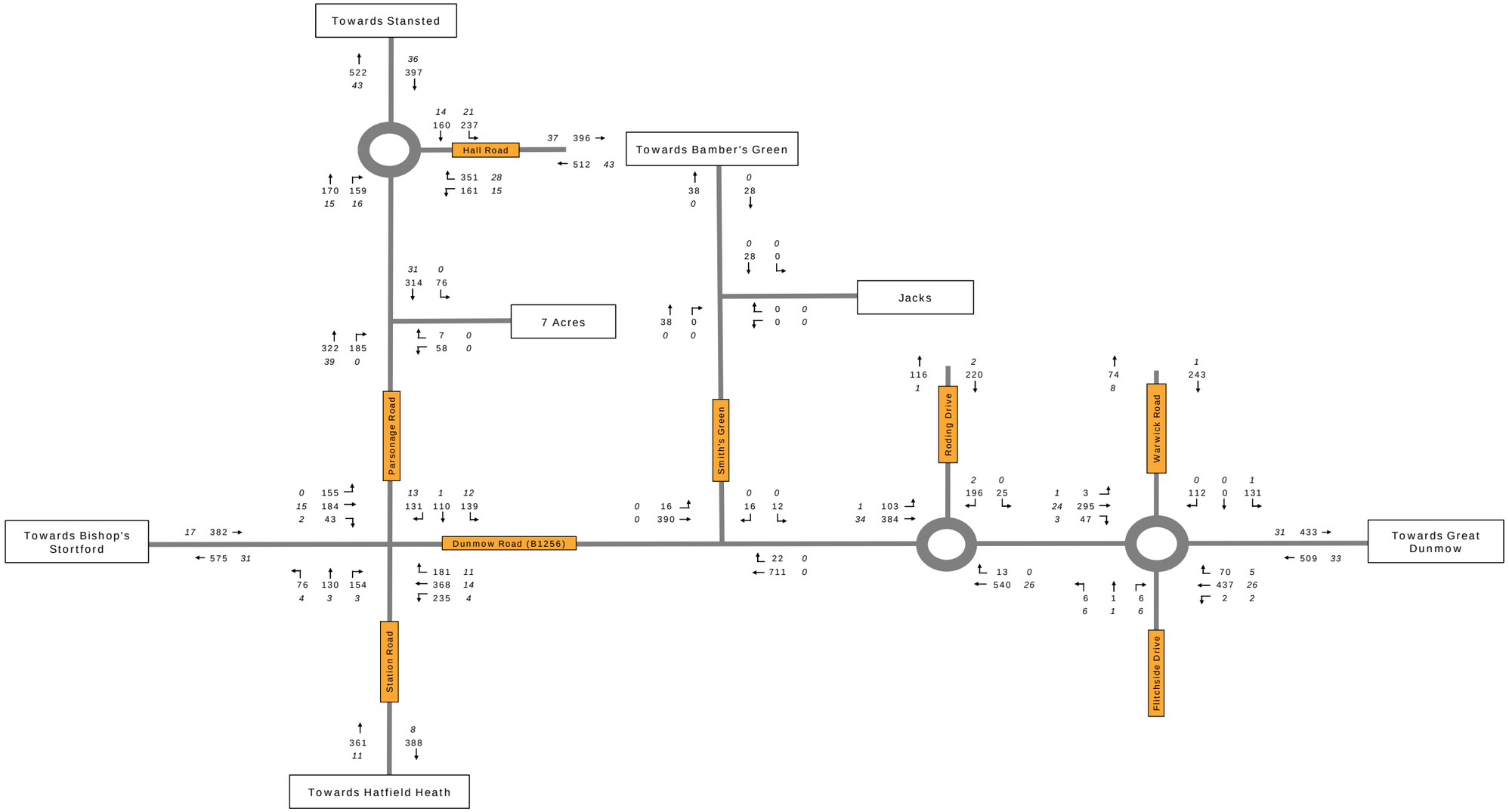
Key:

123 Total Vehicles
45 HGVs

Notes:

Warish Farm, Takeley

2027 With Jacks Development - PM Peak



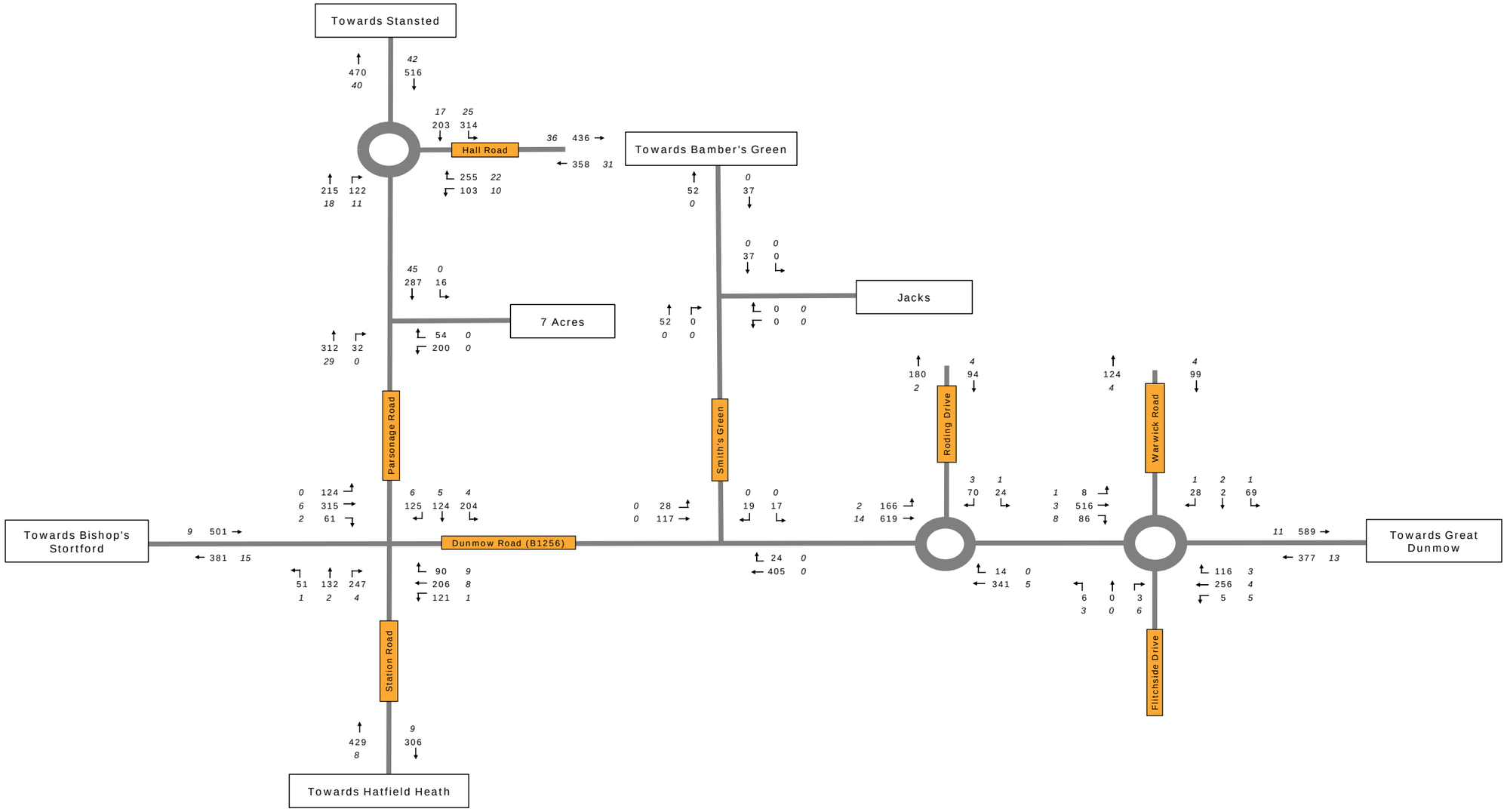
Key:

123 Total Vehicles
45 HGVs

Notes:

Warish Farm, Takeley

2027 With 7 Acres Development - AM Peak



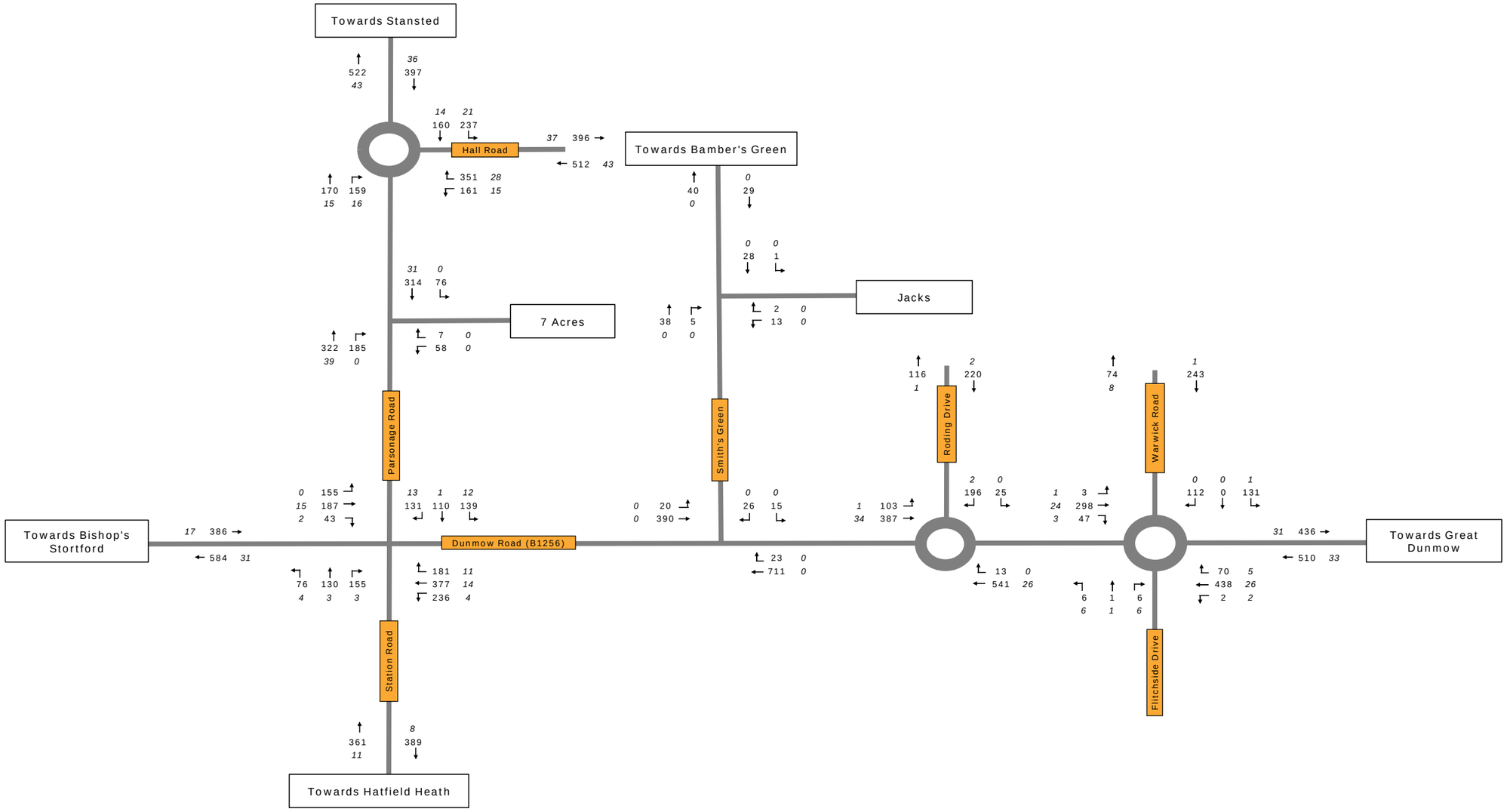
Key:

123 Total Vehicles
45 HGVs

Notes:

Warish Farm, Takeley

2027 With 7 Acres Development - PM Peak



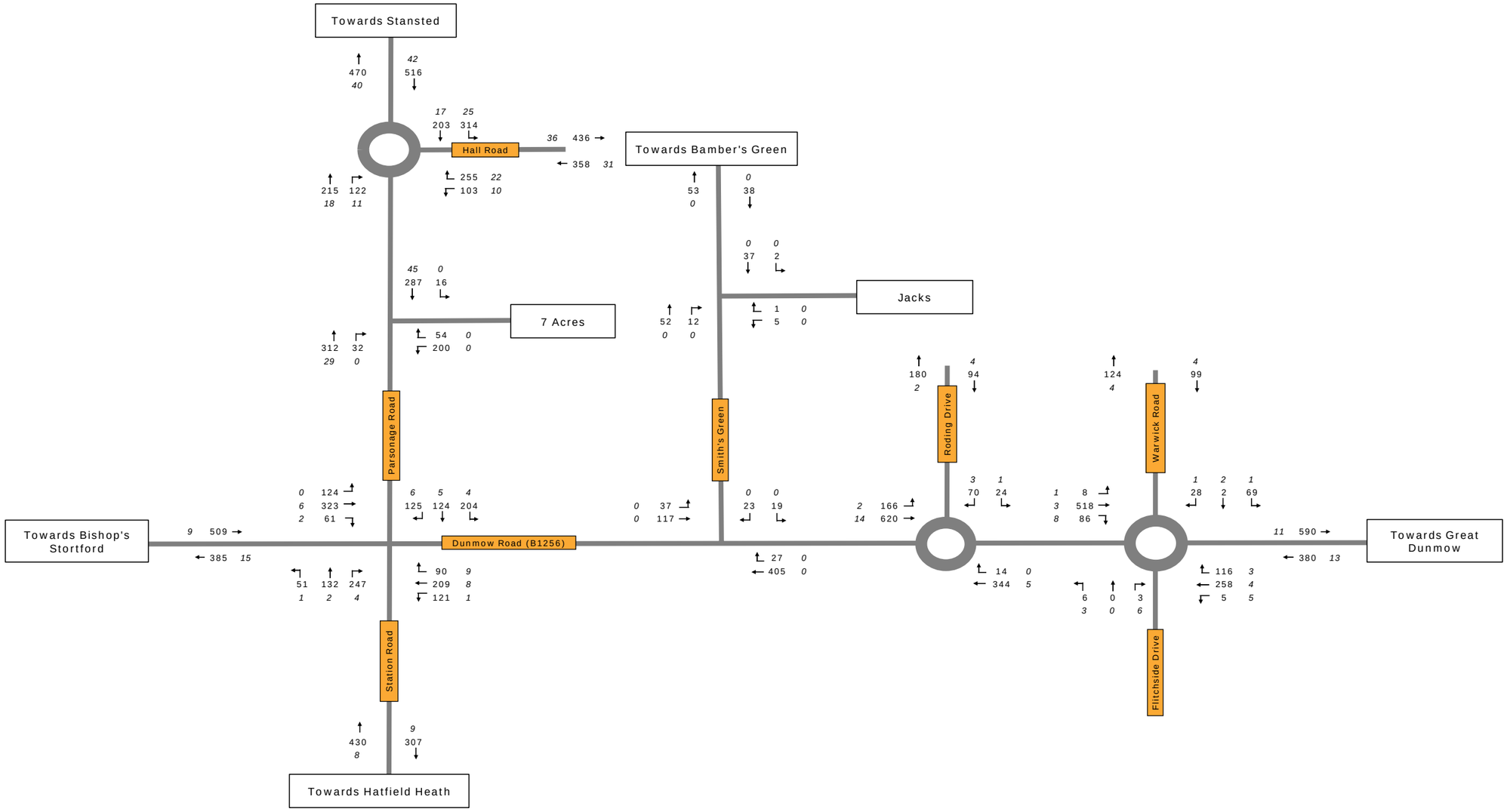
Key:

123 Total Vehicles
45 HGVs

Notes:

Warish Farm, Takeley

2027 AM Peak Sensitivity Test Traffic Flows



Key:

123 Total Vehicles
45 HGVs

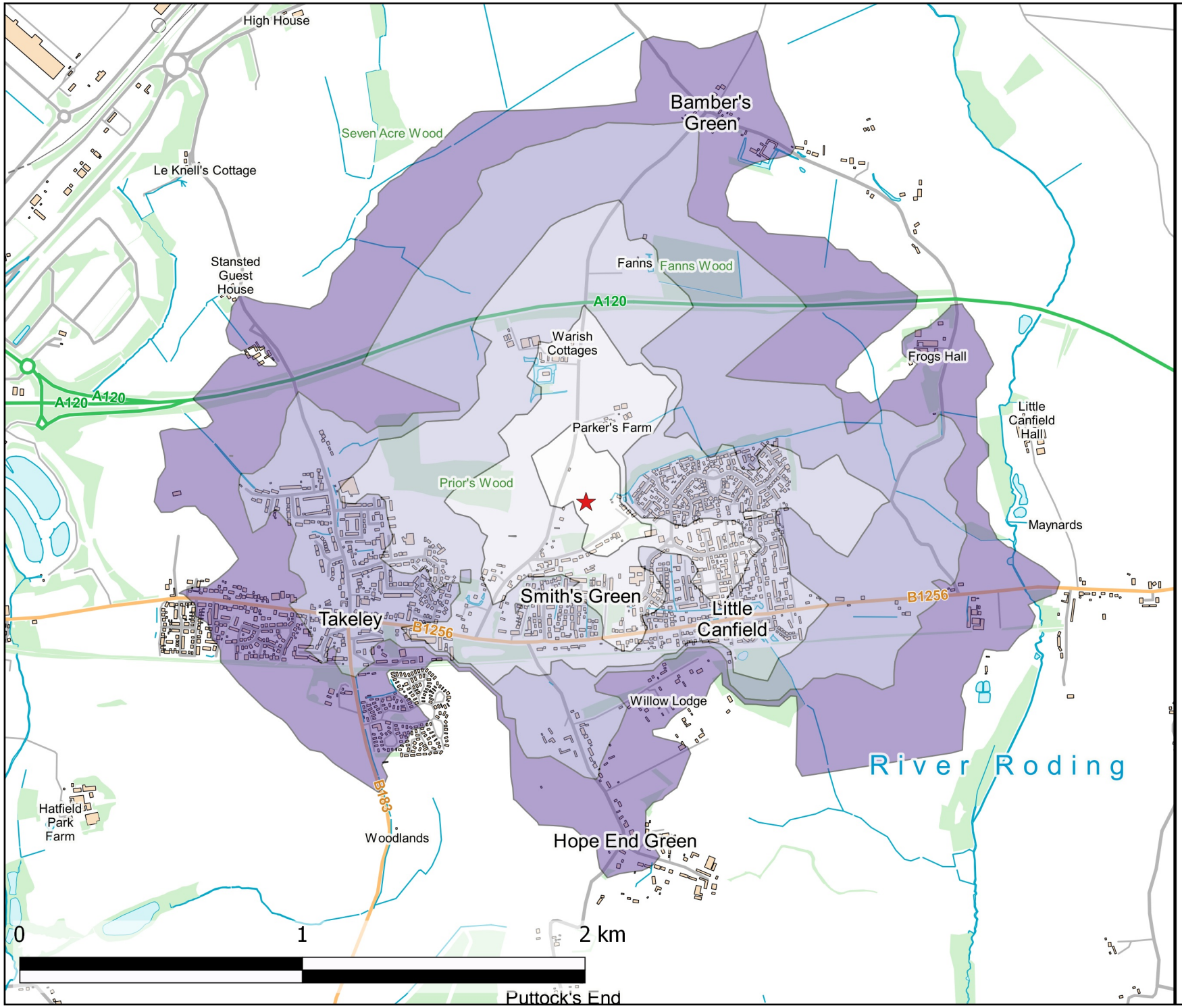
Notes:

Warish Farm, Takeley

2027 PM Peak Sensitivity Test Traffic Flows

Appendix A

Walking Catchments



Key:

Jacks

north

Walk Isochrone (minutes)

- 5
- 10
- 15
- 20
- 25

Assumed walk speed: 4.8 km/h

Title

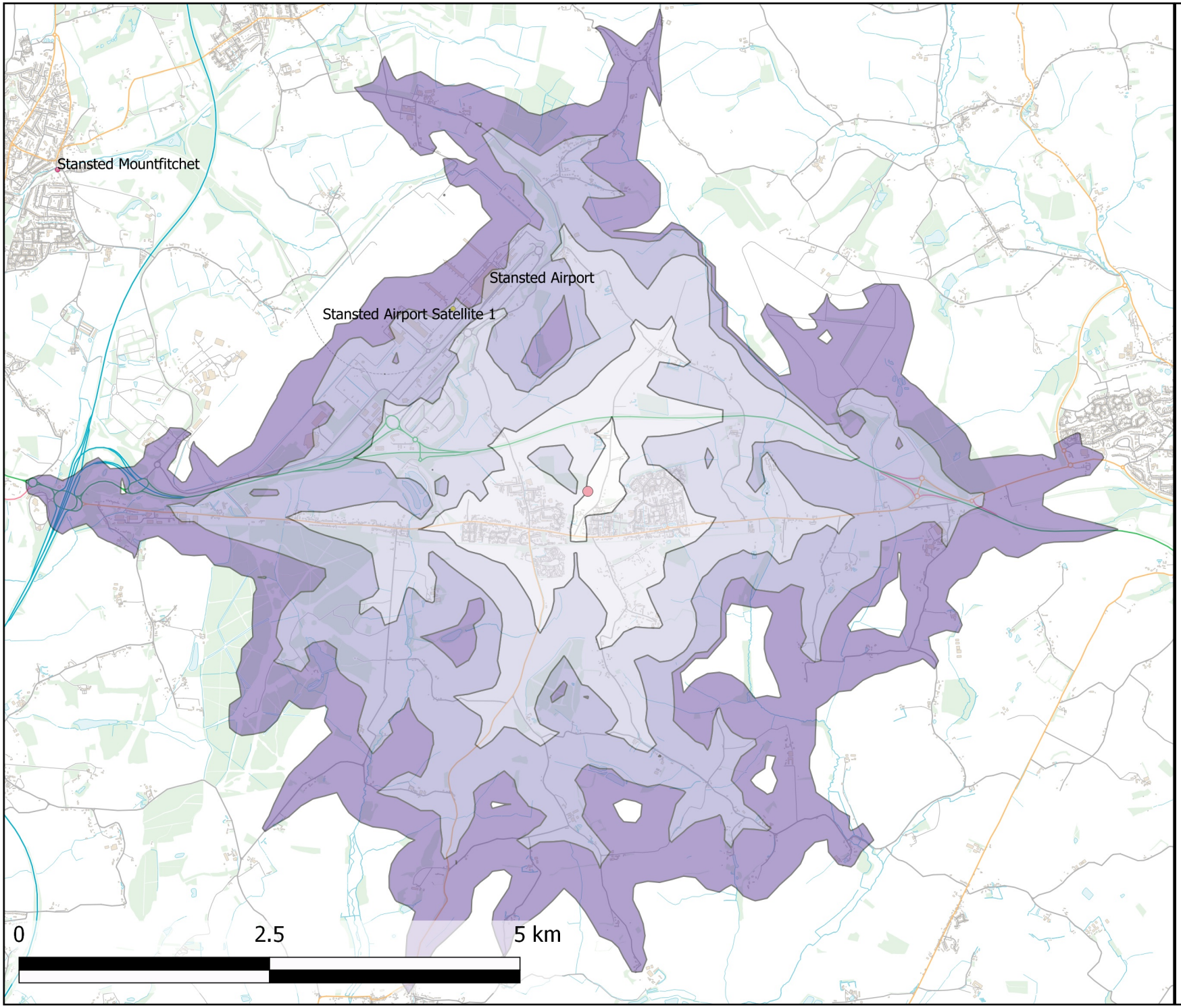
Warish Farm, Takeley
Accessibility on Foot - Jacks

motion

9 Greyfriars Road, Reading, RG1 1NU
Tel: 0118 206 2930

scale	drawn by	date
stated	JE	21/10/2020

drawing number	rev
2007045 - Figure 3	-



Key:

Site Location

north

Cycling Isochrone (minutes)

- 5
- 10
- 15
- 20
- 25

Title

Accessibility by Cycle

motion

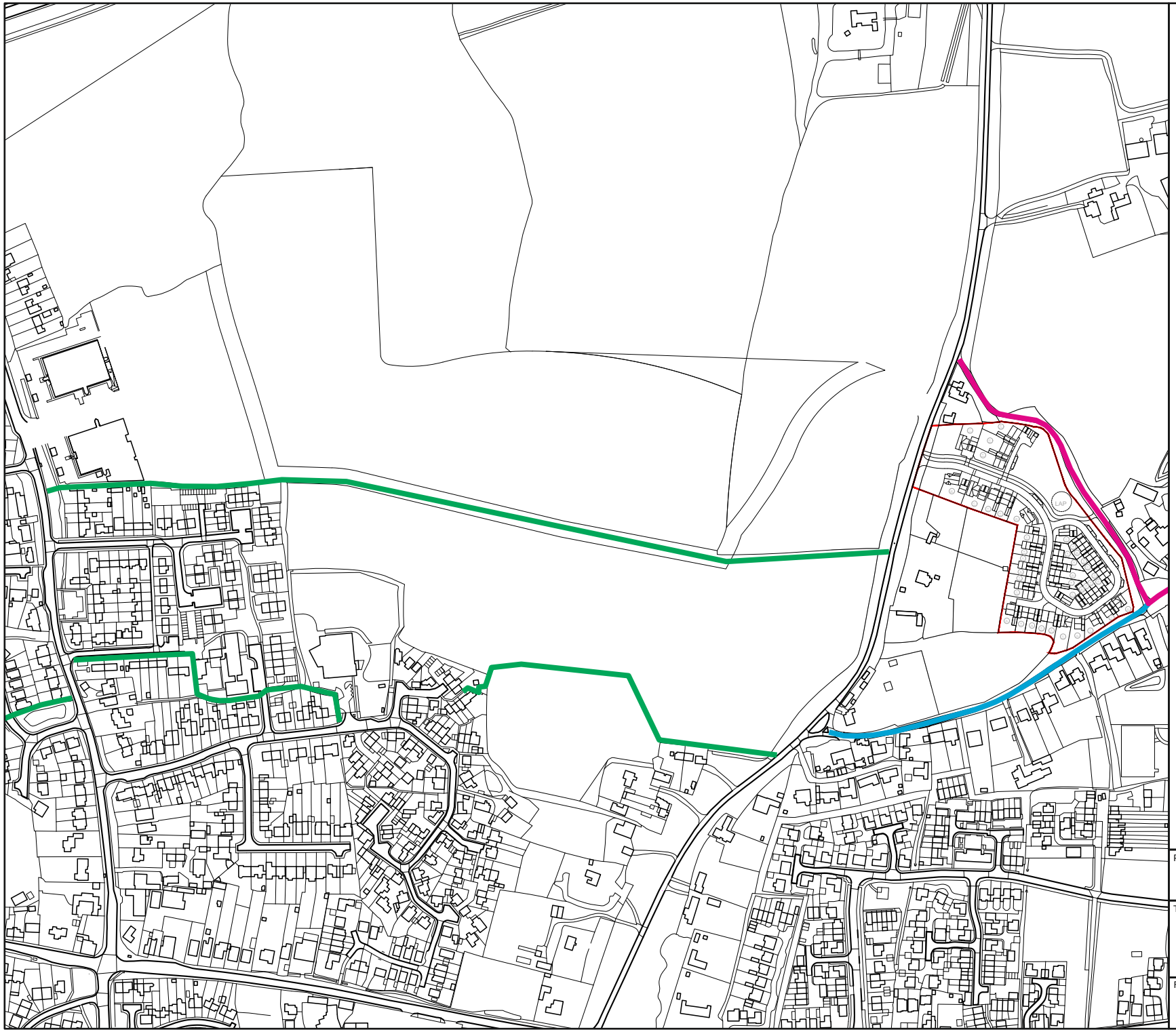
9 Greyfriars Road, Reading, RG1 1NU
Tel: 0118 206 2930

scale	drawn by	date
stated	JE	08/06/2021

drawing number	rev
Appendix A	-

Appendix B

Public Rights of Way



Legend

- Site Location
- Byway
- Footpath
- Other Route with Public Access

motion
9 Greyfriars Road Reading, RG1 1NU
T: 0118 206 2930

Project:
Jacks, Takeley

Title:
Public Rights of Way

Figure:
Appendix B

Revision:
-

Appendix C

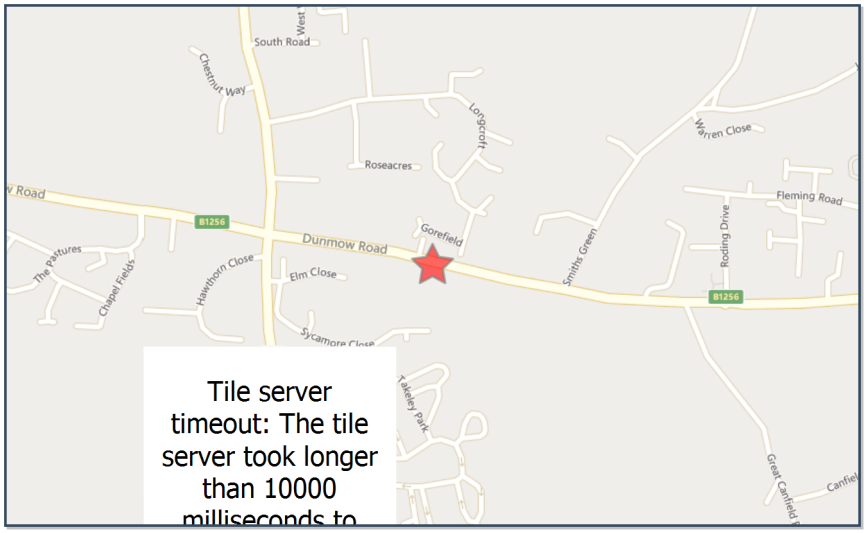
Crashmap Output Reports

[redacted]

Validated Data

Crash Date:	Sunday, January 29, 2017	**Time of Crash:**	5:55:00 PM	**Crash Reference:**	**2017420150216**

Highest Injury Severity:	Serious	**Road Number:**	B1256	**Number of Casualties:**	2
Highway Authority:	Essex			**Number of Vehicles:**	2
Local Authority:	Uttlesford District			**OS Grid Reference:**	556386 221195
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

[redacted]

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	9	Male	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Car (excluding private hire)	14	Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

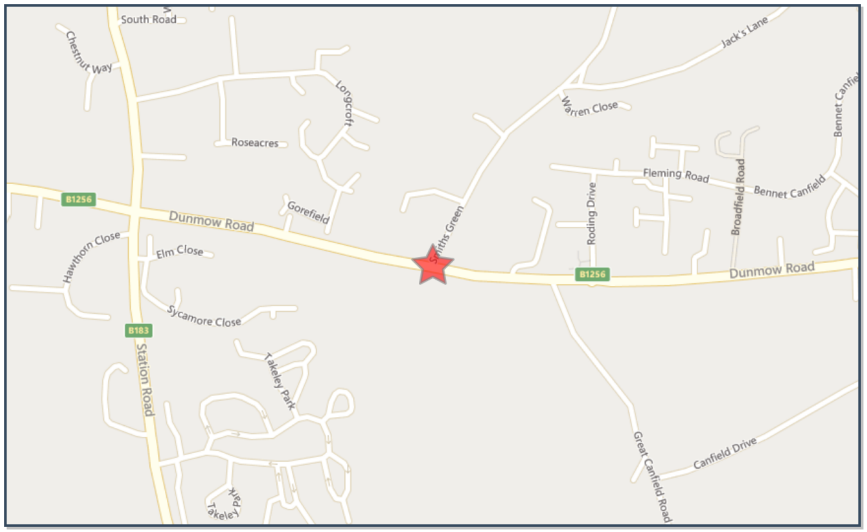
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other
2	2	Serious	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

[redacted]

Validated Data

Crash Date:	Tuesday, February 28, 2017	**Time of Crash:**	8:26:00 AM	**Crash Reference:**	**2017420160149**

Highest Injury Severity:	Slight	**Road Number:**	B1256	**Number of Casualties:**	1
Highway Authority:	Essex			**Number of Vehicles:**	2
Local Authority:	Uttlesford District			**OS Grid Reference:**	556587 221164
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

[redacted]

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	17	Male	46 - 55	Vehicle is in the act of turning right	Front	Journey as part of work	None	None
2	Car (excluding private hire)	1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

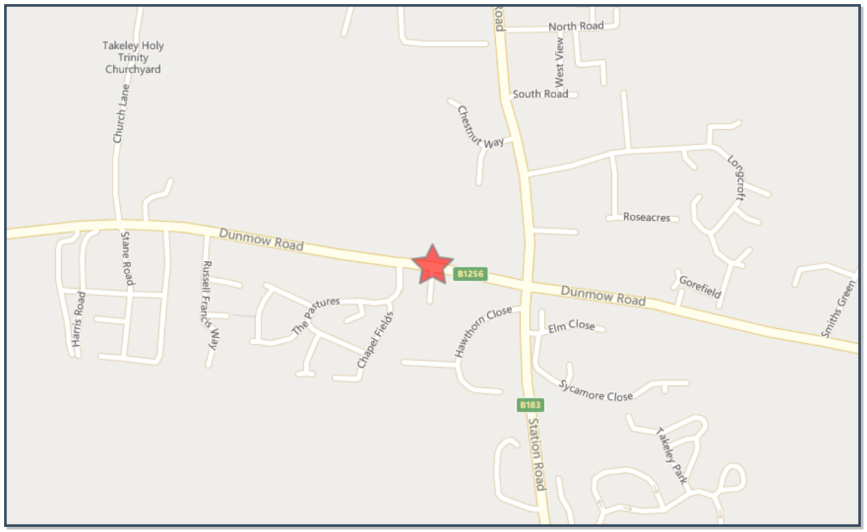
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

[redacted]

Validated Data

Crash Date:	Friday, May 18, 2018	**Time of Crash:**	5:25:00 PM	**Crash Reference:**	**2018420294331**

Highest Injury Severity:	Serious	**Road Number:**	B1256	**Number of Casualties:**	4
Highway Authority:	Essex			**Number of Vehicles:**	2
Local Authority:	Uttlesford District			**OS Grid Reference:**	555995 221256
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

[redacted]

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	3	Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Commuting to/from work	None	None
2	Car (excluding private hire)	10	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

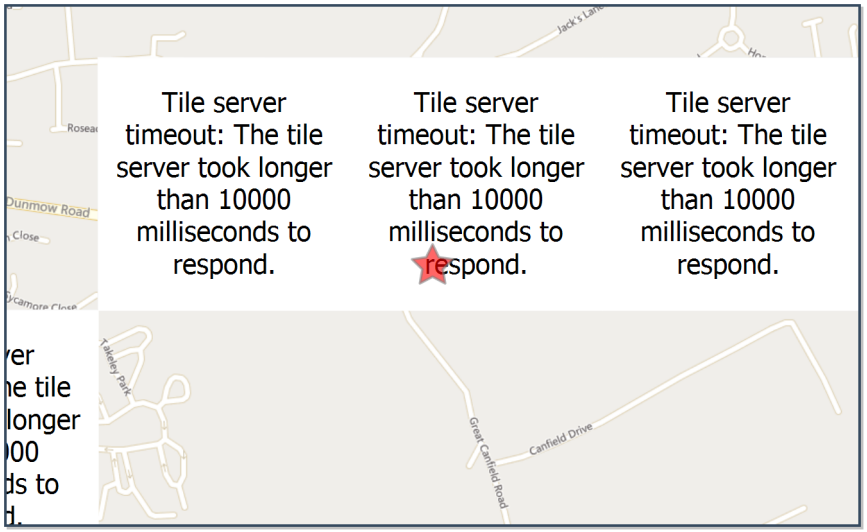
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other
1	3	Serious	Vehicle or pillion passenger	Female	56 - 65	Unknown or other	Unknown or other
2	2	Serious	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other
2	4	Slight	Vehicle or pillion passenger	Male	6 - 10	Unknown or other	Unknown or other

[redacted]

Validated Data

Crash Date:	Wednesday, June 12, 2019	**Time of Crash:**	8:00:00 AM	**Crash Reference:**	**2019420847316**

Highest Injury Severity:	Slight	**Road Number:**	B1256	**Number of Casualties:**	1
Highway Authority:	Essex			**Number of Vehicles:**	2
Local Authority:	Uttlesford District			**OS Grid Reference:**	556834 221151
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Mini roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

[redacted]

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	5	Female	26 - 35	Vehicle is slowing down or stopping	Front	Journey as part of work	None	None
2	Pedal cycle	-1	Male	46 - 55	Vehicle is in the act of turning right	Back	Journey as part of work	None	None

Casualties

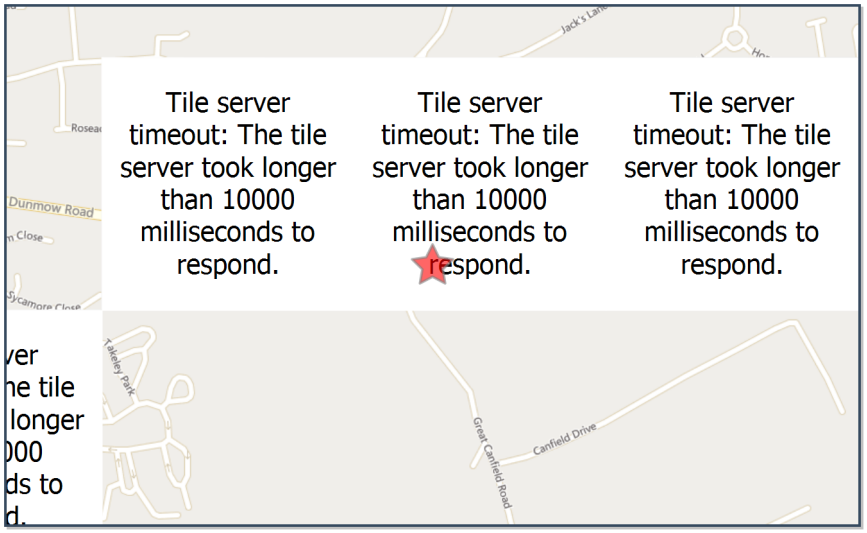
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

[redacted]

Validated Data

Crash Date:	Friday, September 25, 2020	**Time of Crash:**	4:15:00 PM	**Crash Reference:**	**2020420984479**

Highest Injury Severity:	Serious	**Road Number:**	B1256	**Number of Casualties:**	2
Highway Authority:	Essex			**Number of Vehicles:**	2
Local Authority:	Uttlesford District			**OS Grid Reference:**	556828 221154
Weather Description:	Fine with high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Mini roundabout				
Junction Pedestrian Crossing:	Pelican, puffin, toucan or similar non-junction pedestrian light crossing				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

[redacted]

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	0	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	Tree
2	Van or goods vehicle 3.5 tonnes mgw and under	5	Male	56 - 65	Vehicle is in the act of turning right	Offside	Journey as part of work	None	None

Casualties

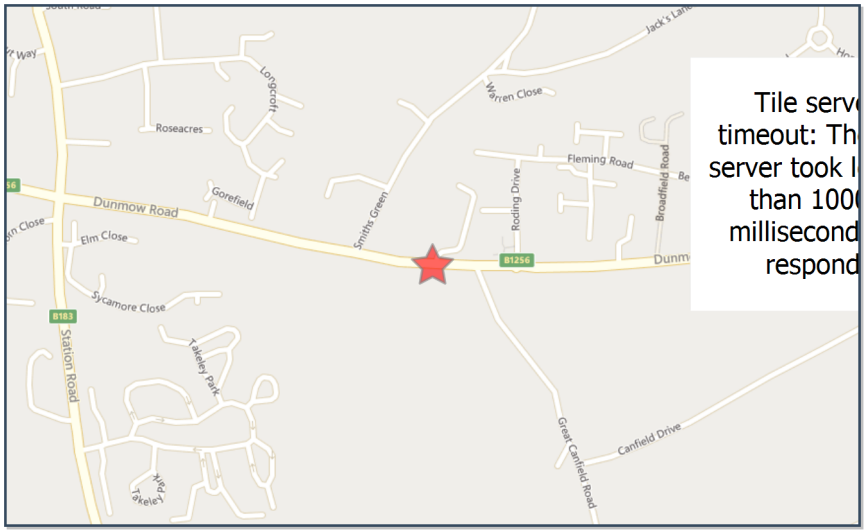
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other
1	2	Serious	Vehicle or pillion passenger	Male	36 - 45	Unknown or other	Unknown or other

[redacted]

Provisional Data does not include vehicle and casualty records

Crash Date:	Thursday, March 04, 2021	**Time of Crash:**	2:42:00 PM	**Crash Reference:**	**2021421025760**

Highest Injury Severity:	Slight	**Road Number:**	B1256	**Number of Casualties:**	1
Highway Authority:				**Number of Vehicles:**	2
Local Authority:				**OS Grid Reference:**	556703 221152
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	Pelican, puffin, toucan or similar non-junction pedestrian light crossing				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

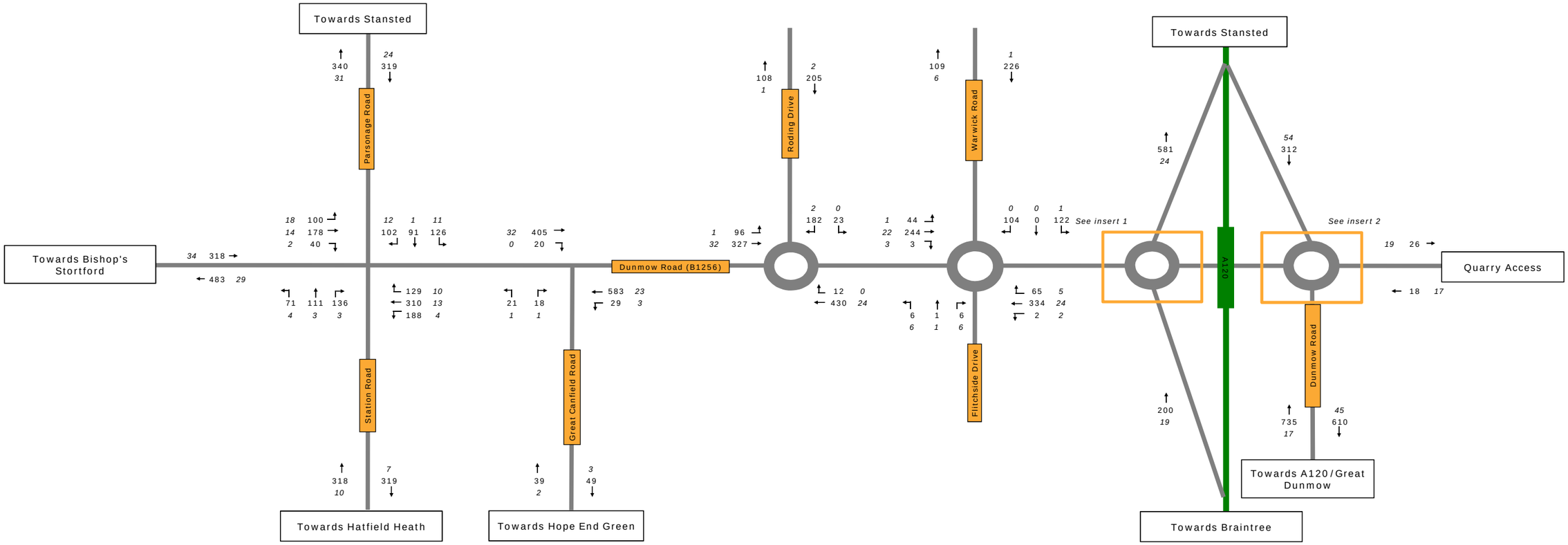
[redacted]

Provisional Data does not include vehicle and casualty records

For more information about the data please visit: *[REDACTED]*
To subscribe to unlimited reports using CrashMap Pro visit *[REDACTED]*

Appendix D

TA Baseline Flows



Insert 1: B1256/A120 Southern Roundabout

Approach	A120 On-slip	Link Road	A120 Off-slip	B1256 West
A120 On-slip				
Link Road	534	0		256
A120 Off-slip	0	23		177
B1256 West	47	338		0

Insert 2: B1256/A120 Northern Roundabout

Approach	A120 Off-slip	Quarry Access	B1256 South	Link Road
A120 Off-slip		16	250	46
Quarry Access		0	6	12
B1256 South		3	0	732
Link Road		7	354	0

Traffic Flow Summary		Vehs	Veh/Min
Junction	B1256/B183	1582	26.4
	B1256/Great Canfield Road	1076	17.9
	B1256/Roding Drive	1070	17.8
	B1256/Warwick Road	931	15.5
	B1256/A120 (South)	1375	22.9
	B1256/A120 (North)	1426	23.8

Key:

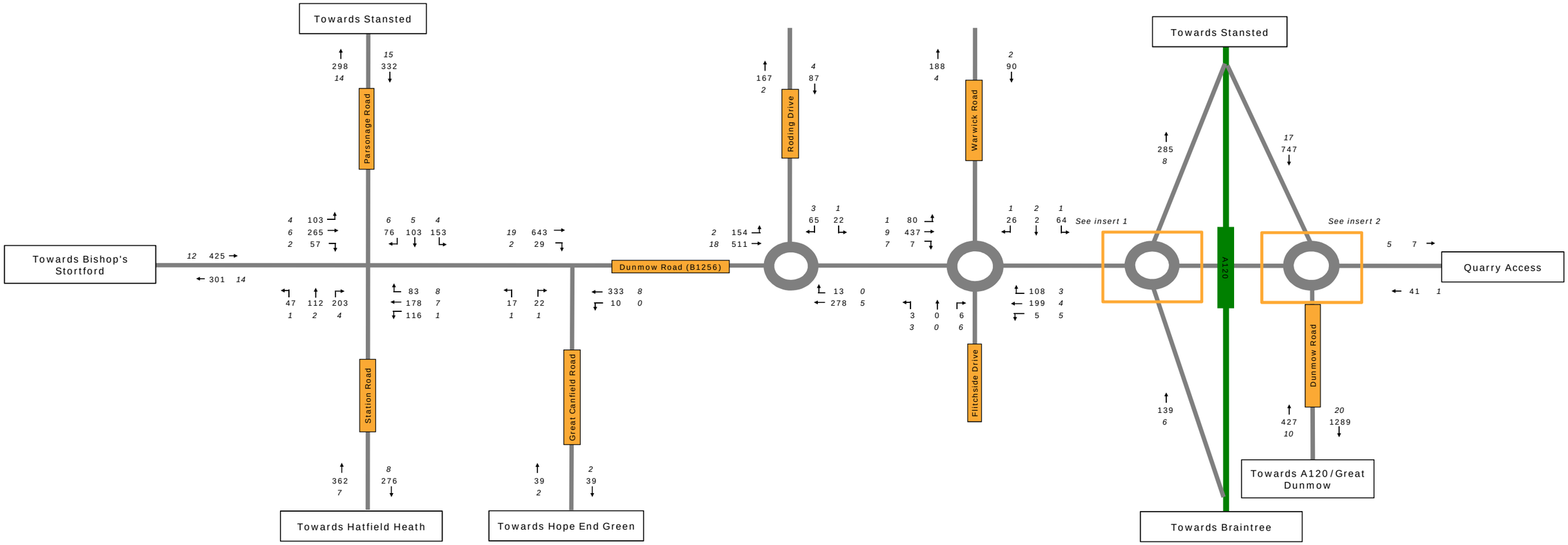
123 Total Vehicles
45 HGVs

Notes:

Great Canfield Road, Takeley

2018 AM Peak Traffic Flows (07:15-08:15)

Motion Figure No. 3.1



Traffic Flow Summary		Vehs	Veh/Min
Junction	B1256/B183	1496	24.9
	B1256/Great Canfield Road	1054	17.6
	B1256/Roding Drive	1043	17.4
	B1256/Warwick Road	937	15.6
	B1256/A120 (South)	1210	20.2
	B1256/A120 (North)	1785	29.8

Insert 1: B1256/A120 Southern Roundabout

Approach	A120 On-slip	Link Road	A120 Off-slip	B1256 West
A120 On-slip				
Link Road	256	0		233
A120 Off-slip	0	17		122
B1256 West	29	553		0

Insert 2: B1256/A120 Northern Roundabout

Approach	A120 Off-slip	Quarry Access	B1256 South	Link Road
A120 Off-slip		3	685	59
Quarry Access		0	35	6
B1256 South		3	0	424
Link Road		1	569	0

Key:

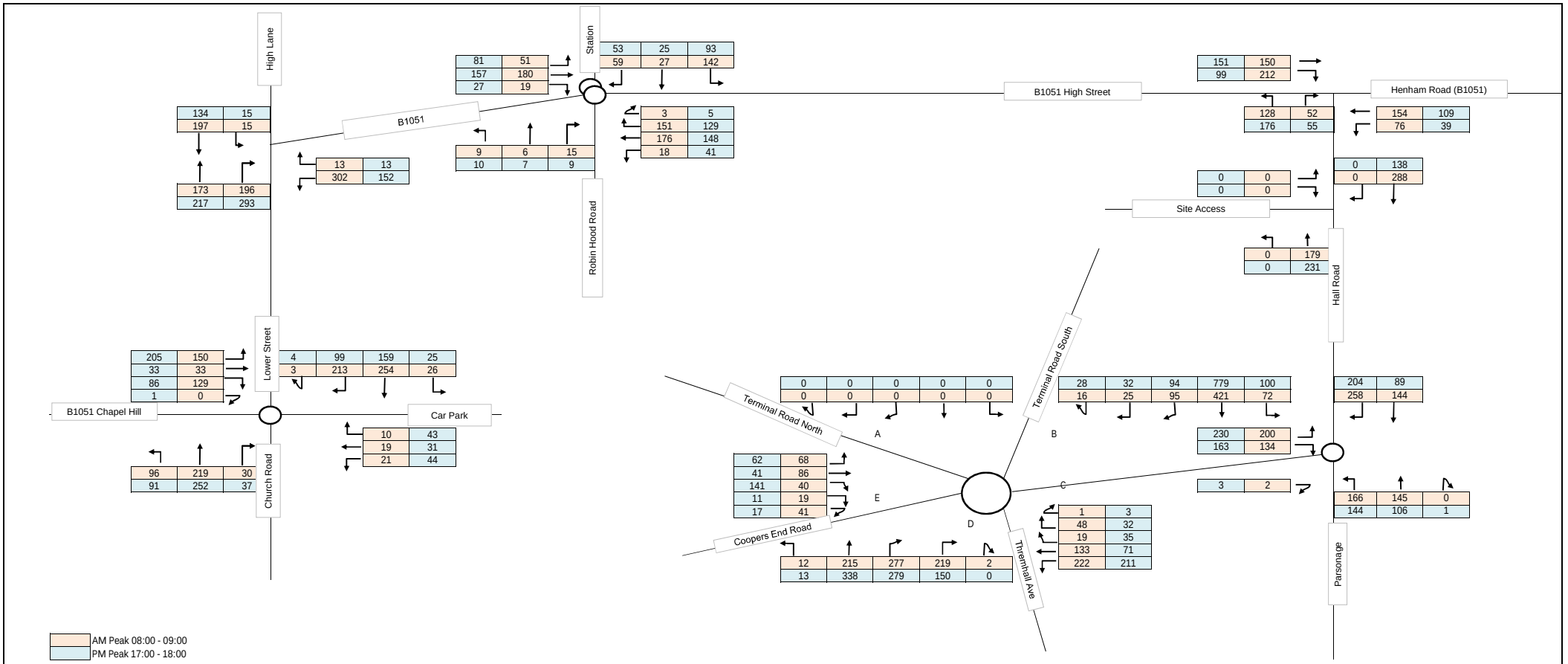
123 Total Vehicles
45 HGVs

Notes:

Great Canfield Road, Takeley

2018 PM Peak Traffic Flows (17:00-18:00)

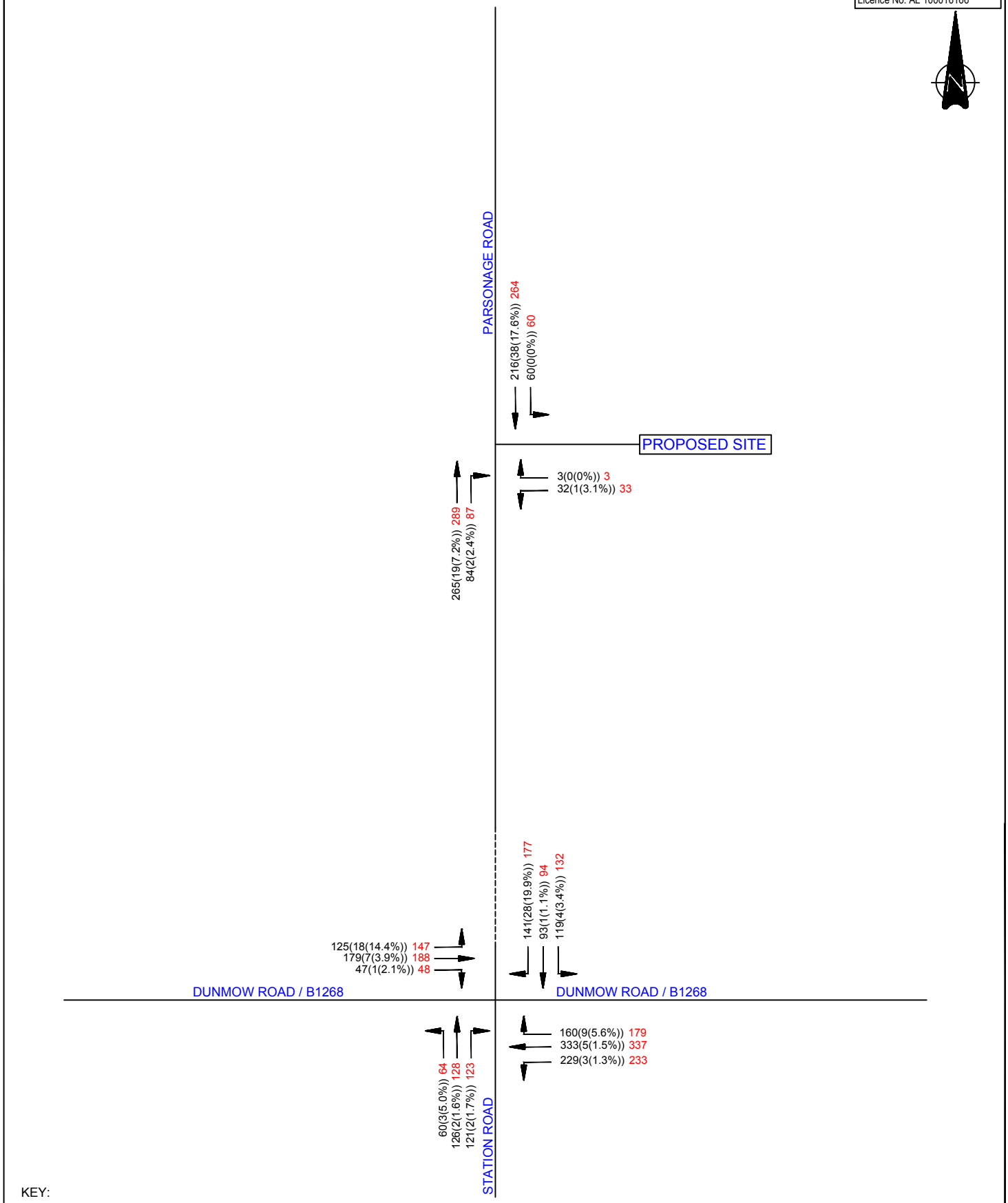
Motion Figure No. 3.2



Client:	Project:	Title:	Drawing Number:	1	Revision:	-	Date:	Jan-19	Checked:	AB	Notes: Not to Scale All flows in PCUs	AECOM
Bovis Homes Ltd	Land West of Hall Rd	Traffic Flow Diagram - Observed Baseline Data	File Path:	U:\Transportation London\60588426_Hall Road Elsenham\10_Technical\03_TFDs			Design:	KC	Approved:	AB		

Appendix E

Weston Business Park Traffic Flows

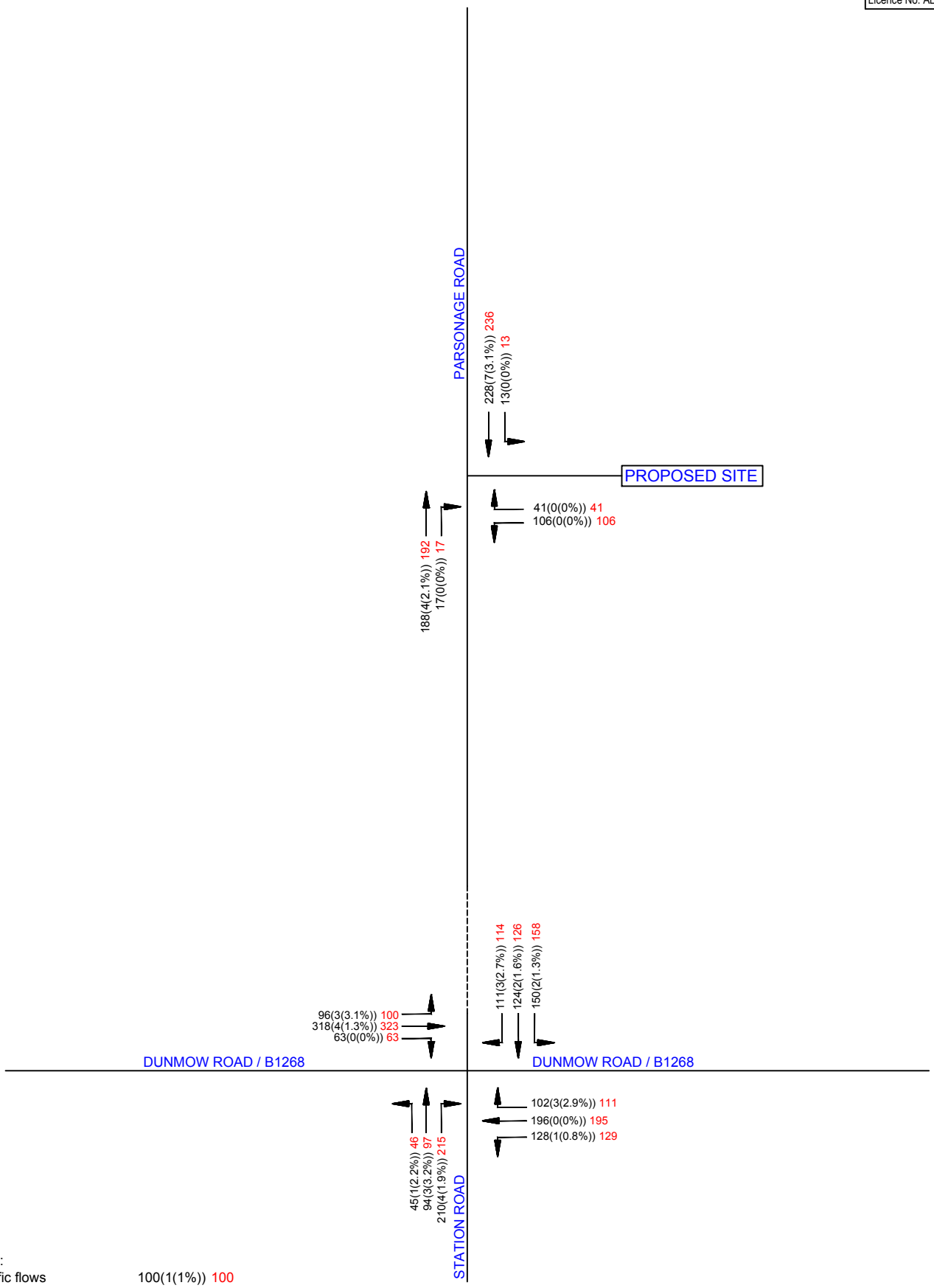


KEY:
Traffic flows 100(1(1%)) 100
Total Traffic(Total HGV(%HGV)) PCU

Drawn: FPEC	Checked: MAC
Scale: NTS	Date: MAY 2017
Drawing No.: 1701/O1	

Project
HABENDUM LIMITED
SKYWAY HOUSE, TAKELEY
2022 WEEKDAY AM PEAK HOUR
BASE MINUS EXISTING SKYWAY HOUSE + PROPOSED SKYWAY HOUSE
0800 - 0900

COTTEE Transport Planning
Fir Lodge
Threshelfords Business Park
Feering
Essex
CO5 9SE
Tel : 01376 573400
Fax : 01376 573480
email : info@cottee-tp.co.uk



KEY:
Traffic flows 100(1(1%)) 100
Total Traffic(Total HGV(%HGV)) PCU

Drawn: FPEC	Checked: MAC	Project: **HABENDUM LIMITED** SKYWAY HOUSE, TAKELEY **2022 WEEKDAY PM PEAK HOUR BASE MINUS EXISTING SKYWAY HOUSE + PROPOSED SKYWAY HOUSE** **1700 - 1800**	COTTEE Transport Planning
Scale: NTS	Date: MAY 2017		
Drawing No.: 1701/P1			

Fir Lodge
Threshelfords Business Park
Feering
Essex
CO5 9SE
Tel : 01376 573400
Fax : 01376 573480
email : info@cottee-tp.co.uk

Appendix F

Smiths Green – Dunmow Road Traffic Survey Data

K&M TRAFFIC SURVEYS

DATE : 28th SEPTEMBER 2021

DAY : TUESDAY

LOCATION : SMITHS GREEN j/w DUNMOW ROAD, TAKELEY, ESSEX.

	SMITHS GREEN TO DUNMOW RD - EAST						SMITHS GREEN TO DUNMOW RD - WEST						DUNMOW RD - WEST TO SMITHS GREEN						DUNMOW RD - WEST TO DUNMOW RD - EAST						DUNMOW RD - EAST TO DUNMOW RD - WEST					
	MOVEMENT 1						MOVEMENT 2						MOVEMENT 3						MOVEMENT 4						MOVEMENT 5					
	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL
0700-0715	2	0	0	0	0	**2**	7	0	0	0	0	**7**	3	0	0	0	0	**3**	31	3	2	0	1	**37**	123	3	0	0	0	**126**
0715-0730	0	0	0	1	0	**1**	3	0	0	0	0	**3**	1	0	0	0	0	**1**	46	2	1	0	0	**49**	132	4	0	1	0	**137**
0730-0745	3	0	0	0	0	**3**	4	0	0	0	0	**4**	1	1	0	0	0	**2**	68	2	0	0	0	**70**	140	3	2	0	1	**146**
0745-0800	2	0	0	0	0	**2**	5	1	0	0	0	**6**	3	0	0	0	1	**4**	61	5	0	0	0	**66**	142	2	2	3	0	**149**
0800-0815	2	0	0	0	0	**2**	6	0	0	0	0	**6**	2	0	0	0	0	**2**	70	0	5	0	0	**75**	160	5	7	0	0	**172**
0815-0830	2	0	0	0	0	**2**	4	0	0	0	1	**5**	5	0	0	0	0	**5**	74	1	3	0	0	**78**	124	3	3	1	0	**131**
0830-0845	3	1	0	0	0	**4**	2	0	0	0	0	**2**	1	1	0	0	0	**2**	89	2	2	0	0	**93**	106	3	4	2	0	**115**
0845-0900	3	0	0	0	0	**3**	2	0	0	0	0	**2**	6	0	0	0	0	**6**	110	1	4	0	0	**115**	137	2	2	0	0	**141**
0900-0915	2	0	0	0	0	**2**	2	1	0	0	0	**3**	1	0	0	0	0	**1**	78	2	1	0	0	**81**	78	4	0	0	0	**82**
0915-0930	4	0	0	0	0	**4**	2	0	0	0	0	**2**	9	0	0	0	0	**9**	60	4	0	0	0	**64**	81	5	1	0	0	**87**
0930-0945	0	0	0	0	0	**0**	4	0	0	0	0	**4**	3	0	0	0	0	**3**	53	4	1	1	1	**60**	71	0	0	0	2	**73**
0945-1000	3	0	0	0	0	**3**	4	0	0	0	0	**4**	3	1	0	0	0	**4**	60	3	1	0	0	**64**	52	1	0	0	0	**53**
0700-1000	**26**	**1**	**0**	**1**	**0**	**28**	**45**	**2**	**0**	**0**	**1**	**48**	**38**	**3**	**0**	**0**	**1**	**42**	**800**	**29**	**20**	**1**	**2**	**852**	**1346**	**35**	**21**	**7**	**3**	**1412**
0700-0800	7	0	0	1	0	**8**	19	1	0	0	0	**20**	8	1	0	0	1	**10**	206	12	3	0	1	**222**	537	12	4	4	1	**558**
0715-0815	7	0	0	1	0	**8**	18	1	0	0	0	**19**	7	1	0	0	1	**9**	245	9	6	0	0	**260**	574	14	11	4	1	**604**
0730-0830	9	0	0	0	0	**9**	19	1	0	0	1	**21**	11	1	0	0	1	**13**	273	8	8	0	0	**289**	566	13	14	4	1	**598**
0745-0845	9	1	0	0	0	**10**	17	1	0	0	1	**19**	11	1	0	0	1	**13**	294	8	10	0	0	**312**	532	13	16	6	0	**567**
0800-0900	10	1	0	0	0	**11**	14	0	0	0	1	**15**	14	1	0	0	0	**15**	343	4	14	0	0	**361**	527	13	16	3	0	**559**
0815-0915	10	1	0	0	0	**11**	10	1	0	0	1	**12**	13	1	0	0	0	**14**	351	6	10	0	0	**367**	445	12	9	3	0	**469**
0830-0930	12	1	0	0	0	**13**	8	1	0	0	0	**9**	17	1	0	0	0	**18**	337	9	7	0	0	**353**	402	14	7	2	0	**425**
0845-0945	9	0	0	0	0	**9**	10	1	0	0	0	**11**	19	0	0	0	0	**19**	301	11	6	1	1	**320**	367	11	3	0	2	**383**
0900-1000	9	0	0	0	0	**9**	12	1	0	0	0	**13**	16	1	0	0	0	**17**	251	13	3	1	1	**269**	282	10	1	0	2	**295**

K&M TRAFFIC SURVEYS

DATE : 28th SEPTEMBER 2021

DAY : TUESDAY

LOCATION : SMITHS GREEN j/w DUNMOW ROAD, TAKELEY, ESSEX.

	SMITHS GREEN TO DUNMOW RD - EAST						SMITHS GREEN TO DUNMOW RD - WEST						DUNMOW RD - WEST TO SMITHS GREEN						DUNMOW RD - WEST TO DUNMOW RD - EAST						DUNMOW RD - EAST TO DUNMOW RD - WEST					
	MOVEMENT 1						MOVEMENT 2						MOVEMENT 3						MOVEMENT 4						MOVEMENT 5					
	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	TOTAL
1600-1615	5	0	0	0	0	**5**	8	2	0	0	0	**10**	5	1	0	0	0	**6**	153	1	2	0	0	**156**	77	2	1	0	2	**82**
1615-1630	1	0	0	0	0	**1**	5	0	0	0	0	**5**	8	0	0	0	0	**8**	130	3	1	0	0	**134**	97	1	1	0	2	**101**
1630-1645	4	0	0	0	0	**4**	3	0	0	0	0	**3**	4	0	0	0	0	**4**	128	2	1	0	0	**131**	72	1	0	0	0	**73**
1645-1700	1	0	0	0	0	**1**	4	0	0	0	0	**4**	4	1	0	0	0	**5**	117	2	0	0	1	**120**	73	2	2	1	0	**78**
1700-1715	4	0	0	0	0	**4**	7	2	0	0	0	**9**	8	0	0	0	0	**8**	174	2	5	1	0	**182**	93	2	1	0	0	**96**
1715-1730	5	0	0	0	1	**6**	4	0	0	0	0	**4**	12	0	0	0	0	**12**	136	1	3	0	0	**140**	89	2	4	0	0	**95**
1730-1745	3	0	0	0	0	**3**	3	0	0	0	0	**3**	2	0	0	0	0	**2**	135	1	4	1	0	**141**	86	4	3	1	0	**94**
1745-1800	3	0	0	0	0	**3**	2	0	0	0	0	**2**	3	0	0	0	1	**4**	93	1	3	1	0	**98**	54	1	2	1	0	**58**
1800-1815	8	0	0	0	0	**8**	3	0	0	0	0	**3**	3	0	0	0	0	**3**	117	2	1	1	0	**121**	73	1	1	0	0	**75**
1815-1830	4	0	0	0	0	**4**	4	0	0	0	0	**4**	5	0	0	0	0	**5**	81	3	0	1	1	**86**	60	2	1	1	0	**64**
1830-1845	4	0	0	0	0	**4**	1	0	0	0	0	**1**	4	0	0	0	0	**4**	88	0	1	0	1	**90**	46	1	0	0	0	**47**
1845-1900	4	0	0	0	0	**4**	3	0	0	0	0	**3**	5	0	0	0	0	**5**	87	1	1	2	0	**91**	59	1	0	0	0	**60**
1600-1900	**46**	**0**	**0**	**0**	**1**	**47**	**47**	**4**	**0**	**0**	**0**	**51**	**63**	**2**	**0**	**0**	**1**	**66**	**1439**	**19**	**22**	**7**	**3**	**1490**	**879**	**20**	**16**	**4**	**4**	**923**
1600-1700	11	0	0	0	0	**11**	20	2	0	0	0	**22**	21	2	0	0	0	**23**	528	8	4	0	1	**541**	319	6	4	1	4	**334**
1615-1715	10	0	0	0	0	**10**	19	2	0	0	0	**21**	24	1	0	0	0	**25**	549	9	7	1	1	**567**	335	6	4	1	2	**348**
1630-1730	14	0	0	0	1	**15**	18	2	0	0	0	**20**	28	1	0	0	0	**29**	555	7	9	1	1	**573**	327	7	7	1	0	**342**
1645-1745	13	0	0	0	1	**14**	18	2	0	0	0	**20**	26	1	0	0	0	**27**	562	6	12	2	1	**583**	341	10	10	2	0	**363**
1700-1800	15	0	0	0	1	**16**	16	2	0	0	0	**18**	25	0	0	0	1	**26**	538	5	15	3	0	**561**	322	9	10	2	0	**343**
1715-1815	19	0	0	0	1	**20**	12	0	0	0	0	**12**	20	0	0	0	1	**21**	481	5	11	3	0	**500**	302	8	10	2	0	**322**
1730-1830	18	0	0	0	0	**18**	12	0	0	0	0	**12**	13	0	0	0	1	**14**	426	7	8	4	1	**446**	273	8	7	3	0	**291**
1745-1845	19	0	0	0	0	**19**	10	0	0	0	0	**10**	15	0	0	0	1	**16**	379	6	5	3	2	**395**	233	5	4	2	0	**244**
1800-1900	20	0	0	0	0	**20**	11	0	0	0	0	**11**	17	0	0	0	0	**17**	373	6	3	4	2	**388**	238	5	2	1	0	**246**

K&M TRAFFIC SURVEYS

DATE : 28th SEPTEMBER 2021

DAY : TUESDAY

LOCATION : SMITHS GREEN j/w DUNMOW ROAD, TAKELEY, ESSEX.

	DUNMOW RD - EAST TO SMITHS GREEN					
	MOVEMENT 6					
	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	**TOTAL**
0700-0715	1	0	0	0	0	**1**
0715-0730	5	0	0	0	0	**5**
0730-0745	2	0	0	0	0	**2**
0745-0800	3	0	0	0	0	**3**
0800-0815	5	0	0	0	0	**5**
0815-0830	4	1	0	0	0	**5**
0830-0845	7	0	0	0	0	**7**
0845-0900	3	0	0	0	0	**3**
0900-0915	5	0	0	0	0	**5**
0915-0930	1	0	0	0	0	**1**
0930-0945	6	0	0	0	0	**6**
0945-1000	2	0	0	0	0	**2**
0700-1000	**44**	**1**	**0**	**0**	**0**	**45**
0700-0800	11	0	0	0	0	**11**
0715-0815	15	0	0	0	0	**15**
0730-0830	14	1	0	0	0	**15**
0745-0845	19	1	0	0	0	**20**
0800-0900	19	1	0	0	0	**20**
0815-0915	19	1	0	0	0	**20**
0830-0930	16	0	0	0	0	**16**
0845-0945	15	0	0	0	0	**15**
0900-1000	14	0	0	0	0	**14**

K&M TRAFFIC SURVEYS

DATE : 28th SEPTEMBER 2021

DAY : TUESDAY

LOCATION : SMITHS GREEN j/w DUNMOW ROAD, TAKELEY, ESSEX.

	DUNMOW RD - EAST TO SMITHS GREEN					
	MOVEMENT 6					
	LIGHT	HEAVY	BUS	MCYCLE	PCYCLE	**TOTAL**
1600-1615	3	0	0	0	0	**3**
1615-1630	2	0	0	0	0	**2**
1630-1645	5	0	0	1	0	**6**
1645-1700	8	0	0	0	0	**8**
1700-1715	9	0	0	0	0	**9**
1715-1730	6	0	0	0	0	**6**
1730-1745	2	0	0	0	0	**2**
1745-1800	4	1	0	0	0	**5**
1800-1815	8	0	0	0	0	**8**
1815-1830	2	0	0	0	0	**2**
1830-1845	2	0	0	0	0	**2**
1845-1900	3	0	0	0	0	**3**
1600-1900	**54**	**1**	**0**	**1**	**0**	**56**
1600-1700	18	0	0	1	0	**19**
1615-1715	24	0	0	1	0	**25**
1630-1730	28	0	0	1	0	**29**
1645-1745	25	0	0	0	0	**25**
1700-1800	21	1	0	0	0	**22**
1715-1815	20	1	0	0	0	**21**
1730-1830	16	1	0	0	0	**17**
1745-1845	16	1	0	0	0	**17**
1800-1900	15	0	0	0	0	**15**

Appendix G

Baseline Modelling Outputs

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Hall Road Mini Rbt 2018.j9
Path: C:\Users\GuestReading\Motion\StaffSite - TP Projects\wetak2 2007045\Analysis\Junctions9
Report generation date: 02/06/2021 09:56:40

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2018									
Arm 1	1.1	11.15	0.51	B	18 %	1.5	12.47	0.58	B	32 %
Arm 2	2.3	19.19	0.68	C	[Arm 2]	1.3	15.22	0.55	C	[Arm 2]
Arm 3	0.9	10.41	0.46	B		0.7	9.08	0.41	A	

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

File summary

File Description

Title	
Location	
Site number	
Date	01/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\GuestReading
Description	

Units

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

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9		✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018	AM	ONE HOUR	08:00	09:30	15
D2	2018	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	14.09	B

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		18	Arm 2

Arms

Arms

Arm	Name	Description
1	Parsonage Road North	
2	Hall Road	
3	Parsonage Road South	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.65	3.65	4.30	4.0	16.00	6.50	0.0	
2	3.30	3.30	3.30	0.0	19.50	14.50	0.0	
3	3.00	3.00	4.20	5.0	19.00	12.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.631	824
2	0.621	740
3	0.621	875

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)
D1	2018	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	334	100.000
2		✓	402	100.000
3		✓	289	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	200	134
	2	258	0	144
	3	144	145	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.51	11.15	1.1	B
2	0.68	19.19	2.3	C
3	0.46	10.41	0.9	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	108	755	0.333	249	0.5	7.794	A
2	303	100	677	0.447	299	0.9	10.376	B
3	218	192	756	0.288	216	0.4	7.312	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	300	130	741	0.405	299	0.7	8.943	A
2	361	120	665	0.543	360	1.3	12.903	B
3	260	231	731	0.355	259	0.6	8.375	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	368	159	723	0.509	366	1.1	11.047	B
2	443	147	648	0.683	439	2.2	18.549	C
3	318	282	700	0.455	317	0.9	10.307	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	368	160	723	0.509	368	1.1	11.145	B
2	443	148	648	0.683	442	2.3	19.188	C
3	318	284	699	0.456	318	0.9	10.406	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	300	131	741	0.405	302	0.8	9.045	A
2	361	121	664	0.544	365	1.4	13.396	B
3	260	234	729	0.356	261	0.6	8.477	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	109	754	0.333	252	0.6	7.899	A
2	303	101	677	0.447	304	0.9	10.686	B
3	218	195	754	0.289	218	0.5	7.408	A

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	12.35	B

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		32	Arm 2

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)
D2	2018	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	393	100.000
2		✓	293	100.000
3		✓	272	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	163	230
	2	204	0	89
	3	166	106	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.58	12.47	1.5	B
2	0.55	15.22	1.3	C
3	0.41	9.08	0.7	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	296	79	774	0.382	293	0.7	8.198	A
2	221	172	633	0.348	218	0.6	9.503	A
3	205	152	781	0.262	203	0.4	6.842	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	353	95	764	0.463	352	0.9	9.603	A
2	263	206	612	0.431	262	0.8	11.310	B
3	245	183	761	0.321	244	0.5	7.645	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	433	116	750	0.577	431	1.5	12.309	B
2	323	252	583	0.553	321	1.3	14.967	B
3	299	223	736	0.407	299	0.7	9.029	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	433	117	750	0.577	433	1.5	12.471	B
2	323	253	582	0.554	322	1.3	15.221	C
3	299	225	735	0.407	299	0.7	9.081	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	353	96	763	0.463	355	1.0	9.759	A
2	263	208	610	0.431	265	0.9	11.538	B
3	245	185	760	0.322	245	0.5	7.706	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	296	80	773	0.383	297	0.7	8.336	A
2	221	174	632	0.349	222	0.6	9.682	A
3	205	154	779	0.263	205	0.4	6.910	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 3 - B1256-Roding Drive[2018].j9
Path: C:\Users\GuestReading\Motion\StaffSite - TP Projects\wetak2 2007045\Analysis\Junctions9
Report generation date: 01/06/2021 14:38:53

Summary of junction performance

	AM							PM						
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2018													
Arm 1	0.7	9.45	0.42	A	7.02	A	71 % [Arm 1]	0.2	8.34	0.18	A	9.99	A	29 % [Arm 3]
Arm 2	0.8	5.40	0.42	A				0.4	3.93	0.27	A			
Arm 3	1.0	7.55	0.48	A				2.4	12.86	0.70	B			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Junction 3 - B1256/Roding Drive
Location	Takeley
Site number	
Date	29/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\GuestReading
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	DIRECT	08:00	09:00	60	15	✓
D2	2018	PM	DIRECT	17:00	18:00	60	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.02	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		71	Arm 1

Arms

Arms

Arm	Name	Description
1	Roding Drive	
2	B1256 East	
3	B1256 West	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.40	3.40	4.40	4.5	14.00	8.00	0.0	✓
2	3.00	3.00	3.60	4.0	20.00	20.00	0.0	
3	4.00	4.00	4.60	2.0	15.40	10.50	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1	0.517	202.559
2	0.909	336.639
3	0.531	243.719

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 period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	0.00	48.00
	2	0.00	0.00	102.00
	3	7.00	96.00	0.00

08:15 - 08:30

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	5.00	38.00
	2	2.00	0.00	124.00
	3	17.00	87.00	0.00

08:30 - 08:45

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	5.00	38.00
	2	4.00	0.00	118.00
	3	43.00	72.00	0.00

08:45 - 09:00

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	13.00	57.00
	2	6.00	0.00	86.00
	3	29.00	72.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	1
	2	0	0	6
	3	1	10	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.42	9.45	0.7	A	51.00	204.00
2	0.42	5.40	0.8	A	110.50	442.00
3	0.48	7.55	1.0	A	105.75	423.00

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	48.00	48.00	95.26	153.29	0.313	47.55	6.95	0.0	0.5	8.560	A
2	102.00	102.00	47.55	293.40	0.348	101.44	95.26	0.0	0.6	4.956	A
3	103.00	103.00	0.00	243.72	0.423	102.21	148.99	0.0	0.8	6.915	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	43.00	43.00	87.06	157.53	0.273	43.07	18.91	0.5	0.4	7.938	A
2	126.00	126.00	38.12	301.98	0.417	125.81	92.02	0.6	0.8	5.404	A
3	104.00	104.00	1.99	242.66	0.429	103.98	161.94	0.8	0.8	7.034	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	43.00	43.00	72.08	165.28	0.260	43.02	46.76	0.4	0.4	7.430	A
2	122.00	122.00	38.02	302.06	0.404	122.03	77.08	0.8	0.7	5.291	A
3	115.00	115.00	3.99	241.60	0.476	114.85	156.06	0.8	1.0	7.550	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	70.00	70.00	72.04	165.30	0.423	69.63	35.12	0.4	0.7	9.447	A
2	92.00	92.00	56.72	285.05	0.323	92.22	84.94	0.7	0.5	4.934	A
3	101.00	101.00	5.99	240.54	0.420	101.17	142.95	1.0	0.8	6.936	A

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	9.99	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		29	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2018	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	4.00	18.00
	2	5.00	0.00	83.00
	3	33.00	132.00	0.00

17:15 - 17:30

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	5.00	16.00
	2	2.00	0.00	76.00
	3	46.00	125.00	0.00

17:30 - 17:45

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	2.00	17.00
	2	1.00	0.00	64.00
	3	33.00	136.00	0.00

17:45 - 18:00

Demand (PCU/TS)

		To		
		1	2	3
From	1	0.00	11.00	14.00
	2	5.00	0.00	54.00
	3	42.00	117.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	2
	3	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.18	8.34	0.2	A	21.75	87.00
2	0.27	3.93	0.4	A	72.50	290.00
3	0.70	12.86	2.4	B	166.00	664.00

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	22.00	22.00	130.28	135.18	0.163	21.80	37.55	0.0	0.2	8.318	A
2	88.00	88.00	17.83	320.42	0.275	87.62	134.24	0.0	0.4	3.932	A
3	165.00	165.00	4.98	241.07	0.684	162.85	100.47	0.0	2.2	11.599	B

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.00	21.00	124.99	137.92	0.152	21.01	47.80	0.2	0.2	8.085	A
2	78.00	78.00	16.02	322.07	0.242	78.06	129.98	0.4	0.3	3.763	A
3	171.00	171.00	2.01	242.65	0.705	170.78	92.06	2.2	2.4	12.859	B

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	19.00	19.00	135.82	132.32	0.144	19.01	34.18	0.2	0.2	8.342	A
2	65.00	65.00	16.99	321.19	0.202	65.07	137.85	0.3	0.3	3.585	A
3	169.00	169.00	1.00	243.19	0.695	169.00	81.05	2.4	2.4	12.552	B

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	25.00	25.00	117.40	141.85	0.176	24.96	46.90	0.2	0.2	8.078	A
2	59.00	59.00	14.03	323.88	0.182	59.03	128.32	0.3	0.2	3.462	A
3	159.00	159.00	4.98	241.07	0.660	159.32	68.08	2.4	2.1	11.412	B

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 4 - B1256-Warwick Road[2018].j9
Path: C:\Users\GuestReading\Motion\StaffSite - TP Projects\wetak2 2007045\Analysis\Junctions9
Report generation date: 01/06/2021 14:58:59

Summary of junction performance

	AM							PM						
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2018													
Arm 1	0.3	4.17	0.25	A	4.96	A	111 % [Arm 2]	0.1	3.84	0.09	A	4.87	A	117 % [Arm 4]
Arm 2	0.8	6.09	0.42	A				0.5	4.89	0.34	A			
Arm 3	0.0	4.04	0.02	A				0.0	3.69	0.02	A			
Arm 4	0.4	4.07	0.26	A				0.8	5.13	0.42	A			

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

File summary

File Description

Title	Junction 4 - B1256-Warwick Road
Location	Takeley
Site number	
Date	29/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\GuestReading
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	DIRECT	08:00	09:00	60	15	✓
D2	2018	PM	DIRECT	17:00	18:00	60	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.96	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	111	Arm 2

Arms

Arms

Arm	Name	Description
1	Warwick Road	
2	B1256 East	
3	Flitchside Drive	
4	B1256 West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.00	4.70	2.5	30.0	28.0	35.0	
2	3.10	5.00	3.5	30.0	28.0	35.0	
3	3.30	4.80	5.0	17.0	28.0	35.0	
4	3.70	5.00	6.0	25.0	28.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1	0.582	330.619
2	0.546	287.105
3	0.549	299.947
4	0.584	335.868

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 period length (min)	Time segment length (min)	Run automatically
D1	2018	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	25.00	0.00	31.00
	2	10.00	0.00	1.00	85.00
	3	0.00	3.00	0.00	1.00
	4	6.00	53.00	0.00	0.00

08:15 - 08:30

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	30.00	0.00	19.00
	2	14.00	0.00	1.00	102.00
	3	0.00	1.00	0.00	2.00
	4	12.00	56.00	1.00	0.00

08:30 - 08:45

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	43.00	0.00	28.00
	2	19.00	0.00	0.00	81.00
	3	0.00	2.00	0.00	2.00
	4	11.00	72.00	0.00	0.00

08:45 - 09:00

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	24.00	0.00	26.00
	2	22.00	0.00	0.00	66.00
	3	1.00	0.00	0.00	1.00
	4	15.00	63.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	8	0	0	8
	3	0	0	0	0
	4	2	10	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.25	4.17	0.3	A	56.50	226.00
2	0.42	6.09	0.8	A	100.25	401.00
3	0.02	4.04	0.0	A	3.25	13.00
4	0.26	4.07	0.4	A	72.50	290.00

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	56.00	56.00	55.77	298.16	0.188	55.77	15.91	0.0	0.2	3.726	A
2	96.00	96.00	30.87	270.24	0.355	95.41	80.67	0.0	0.6	5.536	A
3	4.00	4.00	125.29	231.16	0.017	3.98	0.99	0.0	0.0	3.961	A
4	59.00	59.00	12.93	328.32	0.180	58.76	116.35	0.0	0.2	3.640	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	49.00	49.00	57.98	296.88	0.165	49.03	25.94	0.2	0.2	3.652	A
2	117.00	117.00	20.05	276.16	0.424	116.80	86.97	0.6	0.8	6.088	A
3	3.00	3.00	134.86	225.91	0.013	3.00	2.00	0.0	0.0	4.037	A
4	69.00	69.00	14.98	327.12	0.211	68.95	122.88	0.2	0.3	3.777	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	71.00	71.00	73.91	287.61	0.247	70.87	29.97	0.2	0.3	4.174	A
2	100.00	100.00	27.95	271.84	0.368	100.15	116.83	0.8	0.6	5.668	A
3	4.00	4.00	128.09	229.62	0.017	4.00	0.01	0.0	0.0	3.988	A
4	83.00	83.00	20.97	323.62	0.256	82.91	111.12	0.3	0.4	4.070	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	50.00	50.00	64.05	293.35	0.170	50.12	37.97	0.3	0.2	3.718	A
2	88.00	88.00	27.02	272.35	0.323	88.11	87.15	0.6	0.5	5.278	A
3	2.00	2.00	114.14	237.28	0.008	2.01	1.00	0.0	0.0	3.824	A
4	79.00	79.00	23.00	322.43	0.245	79.02	93.15	0.4	0.4	4.002	A

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.87	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	117	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2018	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	16.00	0.00	4.00
	2	30.00	0.00	0.00	67.00
	3	0.00	0.00	0.00	1.00
	4	13.00	121.00	1.00	0.00

17:15 - 17:30

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	22.00	0.00	4.00
	2	23.00	0.00	1.00	44.00
	3	0.00	3.00	0.00	2.00
	4	33.00	56.00	1.00	0.00

17:30 - 17:45

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	13.00	2.00	9.00
	2	28.00	0.00	3.00	43.00
	3	0.00	0.00	0.00	2.00
	4	14.00	72.00	4.00	0.00

17:45 - 18:00

Demand (PCU/TS)

		To			
		1	2	3	4
From	1	0.00	13.00	0.00	9.00
	2	27.00	0.00	1.00	44.00
	3	0.00	3.00	0.00	1.00
	4	20.00	63.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	4
	2	3	0	0	2
	3	0	0	0	0
	4	1	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.09	3.84	0.1	A	23.00	92.00
2	0.34	4.89	0.5	A	77.75	311.00
3	0.02	3.69	0.0	A	3.00	12.00
4	0.42	5.13	0.8	A	99.75	399.00

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	20.00	20.00	121.31	260.03	0.077	19.92	42.76	0.0	0.1	3.838	A
2	97.00	97.00	4.98	284.39	0.341	96.47	136.24	0.0	0.5	4.886	A
3	1.00	1.00	100.46	244.79	0.004	1.00	0.99	0.0	0.0	3.690	A
4	135.00	135.00	29.84	318.44	0.424	134.23	71.62	0.0	0.8	5.130	A

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26.00	26.00	60.42	295.46	0.088	25.99	55.98	0.1	0.1	3.416	A
2	68.00	68.00	5.00	284.37	0.239	68.20	81.41	0.5	0.3	4.263	A
3	5.00	5.00	71.21	260.85	0.019	4.98	2.00	0.0	0.0	3.516	A
4	90.00	90.00	26.04	320.65	0.281	90.36	50.15	0.8	0.4	4.072	A

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.00	24.00	75.92	286.44	0.084	24.00	42.06	0.1	0.1	3.516	A
2	74.00	74.00	14.96	278.93	0.265	73.96	84.97	0.3	0.4	4.490	A
3	2.00	2.00	79.95	256.06	0.008	2.01	8.97	0.0	0.0	3.544	A
4	90.00	90.00	27.98	319.52	0.282	90.00	53.98	0.4	0.4	4.113	A

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	22.00	22.00	67.05	291.60	0.075	22.01	46.98	0.1	0.1	3.434	A
2	72.00	72.00	10.02	281.63	0.256	72.01	79.04	0.4	0.4	4.395	A
3	4.00	4.00	80.00	256.02	0.016	3.99	2.03	0.0	0.0	3.570	A
4	84.00	84.00	29.99	318.34	0.264	84.03	54.00	0.4	0.4	4.021	A

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Westons Business Park Access Base.j9
Path: C:\Users\GuestReading\Motion\StaffSite - TP Projects\wetak2 2007045\Analysis\Junctions9
Report generation date: 01/06/2021 14:29:53

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2018									
Stream B-C	0.1	6.28	0.06	A	105 %	0.3	8.38	0.21	A	76 %
Stream B-A	0.0	11.18	0.01	B	[Stream C-AB]	0.2	12.13	0.13	B	[Stream B-A]
Stream C-AB	0.5	5.72	0.22	A		0.1	5.30	0.04	A	

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

File summary

File Description

Title	Westons Business Park Access
Location	Takeley
Site number	
Date	04/03/2021
Version	
Status	(new file)
Identifier	wetak2
Client	Weston Homes
Jobnumber	
Enumerator	MOTION\GuestReading
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	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018	AM	ONE HOUR	08:00	09:30	15
D2	2018	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	105	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Parsonage Road North		Major
B	Site Access		Minor
C	Parsonage Road South		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	6.30			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.10	3.80	3.25	3.25	✓	1.00	35	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	509	0.091	0.231	0.145	0.330
1	B-C	715	0.108	0.273	-	-
1	C-B	661	0.253	0.253	-	-

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)
D1	2018	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	349	100.000
B		✓	35	100.000
C		✓	440	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	60	289
	B	3	0	32
	C	356	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.28	0.1	A
B-A	0.01	11.18	0.0	B
C-AB	0.22	5.72	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	642	0.038	24	0.0	5.822	A
B-A	2	384	0.006	2	0.0	9.437	A
C-AB	102	790	0.129	101	0.2	5.445	A
C-A	261			261			
A-B	45			45			
A-C	244			244			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	628	0.046	29	0.0	6.007	A
B-A	3	359	0.008	3	0.0	10.098	B
C-AB	135	818	0.165	135	0.3	5.514	A
C-A	299			299			
A-B	54			54			
A-C	291			291			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	608	0.058	35	0.1	6.279	A
B-A	3	326	0.010	3	0.0	11.172	B
C-AB	190	858	0.222	190	0.5	5.679	A
C-A	341			341			
A-B	66			66			
A-C	356			356			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	608	0.058	35	0.1	6.279	A
B-A	3	325	0.010	3	0.0	11.177	B
C-AB	191	859	0.222	191	0.5	5.718	A
C-A	341			341			
A-B	66			66			
A-C	356			356			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	29	628	0.046	29	0.0	6.008	A
B-A	3	359	0.008	3	0.0	10.106	B
C-AB	135	819	0.165	136	0.4	5.581	A
C-A	299			299			
A-B	54			54			
A-C	291			291			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	642	0.038	24	0.0	5.827	A
B-A	2	383	0.006	2	0.0	9.448	A
C-AB	102	790	0.130	103	0.3	5.494	A
C-A	261			261			
A-B	45			45			
A-C	244			244			

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.63	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	76	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2018	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	428	100.000
B		✓	147	100.000
C		✓	284	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	13	415
	B	41	0	106
	C	267	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	8.38	0.3	A
B-A	0.13	12.13	0.2	B
C-AB	0.04	5.30	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	599	0.133	79	0.2	6.920	A
B-A	31	401	0.077	31	0.1	9.715	A
C-AB	19	724	0.026	18	0.0	5.280	A
C-A	219			219			
A-B	10			10			
A-C	350			350			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	95	577	0.165	95	0.2	7.468	A
B-A	37	376	0.098	37	0.1	10.599	B
C-AB	24	739	0.033	24	0.0	5.228	A
C-A	260			260			
A-B	12			12			
A-C	418			418			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	546	0.214	116	0.3	8.369	A
B-A	45	342	0.132	45	0.1	12.116	B
C-AB	33	761	0.044	33	0.1	5.171	A
C-A	315			315			
A-B	14			14			
A-C	512			512			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	546	0.214	117	0.3	8.383	A
B-A	45	342	0.132	45	0.2	12.132	B
C-AB	33	761	0.044	33	0.1	5.192	A
C-A	315			315			
A-B	14			14			
A-C	512			512			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	95	577	0.165	96	0.2	7.482	A
B-A	37	376	0.098	37	0.1	10.617	B
C-AB	24	739	0.033	24	0.0	5.270	A
C-A	260			260			
A-B	12			12			
A-C	418			418			

18:15 - 18:30

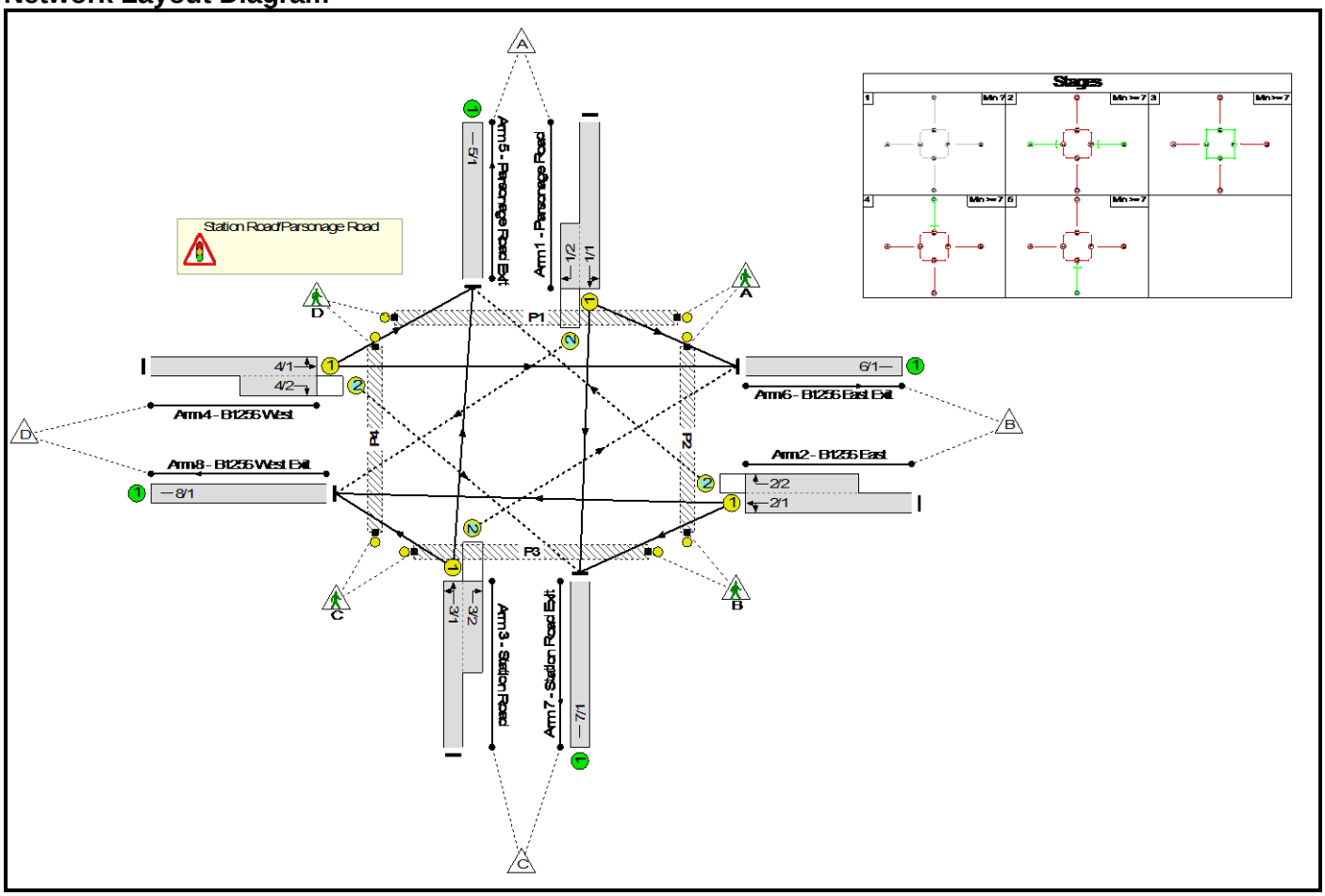
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	599	0.133	80	0.2	6.944	A
B-A	31	401	0.077	31	0.1	9.739	A
C-AB	19	724	0.026	19	0.0	5.300	A
C-A	219			219			
A-B	10			10			
A-C	350			350			

Full Input Data And Results

User and Project Details

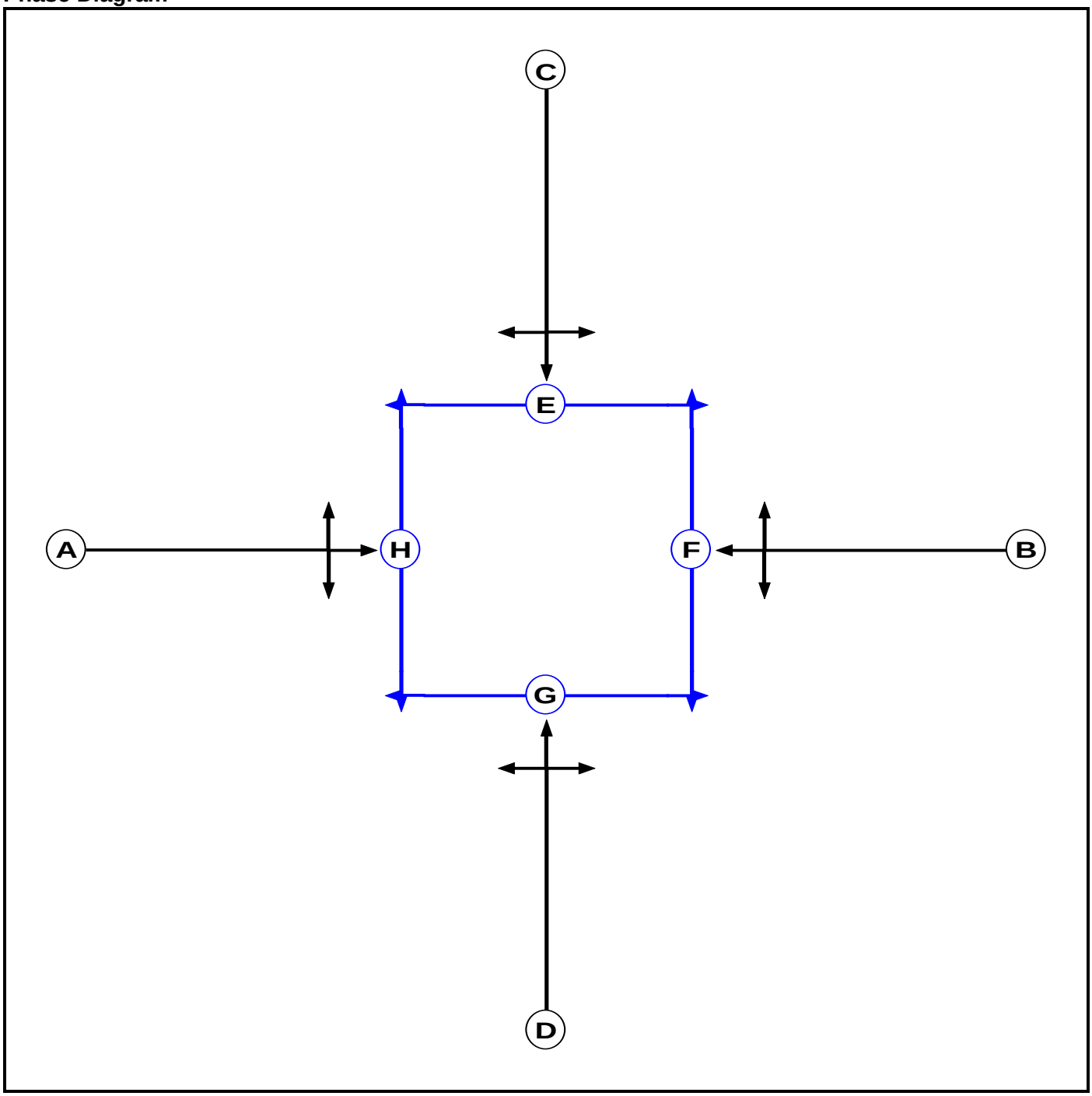
Project:	
Title:	
Location:	
Model Assumptions:	Junction has been set up using signal controller info provided by LHA. Onsite observation indicate that the pedestrian stage is not called every cycle. As such the staging sequence has been designed to reflect a ped stage every other cycle.
Additional detail:	
File name:	Four Ashes X-road Baseline Assessment.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7

Full Input Data And Results

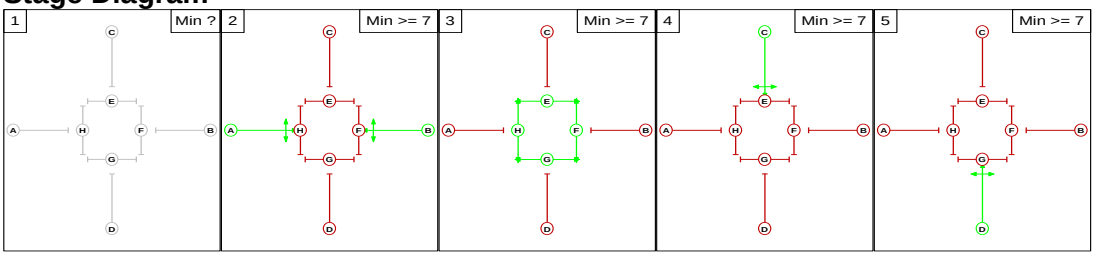
Phase Intergreens Matrix

Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		-	6	5	8	5	9	8
	B	-		6	6	9	8	8	5
	C	5	6		7	6	10	8	7
	D	6	6	6		8	8	5	9
	E	12	12	12	12		-	-	-
	F	12	12	12	12	-		-	-
	G	12	12	12	12	-	-		-
	H	13	13	13	13	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage					
		1	2	3	4	5
	1		X	X	X	X
	2	X		9	6	6
	3	X	13		13	13
	4	X	6	10		7
	5	X	6	9	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Station Road/Parsonage Road											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
1/2 (Parsonage Road)	8/1 (Right)	1439	0	3/1	1.09	All	3.00	-	0.50	3	3.00
2/2 (B1256 East)	5/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
3/2 (Station Road)	6/1 (Right)	1439	0	1/1	1.09	All	3.00	-	0.50	3	3.00
4/2 (B1256 West)	7/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Station Road/Parsonage Road												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Parsonage Road)	U	C	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 6 Left	14.00
											Arm 7 Ahead	Inf
1/2 (Parsonage Road)	O	C	2	3	5.0	Geom	-	2.80	0.00	N	Arm 8 Right	15.00
2/1 (B1256 East)	U	B	2	3	60.0	Geom	-	2.70	0.00	Y	Arm 7 Left	10.00
											Arm 8 Ahead	Inf
2/2 (B1256 East)	O	B	2	3	8.7	Geom	-	2.80	0.00	N	Arm 5 Right	17.00
3/1 (Station Road)	U	D	2	3	60.0	Geom	-	2.90	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	13.00
3/2 (Station Road)	O	D	2	3	7.0	Geom	-	2.90	0.00	N	Arm 6 Right	18.00
4/1 (B1256 West)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	11.00
											Arm 6 Ahead	Inf
4/2 (B1256 West)	O	A	2	3	5.9	Geom	-	3.00	0.00	N	Arm 7 Right	16.00
5/1 (Parsonage Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (B1256 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Station Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (B1256 West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2018 Base AM '	08:00	09:00	01:00	
2: '2018 Base PM'	17:00	18:00	01:00	
3: '2025 Base AM'	08:00	09:00	01:00	
4: '2025 Base PM'	17:00	18:00	01:00	
5: '2025 With Development AM'	08:00	09:00	01:00	
6: '2025 With Development PM'	17:00	18:00	01:00	
7: 'Sensitivity Test AM'	08:00	09:00	01:00	
8: 'Sensitivity Test PM'	17:00	18:00	01:00	

Scenario 1: '2018 Base AM - Validate' (FG1: '2018 Base AM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	126	91	102	319
	B	129	0	188	310	627
	C	111	136	0	71	318
	D	100	178	40	0	318
	Tot.	340	440	319	483	1582

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2018 Base AM - Validate
Junction: Station Road/Parsonage Road	
1/1 (with short)	319(In) 217(Out)
1/2 (short)	102
2/1 (with short)	627(In) 498(Out)
2/2 (short)	129
3/1 (with short)	318(In) 182(Out)
3/2 (short)	136
4/1 (with short)	318(In) 278(Out)
4/2 (short)	40
5/1	340
6/1	440
7/1	319
8/1	483

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	58.1 %	1784	1784
				Arm 7 Ahead	Inf	41.9 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	37.8 %	1784	1784
				Arm 8 Ahead	Inf	62.2 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	61.0 %	1823	1823
				Arm 8 Left	13.00	39.0 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	36.0 %	1825	1825
				Arm 6 Ahead	Inf	64.0 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2018 Base AM - Optimized' (FG1: '2018 Base AM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	126	91	102	319
	B	129	0	188	310	627
	C	111	136	0	71	318
	D	100	178	40	0	318
	Tot.	340	440	319	483	1582

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2018 Base AM - Optimized
Junction: Station Road/Parsonage Road	
1/1 (with short)	319(In) 217(Out)
1/2 (short)	102
2/1 (with short)	627(In) 498(Out)
2/2 (short)	129
3/1 (with short)	318(In) 182(Out)
3/2 (short)	136
4/1 (with short)	318(In) 278(Out)
4/2 (short)	40
5/1	340
6/1	440
7/1	319
8/1	483

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	58.1 %	1784	1784
				Arm 7 Ahead	Inf	41.9 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	37.8 %	1784	1784
				Arm 8 Ahead	Inf	62.2 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	61.0 %	1823	1823
				Arm 8 Left	13.00	39.0 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	36.0 %	1825	1825
				Arm 6 Ahead	Inf	64.0 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2018 Base PM - Validate' (FG2: '2018 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	153	103	76	332
	B	83	0	116	178	377
	C	112	203	0	47	362
	D	103	265	57	0	425
	Tot.	298	621	276	301	1496

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2018 Base PM - Validate
Junction: Station Road/Parsonage Road	
1/1 (with short)	332(In) 256(Out)
1/2 (short)	76
2/1 (with short)	377(In) 294(Out)
2/2 (short)	83
3/1 (with short)	362(In) 159(Out)
3/2 (short)	203
4/1 (with short)	425(In) 368(Out)
4/2 (short)	57
5/1	298
6/1	621
7/1	276
8/1	301

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	59.8 %	1781	1781
				Arm 7 Ahead	Inf	40.2 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	39.5 %	1780	1780
				Arm 8 Ahead	Inf	60.5 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	70.4 %	1842	1842
				Arm 8 Left	13.00	29.6 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	28.0 %	1845	1845
				Arm 6 Ahead	Inf	72.0 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2018 Base PM - Optimized' (FG2: '2018 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	153	103	76	332
	B	83	0	116	178	377
	C	112	203	0	47	362
	D	103	265	57	0	425
	Tot.	298	621	276	301	1496

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2018 Base PM - Optimized
Junction: Station Road/Parsonage Road	
1/1 (with short)	332(In) 256(Out)
1/2 (short)	76
2/1 (with short)	377(In) 294(Out)
2/2 (short)	83
3/1 (with short)	362(In) 159(Out)
3/2 (short)	203
4/1 (with short)	425(In) 368(Out)
4/2 (short)	57
5/1	298
6/1	621
7/1	276
8/1	301

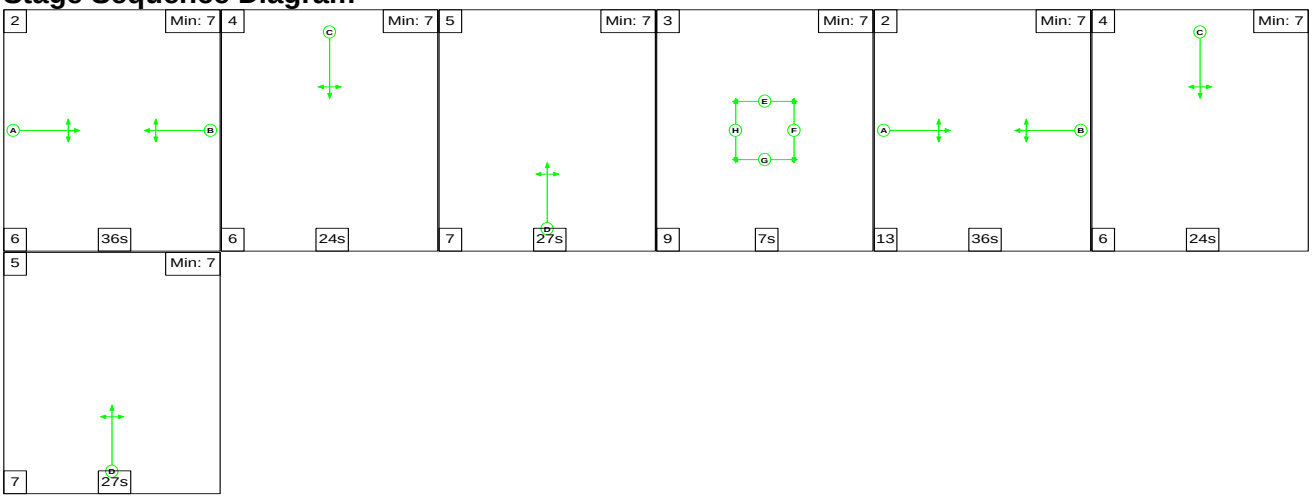
Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	59.8 %	1781	1781
				Arm 7 Ahead	Inf	40.2 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	39.5 %	1780	1780
				Arm 8 Ahead	Inf	60.5 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	70.4 %	1842	1842
				Arm 8 Left	13.00	29.6 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	28.0 %	1845	1845
				Arm 6 Ahead	Inf	72.0 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2018 Base AM - Validate' (FG1: '2018 Base AM ', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

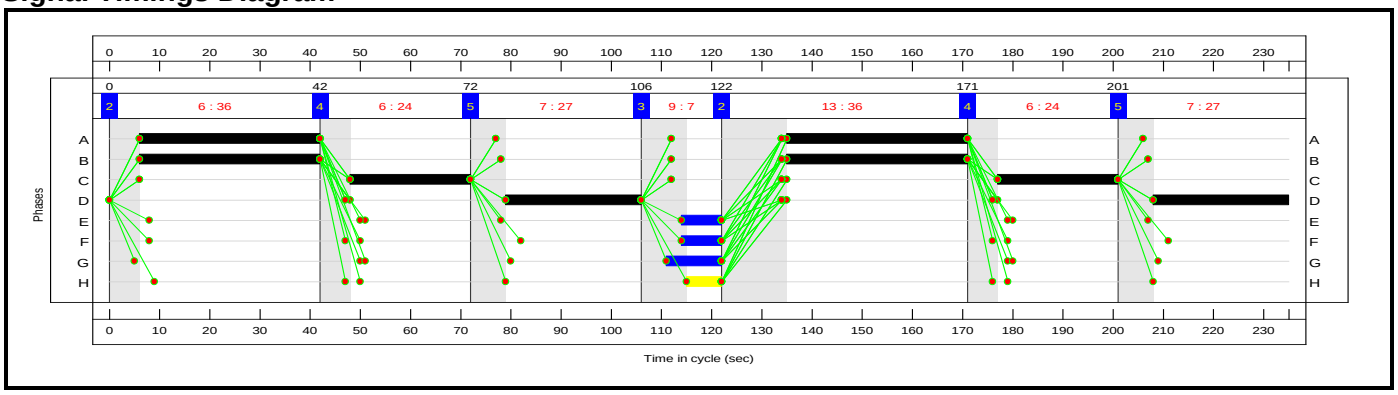


Full Input Data And Results

Stage Timings

Stage	2	4	5	3	2	4	5
Duration	36	24	27	7	36	24	27
Change Point	0	42	72	106	122	171	201

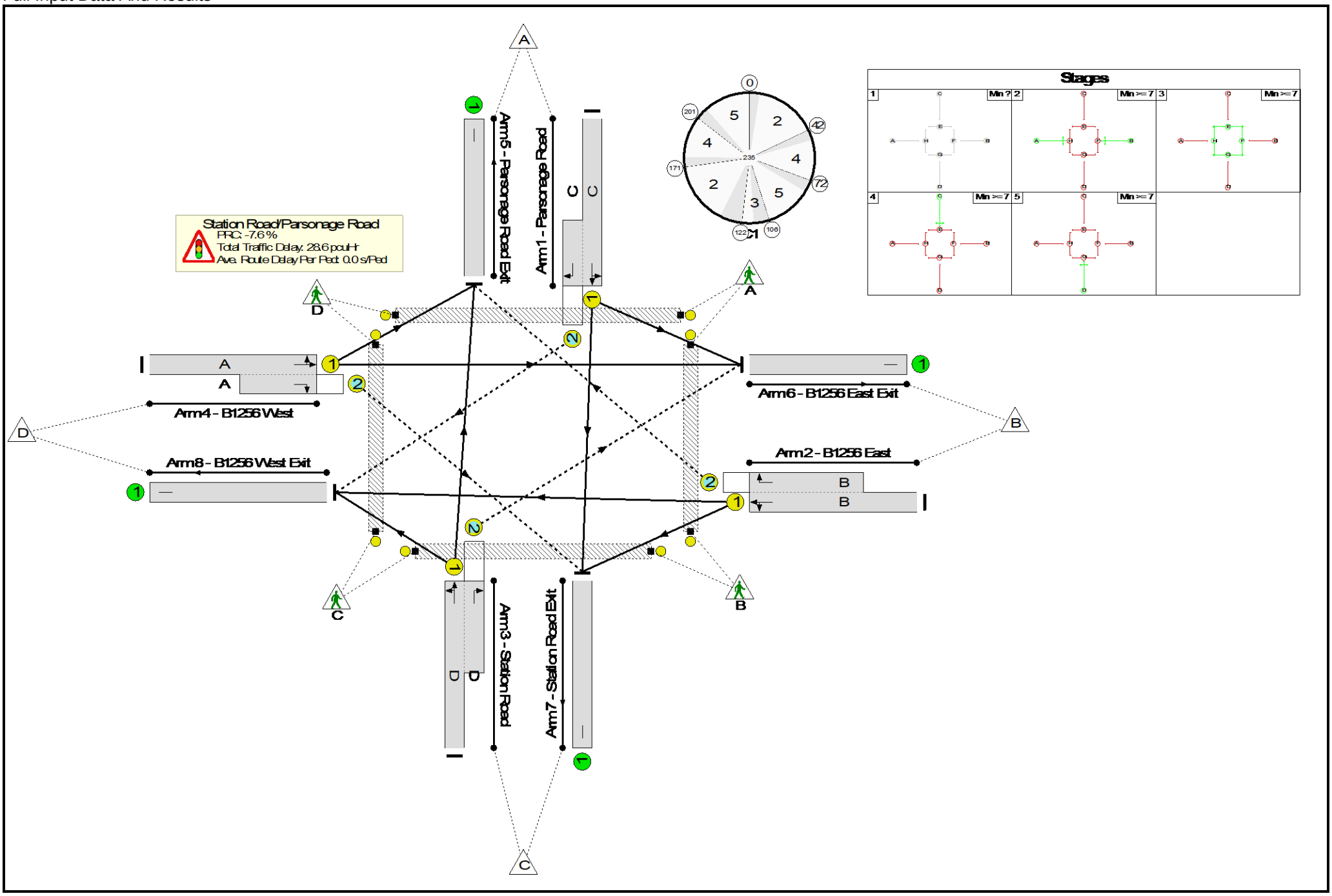
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.8%**
Station Road/Parsonage Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.8%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	48	-	319	1784:1850	310+146	70.0 : 70.0%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B		2	72	-	627	1784:1870	514+133	96.8 : 96.8%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	54	-	318	1823:1888	341+255	53.4 : 53.4%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	72	-	318	1825:1879	537+61	51.8 : 65.3%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	440	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	483	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

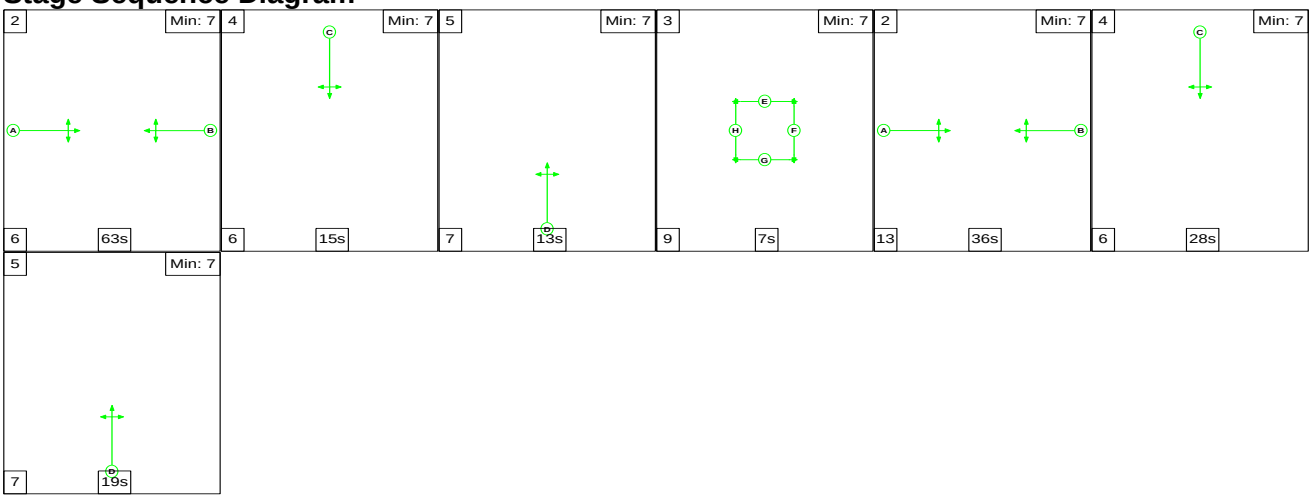
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**144**	**232**	**31**	**17.3**	**10.7**	**0.7**	**28.6**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**144**	**232**	**31**	**17.3**	**10.7**	**0.7**	**28.6**	**-**	**-**	**-**	**-**
1/1+1/2	319	319	0	99	3	3.7	1.1	0.0	4.9	54.7	8.3	1.1	9.4
2/1+2/2	627	627	129	0	0	7.3	8.4	0.3	16.0	91.9	20.9	8.4	29.3
3/1+3/2	318	318	0	133	3	3.4	0.6	0.0	4.0	44.9	5.7	0.6	6.2
4/1+4/2	318	318	15	0	25	2.9	0.6	0.3	3.8	42.9	8.7	0.6	9.3
5/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	483	483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): -7.6 Total Delay for Signalled Lanes (pcuHr): 28.62 Cycle Time (s): 235
PRC Over All Lanes (%): -7.6 Total Delay Over All Lanes(pcuHr): 28.62

Full Input Data And Results

Scenario 2: '2018 Base AM - Optimized' (FG1: '2018 Base AM ', Plan 1: 'Network Control Plan 1')

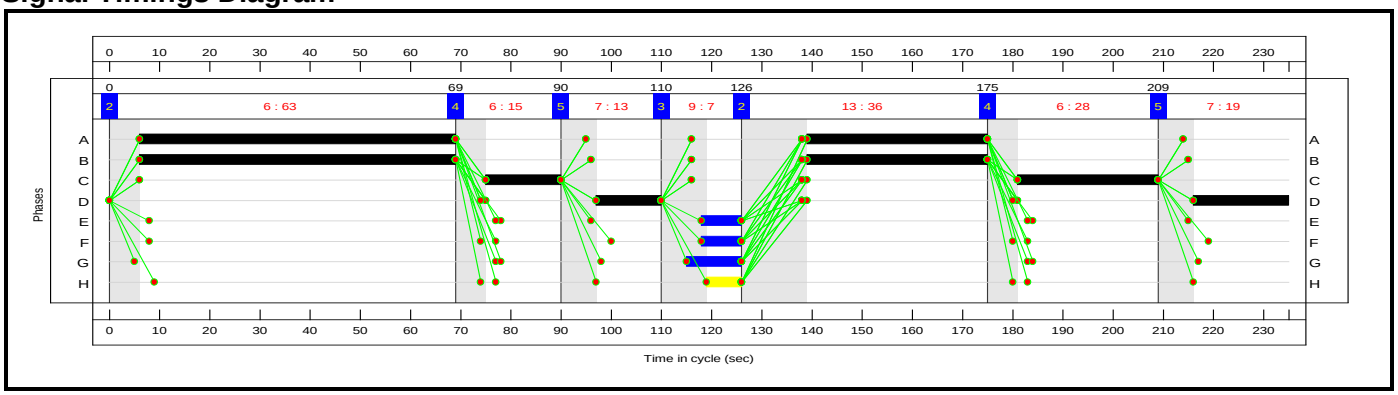
Stage Sequence Diagram



Stage Timings

Stage	2	4	5	3	2	4	5
Duration	63	15	13	7	36	28	19
Change Point	0	69	90	110	126	175	209

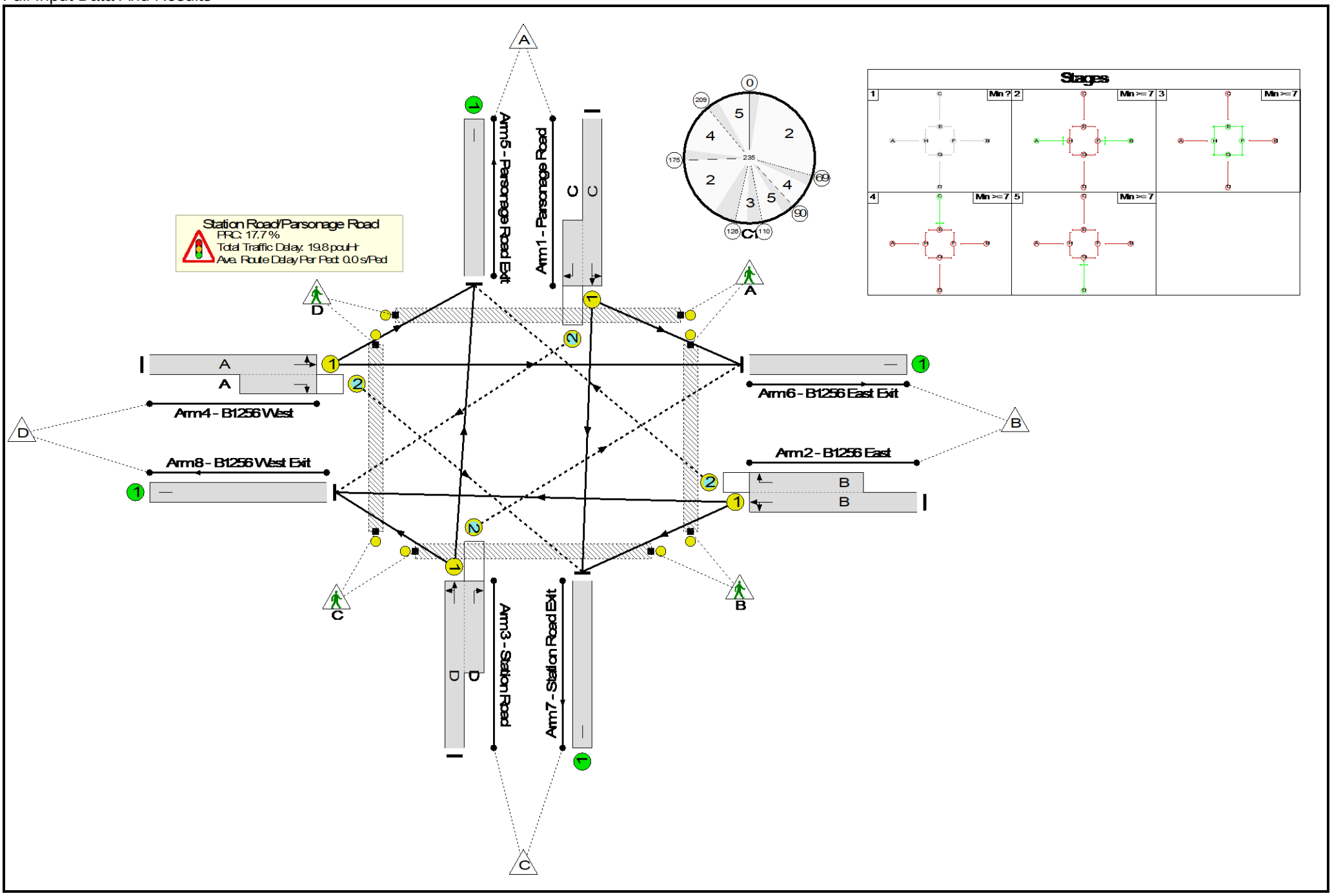
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.5%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.5%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	43	-	319	1784:1850	284+133	76.5 : 76.5%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B		2	99	-	627	1784:1870	679+176	73.4 : 73.4%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	32	-	318	1823:1888	242+180	75.4 : 75.4%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	99	-	318	1825:1879	721+104	38.6 : 38.6%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	440	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	483	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

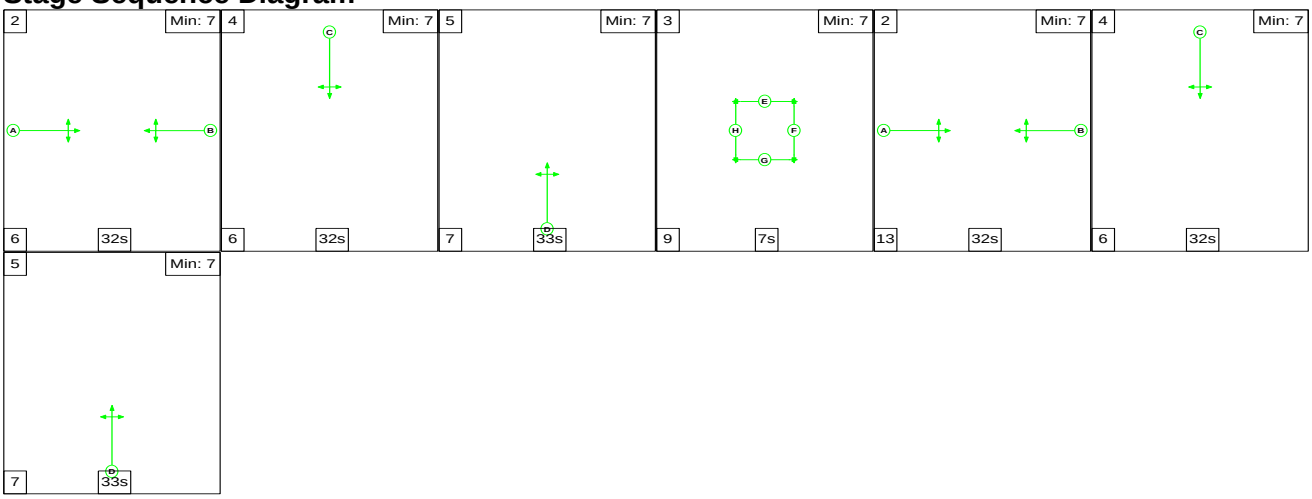
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**169**	**226**	**12**	**14.5**	**4.7**	**0.5**	**19.8**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**169**	**226**	**12**	**14.5**	**4.7**	**0.5**	**19.8**	**-**	**-**	**-**	**-**
1/1+1/2	319	319	0	94	8	3.8	1.6	0.0	5.4	61.3	7.8	1.6	9.4
2/1+2/2	627	627	129	0	0	4.5	1.4	0.2	6.1	35.2	14.6	1.4	16.0
3/1+3/2	318	318	0	133	3	4.2	1.5	0.0	5.7	64.6	5.9	1.5	7.4
4/1+4/2	318	318	40	0	0	2.0	0.3	0.2	2.5	28.3	6.3	0.3	6.6
5/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	483	483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 17.7 Total Delay for Signalled Lanes (pcuHr): 19.77 Cycle Time (s): 235
PRC Over All Lanes (%): 17.7 Total Delay Over All Lanes(pcuHr): 19.77

Full Input Data And Results

Scenario 3: '2018 Base PM - Validate' (FG2: '2018 Base PM', Plan 1: 'Network Control Plan 1')

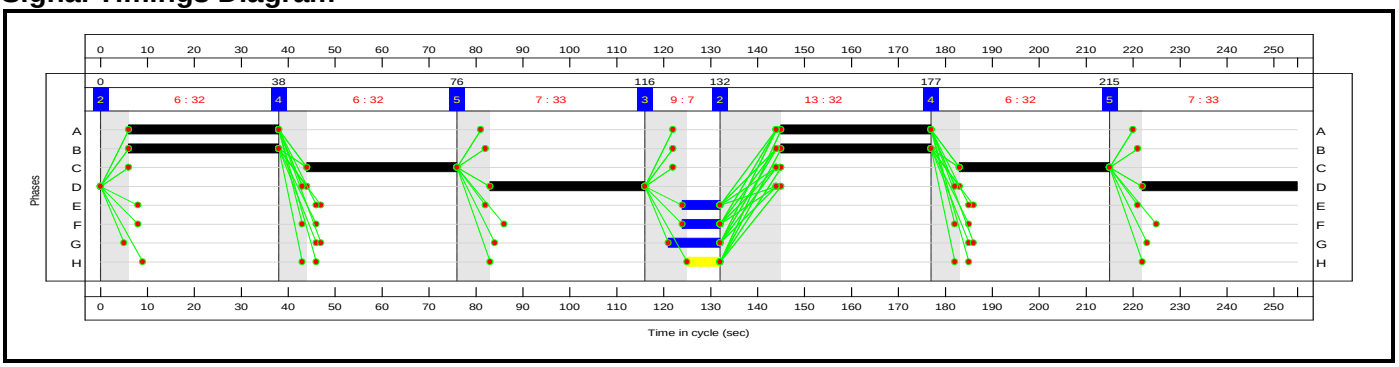
Stage Sequence Diagram



Stage Timings

Stage	2	4	5	3	2	4	5
Duration	32	32	33	7	32	32	33
Change Point	0	38	76	116	132	177	215

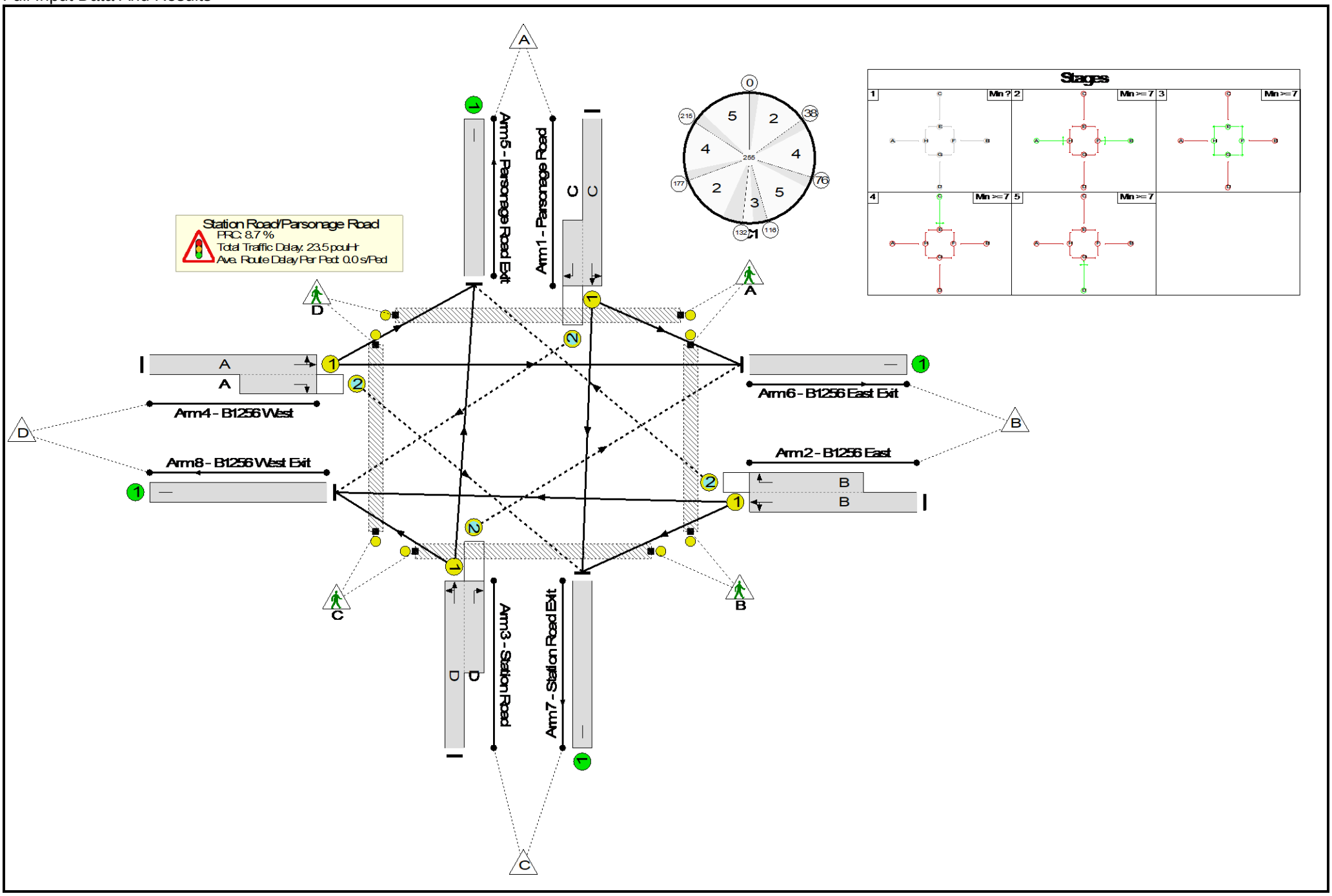
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.8%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.8%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	64	-	332	1781:1850	391+116	65.5 : 65.5%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B		2	64	-	377	1780:1870	426+101	69.1 : 82.2%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	66	-	362	1842:1888	290+370	54.8 : 54.8%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	64	-	425	1845:1879	444+69	82.8 : 82.8%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2259	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2259	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3106	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	1976	0.0%

Full Input Data And Results

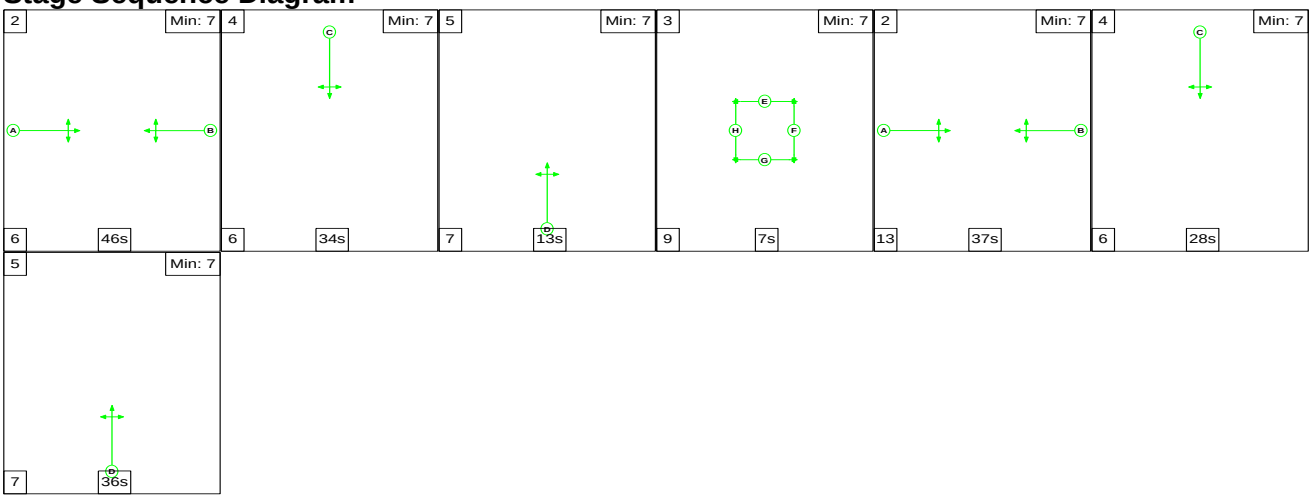
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**120**	**272**	**27**	**17.7**	**5.1**	**0.7**	**23.5**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**120**	**272**	**27**	**17.7**	**5.1**	**0.7**	**23.5**	**-**	**-**	**-**	**-**
1/1+1/2	332	332	0	74	2	3.8	0.9	0.0	4.8	51.5	10.1	0.9	11.1
2/1+2/2	377	377	63	0	20	4.7	1.2	0.4	6.4	61.5	10.7	1.2	12.0
3/1+3/2	362	362	0	198	5	3.9	0.6	0.1	4.6	45.5	6.6	0.6	7.2
4/1+4/2	425	425	57	0	0	5.2	2.3	0.2	7.7	65.3	14.9	2.3	17.2
5/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 8.7 Total Delay for Signalled Lanes (pcuHr): 23.47 Cycle Time (s): 255
PRC Over All Lanes (%): 8.7 Total Delay Over All Lanes(pcuHr): 23.47

Full Input Data And Results

Scenario 4: '2018 Base PM - Optimized' (FG2: '2018 Base PM', Plan 1: 'Network Control Plan 1')

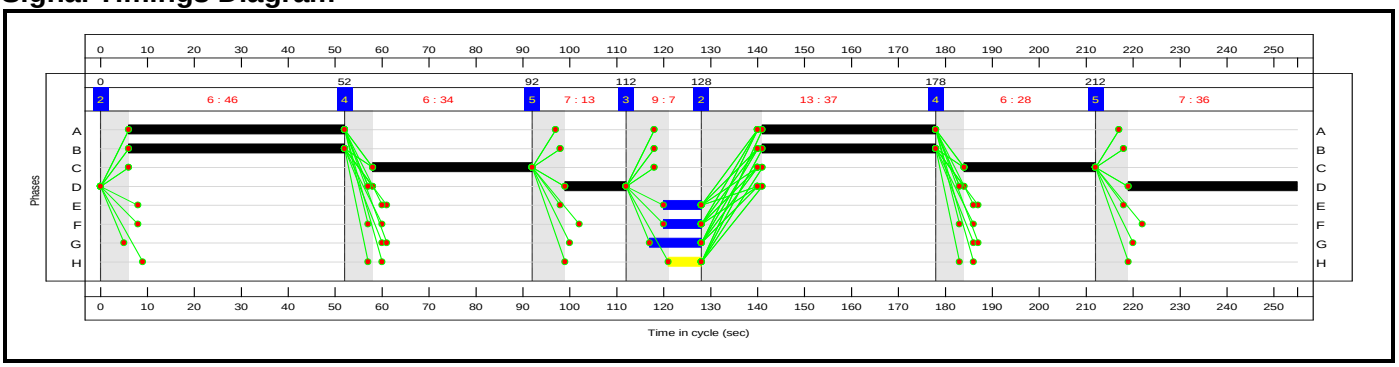
Stage Sequence Diagram



Stage Timings

Stage	2	4	5	3	2	4	5
Duration	46	34	13	7	37	28	36
Change Point	0	52	92	112	128	178	212

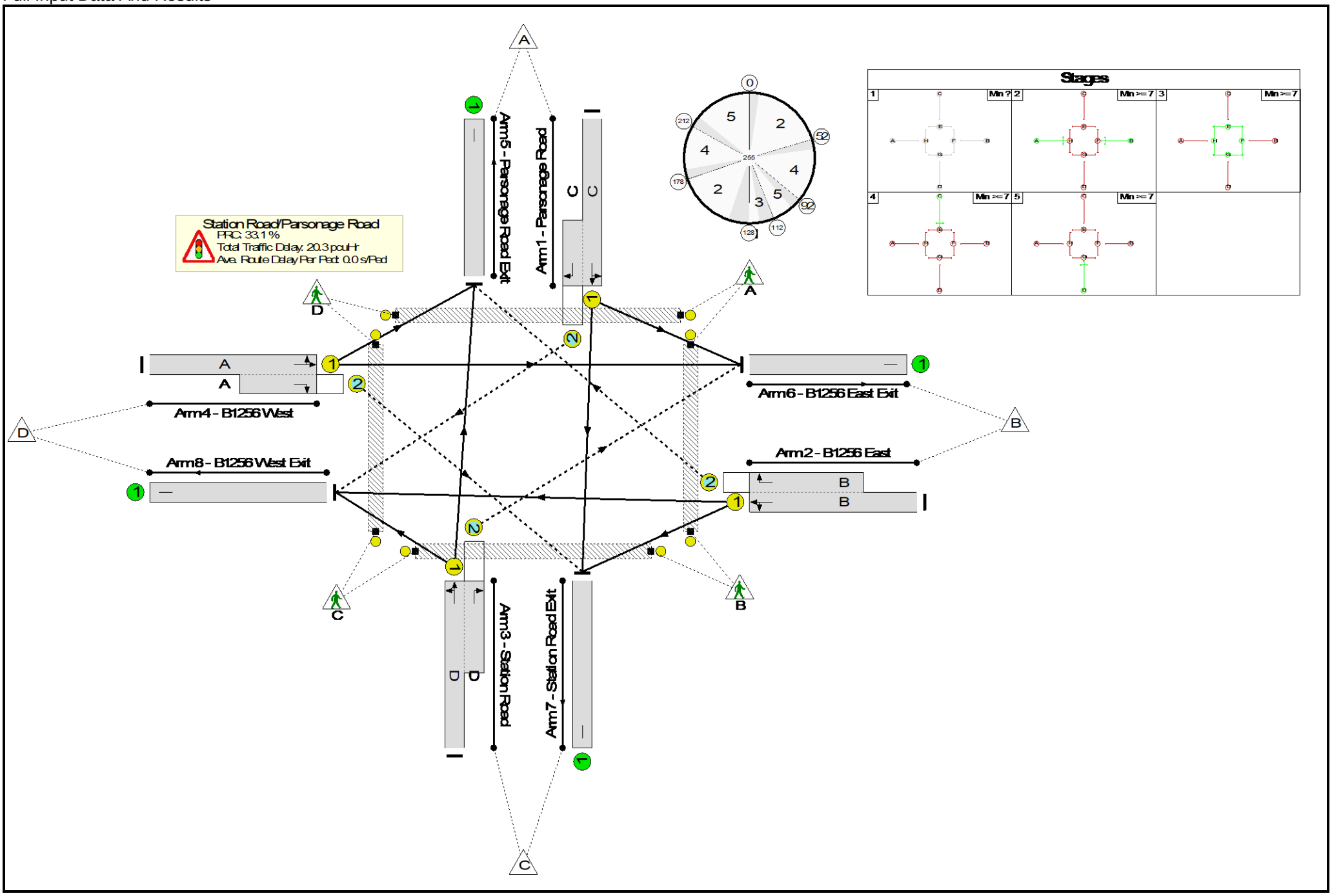
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.6%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.6%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	62	-	332	1781:1850	380+113	67.3 : 67.3%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B		2	83	-	377	1780:1870	530+150	55.5 : 55.5%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	49	-	362	1842:1888	235+300	67.6 : 67.6%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	83	-	425	1845:1879	564+87	65.3 : 65.3%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2259	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2259	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3106	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	1976	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**140**	**248**	**31**	**16.1**	**3.6**	**0.7**	**20.3**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**140**	**248**	**31**	**16.1**	**3.6**	**0.7**	**20.3**	**-**	**-**	**-**	**-**
1/1+1/2	332	332	0	74	2	3.8	1.0	0.0	4.9	52.8	9.4	1.0	10.4
2/1+2/2	377	377	83	0	0	3.5	0.6	0.4	4.5	43.3	8.6	0.6	9.2
3/1+3/2	362	362	0	174	29	4.6	1.0	0.1	5.7	56.6	6.7	1.0	7.7
4/1+4/2	425	425	57	0	0	4.2	0.9	0.2	5.2	44.4	12.2	0.9	13.1
5/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 33.1 Total Delay for Signalled Lanes (pcuHr): 20.33 Cycle Time (s): 255
PRC Over All Lanes (%): 33.1 Total Delay Over All Lanes(pcuHr): 20.33

Appendix H

Proposed Layout

House Types - 1:1000

Single Garage

Double Garage

HT 1A
2B4P
1.5 Storey
82sqm

HT 2C
2B4P
1 Storey
70sqm

FOG
2B4P
2 Storey
70sqm

HT 2B
2B4P
2 Storey
75sqm

HT 3A
3B6P
2.5 Storey
106sqm

HT 3B
3B5P
2 Storey
93sqm

HT 3C
3B5P
2 Storey
93sqm

HT 4A
4B7P
2.5 Storey
136sqm

HT 4B
4B7P
2 Storey
117 sqm

HT 4C
4B5P
2 Storey
130sqm

HT 4D*
4B6P
2 Storey
166 sqm

HT 5A*
5B10P
2.5 Storey
218 sqm

HT P B1
5B9P
2 Storey
182 sqm

HT P C1
5B9P
2 Storey
188 sqm

Note

Rev

5m 10m 15m 20m

PLANNING

Title
MASTER PLAN - JACKS PARCEL GENERAL ARRANGEMENT

Site
JACKS GREEN, OAKLEY

Date	Drawn	Checked
AUGUST 2022	PMR	PMR

Scale
1:500@A1

Drawing No. WH202.WST.P1.ZZ.DR.PL.10.01

Rev -

DRAFT REV A

Weston Homes

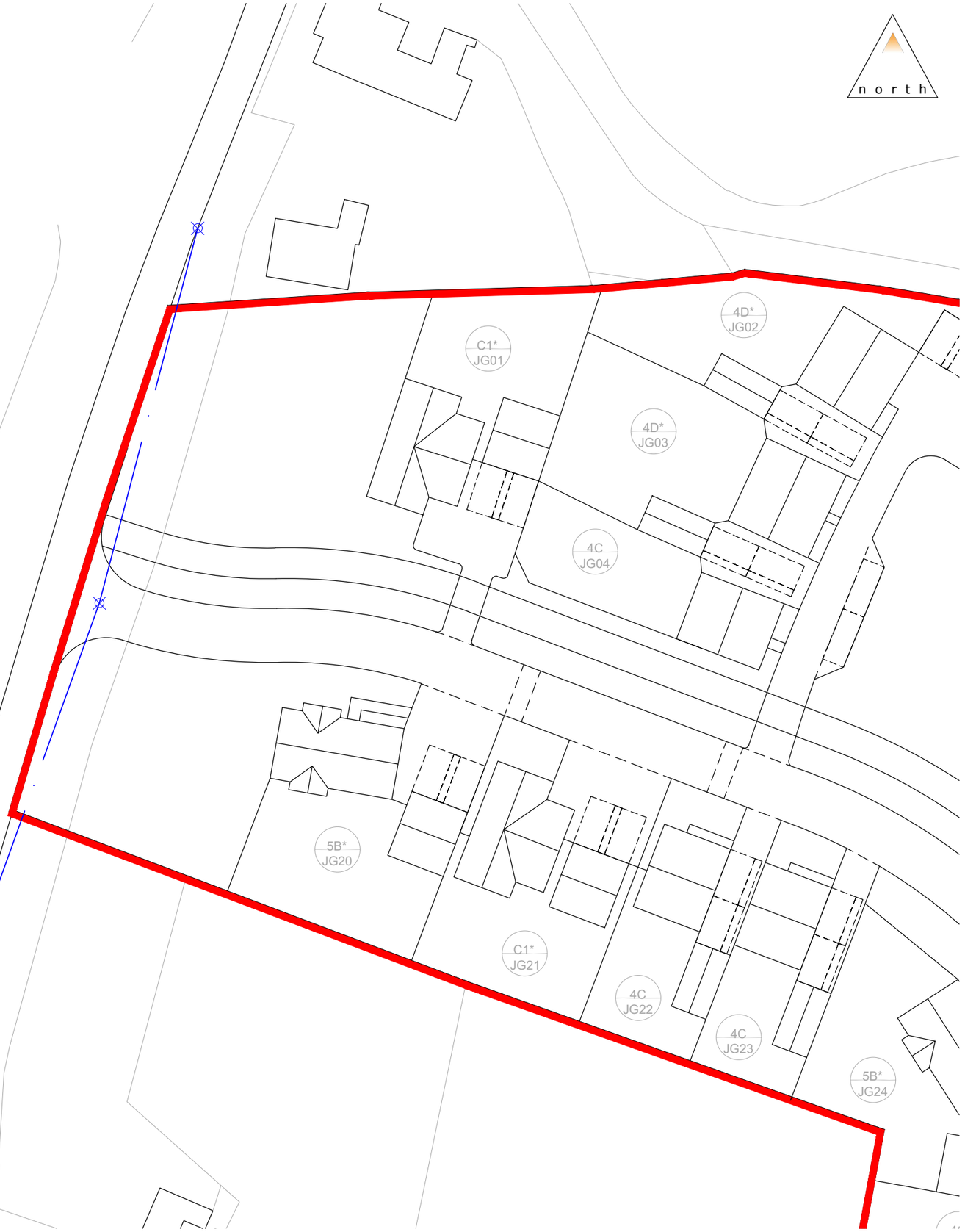
Head Office
Weston Group Business Centre, Parsonage Road, Takeley, Essex, CM22 6PU.
T: 01279 873333

London Office
10 Portman Square, London, W1H 6AZ
T: 0203 096 7238

[redacted] | email: info@weston-homes.com

Appendix I

Site Accesses – Visibility Splays



C:\Users\calummcgoff\OneDrive - Motion\TP Projects\wetak2 2007045\Drawings\2007045-SK-37A [Jacks Visibility].dwg

Rev:	Description:	Date:	Rev By:	Chk'd:

motion

9 Greyfriars, Reading, Berkshire, RG1 1NU

T: 0118 206 2930

Guildford - London - Reading

Project:
Takeley

Title:
Jacks Access
Visiblity Splays

Client:
Weston Homes

Drawing Status: Information

Scale: 1:500 (@ A3) Date:03/02/2023

Drawn: CM Checked: JR Approved: JR

Drawing: 2007045-SK37

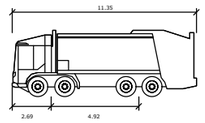
Revision: A

Appendix J

Swept Path Analysis

C:\Users\calummcgoff\OneDrive - Motion\TP Projects\wetak2 2007045\Drawings\2007045-TK-33A [Jacks Refuse Tracking].dwg

Rev:	Description:	Date:	Rev By:	Chk'd:



Large Refuse Vehicle (4 axle)

meters

Width	:	2.50
Track	:	2.50
Lock to Lock Time	:	6.0
Steering Angle	:	34.6

motion

9 Greyfriars, Reading, Berkshire, RG1 1NU

T: 0118 206 2930

Guildford - London - Reading

Project:
Takeley

Title:
Swept Path Analysis
Refuse Vehicle

Client:
Weston Homes

Drawing Status: Information

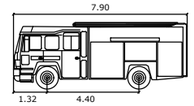
Scale: 1:1000 (@ A3) Date:13/02/2023

Drawn: CM Checked: JR Approved: JR

Drawing: 2007045-TK33 Revision: A

C:\Users\calummcgoff\OneDrive - Motion\TP Projects\wetak2 2007045\Drawings\2007045-TK-34A [Jacks Fire Tracking].dwg

Rev:	Description:	Date:	Rev By:	Chk'd:



Pumping Appliance
meters

Width	: 2.50	Lock to Lock Time	: 6.0
Track	: 1.75	Steering Angle	: 34.3

motion
9 Greyfriars, Reading, Berkshire, RG1 1NU
T: 0118 206 2930
Guildford - London - Reading

Project:
Takeley

Title:
Swept Path Analysis
Fire Tender

Client:
Weston Homes

Drawing Status: Information

Scale: 1:1000 (@ A3) Date:13/02/2023

Drawn: CM Checked: JR Approved: JR

Drawing: 2007045-TK34 Revision: A

Appendix K

TRICS Output Reports

Calculation Reference: AUDIT-706101-210906-0942

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
06	WEST MIDLANDS		
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	3 days
08	NORTH WEST		
	LC	LANCASHIRE	1 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: Gross floor area
Actual Range: 1776 to 4876 (units: sqm)
Range Selected by User: 552 to 5000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 17/09/20

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:

Monday	3 days
Tuesday	1 days
Friday	3 days

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

Selected survey types:

Manual count	7 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 undertaking using machines.

Selected Locations:

Edge of Town	7

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:

Industrial Zone	4
Commercial Zone	1
Development Zone	1
No Sub Category	1

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.

Secondary Filtering selection:

Use Class:

Not Known	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

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	2 days
25,001 to 50,000	2 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	6 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	4 days
1.1 to 1.5	3 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:

No	7 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	7 days

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

LIST OF SITES relevant to selection parameters

1 DV-02-D-07 INDUSTRIAL ESTATE DEVON
BITTERN ROAD
EXETER
SOWTON IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 3600 sqm
Survey date: MONDAY 03/07/17 Survey Type: MANUAL

2 EX-02-D-03 INDUSTRIAL ESTATE ESSEX
WYNCOLLS ROAD
COLCHESTER
SEVERALLS INDUSTRIAL PK
Edge of Town
Industrial Zone
Total Gross floor area: 4876 sqm
Survey date: FRIDAY 18/05/18 Survey Type: MANUAL

3 LC-02-D-07 INDUSTRIAL ESTATE LANCASHIRE
CHAIN CAUL WAY
PRESTON
ASHTON-ON-RIBBLE
Edge of Town
Industrial Zone
Total Gross floor area: 4700 sqm
Survey date: FRIDAY 17/11/17 Survey Type: MANUAL

4 WO-02-D-01 INDUSTRIAL ESTATE WORCESTERSHIRE
SANDY LANE
STOURPORT-ON-SEVERN

Edge of Town
Commercial Zone
Total Gross floor area: 2758 sqm
Survey date: FRIDAY 23/05/14 Survey Type: MANUAL

5 WY-02-D-05 INDUSTRIAL ESTATE WEST YORKSHIRE
CARR WOOD ROAD
CASTLEFORD

Edge of Town
Development Zone
Total Gross floor area: 1776 sqm
Survey date: MONDAY 22/05/17 Survey Type: MANUAL

6 WY-02-D-06 INDUSTRIAL ESTATE (PART) WEST YORKSHIRE
PIONEER WAY
CASTLEFORD

Edge of Town
Industrial Zone
Total Gross floor area: 4328 sqm
Survey date: TUESDAY 23/05/17 Survey Type: MANUAL

7 WY-02-D-07 INDUSTRIAL ESTATE WEST YORKSHIRE
THUNDERHEAD RIDGE RD
CASTLEFORD
GLASSHOUGHTON
Edge of Town
No Sub Category
Total Gross floor area: 3191 sqm
Survey date: MONDAY 15/05/17 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 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	7	3604	0.488	7	3604	0.147	7	3604	0.635
08:00 - 09:00	7	3604	0.717	7	3604	0.495	7	3604	1.212
09:00 - 10:00	7	3604	0.602	7	3604	0.460	7	3604	1.062
10:00 - 11:00	7	3604	0.690	7	3604	0.595	7	3604	1.285
11:00 - 12:00	7	3604	0.706	7	3604	0.773	7	3604	1.479
12:00 - 13:00	7	3604	0.702	7	3604	0.773	7	3604	1.475
13:00 - 14:00	7	3604	0.638	7	3604	0.614	7	3604	1.252
14:00 - 15:00	7	3604	0.579	7	3604	0.678	7	3604	1.257
15:00 - 16:00	7	3604	0.567	7	3604	0.495	7	3604	1.062
16:00 - 17:00	7	3604	0.484	7	3604	0.706	7	3604	1.190
17:00 - 18:00	7	3604	0.238	7	3604	0.599	7	3604	0.837
18:00 - 19:00	7	3604	0.063	7	3604	0.135	7	3604	0.198
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.474			6.470			12.944

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.*

Parameter summary

Trip rate parameter range selected:	1776 - 4876 (units: sqm)
Survey date date range:	01/01/13 - 17/09/20
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-734001-211004-1059

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : G - GP SURGERIES
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 days
	IW	ISLE OF WIGHT	1 days
	SC	SURREY	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LE	LEICESTERSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 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: Gross floor area
Actual Range: 310 to 1400 (units: sqm)
Range Selected by User: 200 to 1592 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 08/11/19

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:

Wednesday	5 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	7 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	3

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	6
No Sub Category	1

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.

Secondary Filtering selection:

Use Class:

E(e)	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	4 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	2 days
1.1 to 1.5	5 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:

Not Known	1 days
No	6 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	7 days

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

LIST OF SITES relevant to selection parameters

1 DS-05-G-01 GP SURGERY DERBYSHIRE
OSMASTON ROAD
DERBY

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 676 sqm
Survey date: WEDNESDAY *25/09/19* *Survey Type: MANUAL*

2 DV-05-G-01 GP SURGERY DEVON
MOUNT PLEASANT ROAD
EXETER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1319 sqm
Survey date: WEDNESDAY *03/04/19* *Survey Type: MANUAL*

3 HF-05-G-01 GP SURGERY HERTFORDSHIRE
CHELLS WAY
STEVENAGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 830 sqm
Survey date: FRIDAY *28/06/19* *Survey Type: MANUAL*

4 IW-05-G-01 GP SURGERY ISLE OF WIGHT
NEWPORT ROAD
COWES

Edge of Town
Residential Zone
Total Gross floor area: 1400 sqm
Survey date: WEDNESDAY *26/06/19* *Survey Type: MANUAL*

5 LE-05-G-01 GP SURGERY LEICESTERSHIRE
GLEN ROAD
LEICESTER
OADBY
Edge of Town
Residential Zone
Total Gross floor area: 550 sqm
Survey date: THURSDAY *30/10/14* *Survey Type: MANUAL*

6 NT-05-G-01 GP SURGERY NOTTINGHAMSHIRE
MANSFIELD ROAD
NOTTINGHAM

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 460 sqm
Survey date: WEDNESDAY *24/06/15* *Survey Type: MANUAL*

7 SC-05-G-02 GP SURGERY SURREY
ESHER GREEN DRIVE
ESHER
SANDOWN PARK
Edge of Town
Residential Zone
Total Gross floor area: 310 sqm
Survey date: WEDNESDAY *22/06/16* *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.

Calculation Reference: AUDIT-734001-201014-1025

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	3 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	3 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	4 days
	SC	SURREY	2 days
	WS	WEST SUSSEX	6 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	7 days
	SF	SUFFOLK	3 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	3 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	5 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	4 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	DH	DURHAM	2 days
	TW	TYNE & WEAR	1 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: 7 to 984 (units:)
Range Selected by User: 6 to 4334 (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: 01/01/12 to 19/11/19

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:

Monday	14 days
Tuesday	12 days
Wednesday	16 days
Thursday	13 days
Friday	7 days

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

Selected survey types:

Manual count	62 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	24
Edge of Town	38

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	60
No Sub Category	2

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.

Secondary Filtering selection:

Use Class:

C3	62 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included
Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	4 days
5,001 to 10,000	17 days
10,001 to 15,000	19 days
15,001 to 20,000	9 days
20,001 to 25,000	7 days
25,001 to 50,000	5 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	6 days
25,001 to 50,000	4 days
50,001 to 75,000	9 days
75,001 to 100,000	14 days
100,001 to 125,000	2 days
125,001 to 250,000	19 days
250,001 to 500,000	8 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	19 days
1.1 to 1.5	41 days
1.6 to 2.0	2 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	18 days
No	44 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	61 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1 CA-03-A-05 DETACHED HOUSES CAMBRIDGESHIRE
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

2 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
CHESTER
BOUGHTON HEATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

3 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

4 CH-03-A-10 SEMI-DETACHED & TERRACED CHESHIRE
MEADOW DRIVE
NORTHWICH
BARNTON
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: TUESDAY *04/06/19* *Survey Type: MANUAL*

5 CH-03-A-11 TOWN HOUSES CHESHIRE
LONDON ROAD
NORTHWICH
LEFTWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 24
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

6 DC-03-A-08 BUNGALOWS DORSET
HURSTDENE ROAD
BOURNEMOUTH
CASTLE LANE WEST
Edge of Town
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *24/03/14* *Survey Type: MANUAL*

7 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

8 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM
PILGRIMS WAY
DURHAM

Edge of Town
Residential Zone
Total No of Dwellings: 57
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

10 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

11 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

12 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

13 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

14 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total No of Dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

15 ES-03-A-05 MIXED HOUSES & FLATS EAST SUSSEX
RATTLE ROAD
NEAR EASTBOURNE
STONE CROSS
Edge of Town
Residential Zone
Total No of Dwellings: 99
Survey date: WEDNESDAY *05/06/19* *Survey Type: MANUAL*

16 EX-03-A-02 DETACHED & SEMI-DETACHED ESSEX
MANOR ROAD
CHIGWELL
GRANGE HILL
Edge of Town
Residential Zone
Total No of Dwellings: 97
Survey date: MONDAY *27/11/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total No of Dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

18 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

19 HC-03-A-23 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 62
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

20 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

21 KC-03-A-03 MIXED HOUSES & FLATS KENT
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

22 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

23 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

24 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

25 LC-03-A-31 DETACHED HOUSES LANCASHIRE
GREENSIDE
PRESTON
COTTAM
Edge of Town
Residential Zone
Total No of Dwellings: 32
Survey date: FRIDAY *17/11/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

26 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
LINCOLN
BOULTHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 22
Survey date: TUESDAY *18/09/12* *Survey Type: MANUAL*

27 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
LIVERPOOL
OTTERSPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

28 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

29 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD
CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 27
Survey date: TUESDAY *16/10/12* *Survey Type: MANUAL*

30 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD
NORWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

31 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

32 NF-03-A-04 MIXED HOUSES NORFOLK
NORTH WALSHAM ROAD
NORTH WALSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 70
Survey date: WEDNESDAY *18/09/19* *Survey Type: MANUAL*

33 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

34 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

35 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*

36 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET
YORK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

37 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE
NORTHALLERTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

38 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total No of Dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

39 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total No of Dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

40 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

41 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total No of Dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

42 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

43 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE
LOWESTOFT

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 7
Survey date: TUESDAY *23/10/12* *Survey Type: MANUAL*

44 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total No of Dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

45 SF-03-A-07 MIXED HOUSES SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 73
Survey date: THURSDAY *09/05/19* *Survey Type: MANUAL*

46 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total No of Dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

47 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total No of Dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

48 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

49 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

50 ST-03-A-08 DETACHED HOUSES STAFFORDSHIRE
SILKMORE CRESCENT
STAFFORD
MEADOWCROFT PARK
Edge of Town
Residential Zone
Total No of Dwellings: 26
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

51 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
DONCASTER
BENTLEY RISE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 54
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

52 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 16
Survey date: MONDAY *07/10/13* *Survey Type: MANUAL*

53 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

54 WK-03-A-03 DETACHED HOUSES WARWICKSHIRE
BRESE AVENUE
WARWICK
GUYS CLIFFE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 23
Survey date: WEDNESDAY *25/09/19* *Survey Type: MANUAL*

55 WK-03-A-04 DETACHED HOUSES WARWICKSHIRE
DALEHOUSE LANE
KENILWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 49
Survey date: FRIDAY *27/09/19* *Survey Type: MANUAL*

56 WL-03-A-02 SEMI DETACHED WILTSHIRE
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

57 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

58 WS-03-A-05 TERRACED & FLATS WEST SUSSEX
UPPER SHOREHAM ROAD
SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 48
Survey date: WEDNESDAY *18/04/12* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

59	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES	WEST SUSSEX
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	Survey date: THURSDAY	*19/04/18*	*Survey Type: MANUAL*
60	WS-03-A-09 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON	MIXED HOUSES & FLATS	WEST SUSSEX
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	197	
	Survey date: THURSDAY	*05/07/18*	*Survey Type: MANUAL*
61	WS-03-A-10 TODDINGTON LANE LITTLEHAMPTON WICK	MIXED HOUSES	WEST SUSSEX
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	79	
	Survey date: WEDNESDAY	*07/11/18*	*Survey Type: MANUAL*
62	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH	MIXED HOUSES	WEST SUSSEX
	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
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	62	116	0.071	62	116	0.298	62	116	0.369
08:00 - 09:00	62	116	0.131	62	116	0.367	62	116	0.498
09:00 - 10:00	62	116	0.139	62	116	0.168	62	116	0.307
10:00 - 11:00	62	116	0.117	62	116	0.144	62	116	0.261
11:00 - 12:00	62	116	0.125	62	116	0.132	62	116	0.257
12:00 - 13:00	62	116	0.147	62	116	0.142	62	116	0.289
13:00 - 14:00	62	116	0.149	62	116	0.142	62	116	0.291
14:00 - 15:00	62	116	0.157	62	116	0.174	62	116	0.331
15:00 - 16:00	62	116	0.240	62	116	0.170	62	116	0.410
16:00 - 17:00	62	116	0.267	62	116	0.159	62	116	0.426
17:00 - 18:00	62	116	0.336	62	116	0.156	62	116	0.492
18:00 - 19:00	62	116	0.290	62	116	0.158	62	116	0.448
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.262			2.283			4.545

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.*

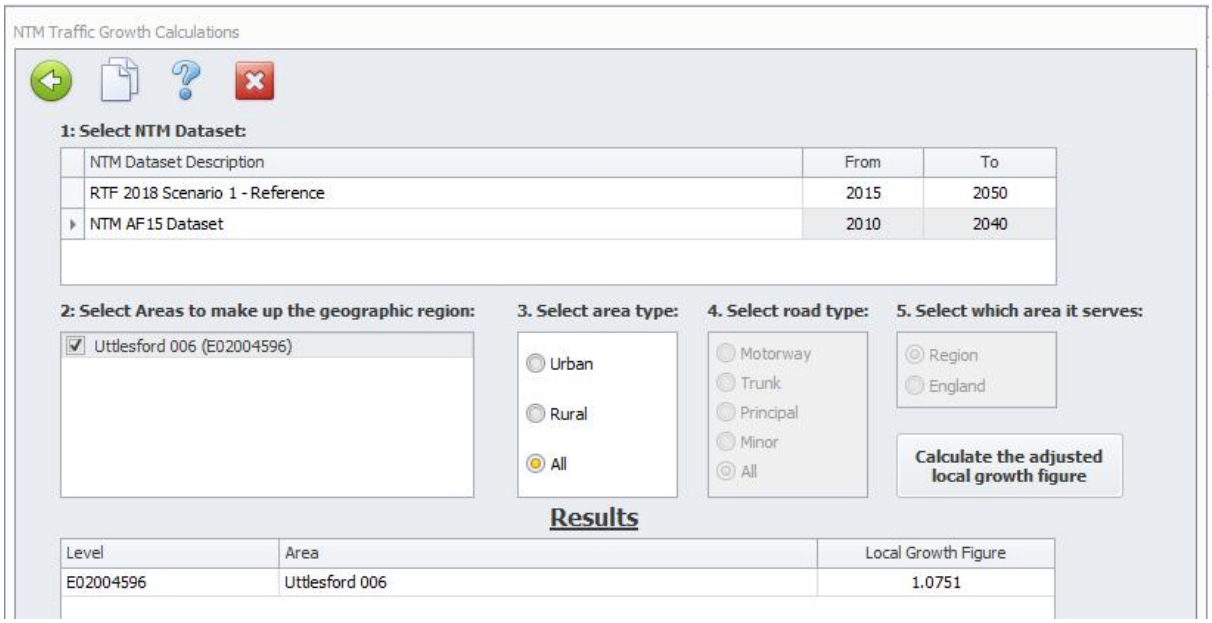
Parameter summary

Trip rate parameter range selected:	7 - 984 (units:)
Survey date date range:	01/01/12 - 19/11/19
Number of weekdays (Monday-Friday):	62
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	5
Surveys manually removed from selection:	0

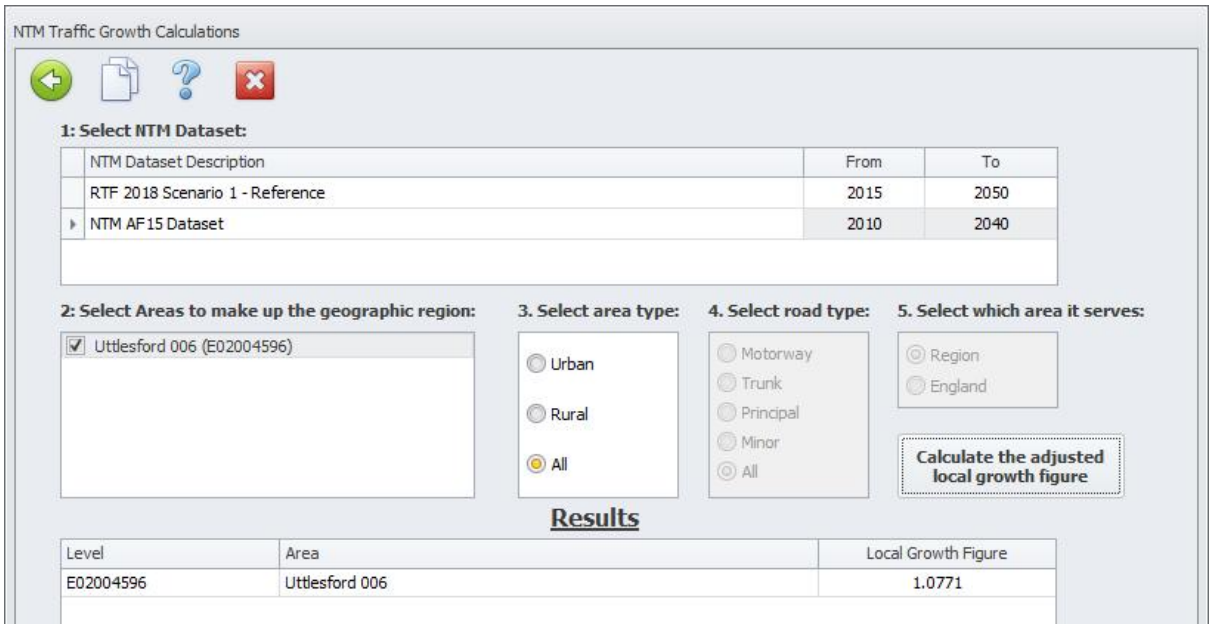
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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

Appendix L

TEMPRO Growth Rates



2018-2027 AM Peak



2018-2027 PM Peak

Appendix M

Traffic Data – DfT Count Point 941072

count_poir	year	region_id	region_nar	local_auth	local_auth	road_name	road_type	start_junct	end_junctio	easting	northing	latitude	longitude	link_length	link_length	estimation_	estimation_	all_motor_vehicles
941072	2008	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	6028
941072	2010	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	6044
941072	2011	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Estimated	Estimated ı	6044
941072	2012	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	7282
941072	2013	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	7461
941072	2014	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	7754
941072	2015	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	7993
941072	2016	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	8098
941072	2017	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	8448
941072	2018	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	8085
941072	2019	7	East of Eng	123	Essex	B1256	Minor			558845	221335	51.86798	0.305713			Counted	Manual cou	8254

Appendix N

2011 Census Data - Distribution

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
method of travel to work	Driving a car or van

place of work : 2011 census merged local authority district	**usual residence E02004596 : Uttlesford 006**	%	Route
The North and Midlands	17	*0.7%*	B1256 West
Luton	9	*0.4%*	B1256 West
Southend-on-Sea	7	*0.3%*	B1256 East
Thurrock	17	*0.7%*	B1256 West
Bedfordshire	4	*0.2%*	B1256 West
Cambridgeshire	67	*2.8%*	B1256 West
Basildon	15	*0.6%*	50:50 B1256 West/B1256 East
Braintree	43	*1.8%*	B1256 East
Brentwood	22	*0.9%*	B1256 West
Castle Point	1	*0.0%*	B1256 East
Chelmsford	87	*3.7%*	B1256 East
Colchester	21	*0.9%*	B1256 East
Epping Forest	106	*4.5%*	50:50 B1256 West/Station Road South
Harlow	196	*8.2%*	50:50 B1256 West/Station Road South
Maldon	3	*0.1%*	B1256 East
Tendring	8	*0.3%*	B1256 East
Uttlesford	923	*38.8%*	33:33:33 Parsonage Road North/B1256 West/B1256 East
Hertfordshire	476	*20.0%*	B1256 West
East Anglia	18	*0.8%*	B1256 East
Greater London	312	*13.1%*	B1256 West
Milton Keynes	3	*0.1%*	B1256 West
Aylesbury Vale	1	*0.0%*	B1256 West
The South	18	*0.8%*	B1256 West
Wales and The West Country	5	*0.2%*	B1256 West
Total	2,379	*100.0%*	

Route	*%*
B1256 East	*21%*
B1256 West	*59.6%*
Station Road South	*6.3%*
Parsonage Road North/Smiths Green North	*12.9%*
Total	*100.0%*

Appendix O

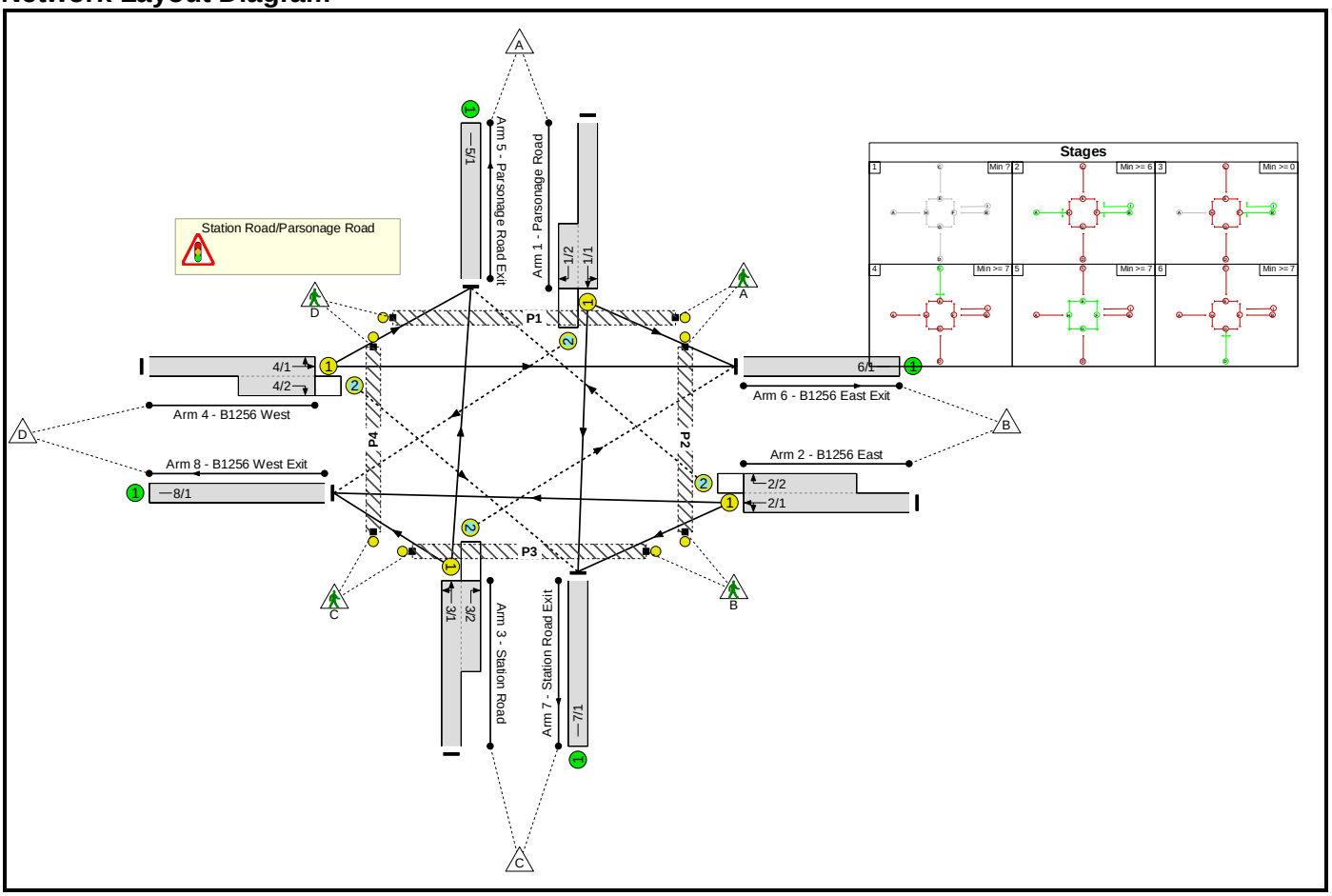
Future Modelling Outputs

Full Input Data And Results

User and Project Details

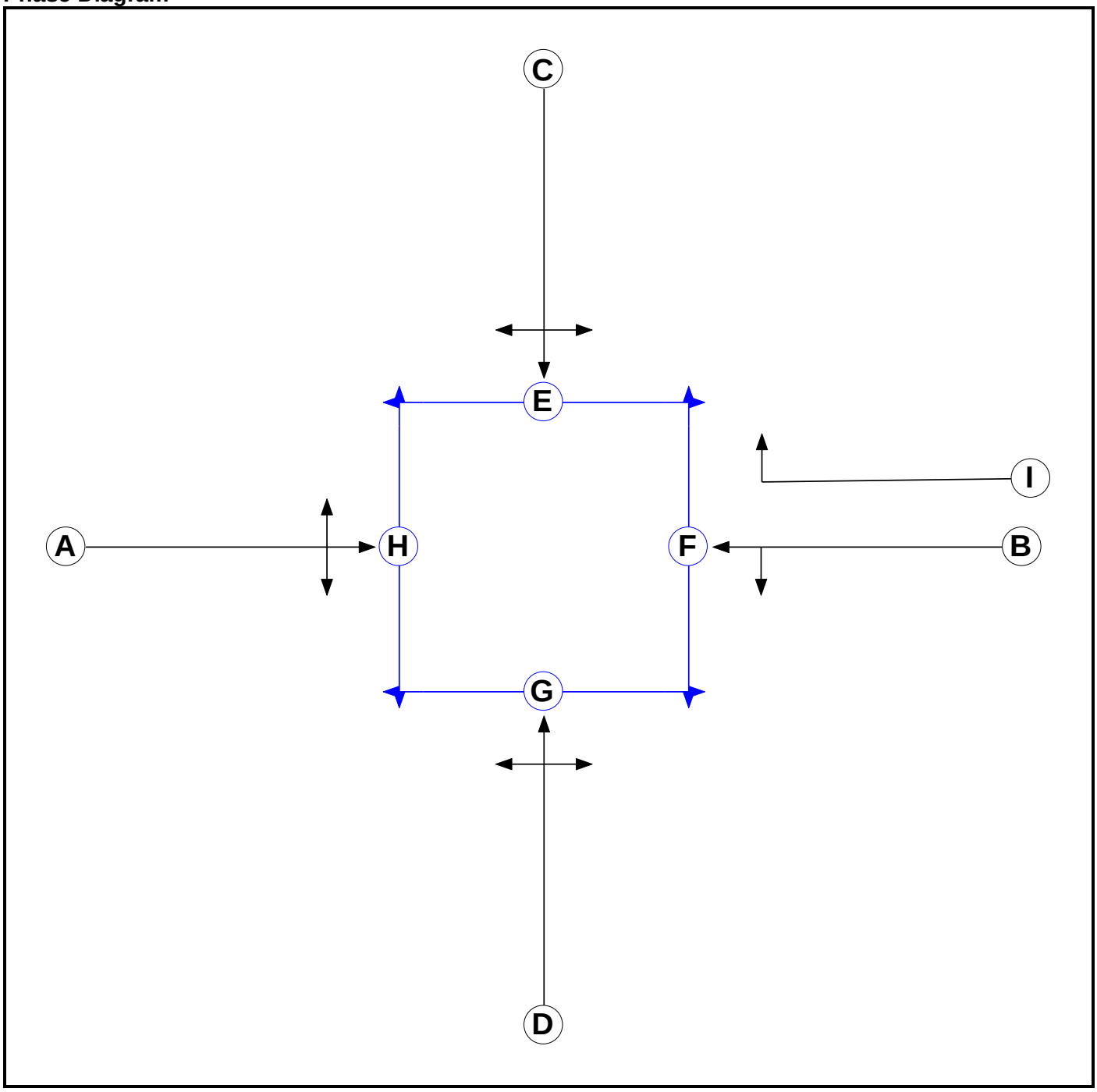
Project:	
Title:	
Location:	
Model Assumptions:	Junction has been set up using signal controller info provided by LHA. Onsite observation indicate that the pedestrian stage is not called every cycle. As such the staging sequence has been designed to reflect a ped stage every other cycle.
Additional detail:	
File name:	Four Ashes X-road RTIGA 2022-09-20.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Traffic		4	4

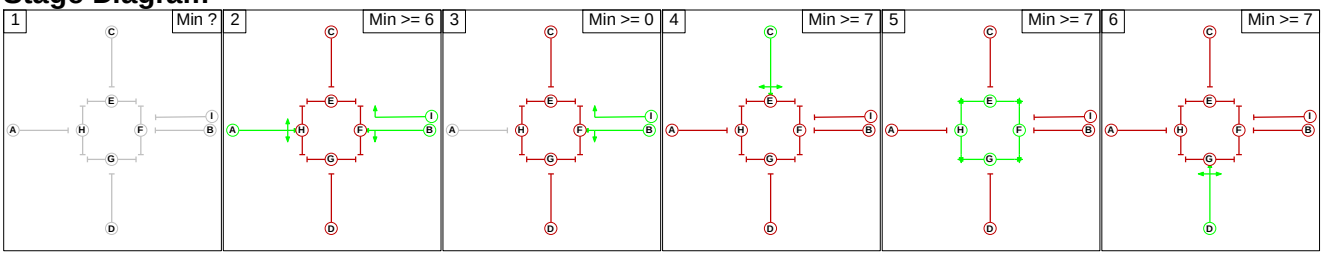
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		-	6	5	8	5	9	8	-
B	-		6	6	9	8	8	5	-
C	5	6		7	6	10	8	7	6
D	6	6	6		8	8	5	9	6
E	12	12	12	12		-	-	-	12
F	12	12	12	12	-		-	-	12
G	12	12	12	12	-	-		-	12
H	13	13	13	13	-	-	-		12
I	-	-	6	6	9	8	8	5	

Phases in Stage

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

Stage Diagram



Full Input Data And Results

Phase Delays

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

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		X	X	X	X	X
	2	X		0	6	9	6
	3	X	2		6	9	6
	4	X	6	6		10	7
	5	X	13	13	13		13
	6	X	6	6	6	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Station Road/Parsonage Road

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Parsonage Road)	8/1 (Right)	1439	0	3/1	1.09	All	3.00	-	0.50	3	3.00
2/2 (B1256 East)	5/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
3/2 (Station Road)	6/1 (Right)	1439	0	1/1	1.09	All	3.00	-	0.50	3	3.00
4/2 (B1256 West)	7/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Station Road/Parsonage Road

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Parsonage Road)	U	C	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 6 Left	14.00
											Arm 7 Ahead	Inf
1/2 (Parsonage Road)	O	C	2	3	5.0	Geom	-	2.80	0.00	N	Arm 8 Right	15.00
2/1 (B1256 East)	U	B	2	3	60.0	Geom	-	2.70	0.00	Y	Arm 7 Left	10.00
											Arm 8 Ahead	Inf
2/2 (B1256 East)	O	I	2	3	8.7	Geom	-	2.80	0.00	N	Arm 5 Right	17.00
3/1 (Station Road)	U	D	2	3	60.0	Geom	-	2.90	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	13.00
3/2 (Station Road)	O	D	2	3	7.0	Geom	-	2.90	0.00	N	Arm 6 Right	18.00
4/1 (B1256 West)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	11.00
											Arm 6 Ahead	Inf
4/2 (B1256 West)	O	A	2	3	5.9	Geom	-	3.00	0.00	N	Arm 7 Right	16.00
5/1 (Parsonage Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (B1256 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Station Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (B1256 West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2027 Base AM'	08:00	09:00	01:00	
2: '2027 Base PM'	17:00	18:00	01:00	
3: '2027 With Jacks Development AM'	08:00	09:00	01:00	
4: '2027 With Jacks Development PM'	17:00	18:00	01:00	
5: '2027 With 7 Acres Development AM'	08:00	09:00	01:00	
6: '2027 With 7 Acres Development PM'	17:00	18:00	01:00	
7: '2027 Sensitivity Test AM'	08:00	09:00	01:00	
8: '2027 Sensitivity Test PM'	17:00	18:00	01:00	

Scenario 1: '2027 Base AM' (FG1: '2027 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	145	109	128	382
	B	182	0	239	382	803
	C	130	157	0	80	367
	D	130	199	45	0	374
	Tot.	442	501	393	590	1926

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2027 Base AM
Junction: Station Road/Parsonage Road	
1/1 (with short)	382(In) 254(Out)
1/2 (short)	128
2/1 (with short)	803(In) 621(Out)
2/2 (short)	182
3/1 (with short)	367(In) 210(Out)
3/2 (short)	157
4/1 (with short)	374(In) 329(Out)
4/2 (short)	45
5/1	442
6/1	501
7/1	393
8/1	590

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	57.1 %	1786	1786
				Arm 7 Ahead	Inf	42.9 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	38.5 %	1782	1782
				Arm 8 Ahead	Inf	61.5 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	61.9 %	1825	1825
				Arm 8 Left	13.00	38.1 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	39.5 %	1817	1817
				Arm 6 Ahead	Inf	60.5 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2027 Base PM' (FG2: '2027 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	202	127	112	441
	B	89	0	122	209	420
	C	133	251	0	52	436
	D	115	321	63	0	499
	Tot.	337	774	312	373	1796

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2027 Base PM
Junction: Station Road/Parsonage Road	
1/1 (with short)	441(In) 329(Out)
1/2 (short)	112
2/1 (with short)	420(In) 331(Out)
2/2 (short)	89
3/1 (with short)	436(In) 185(Out)
3/2 (short)	251
4/1 (with short)	499(In) 436(Out)
4/2 (short)	63
5/1	337
6/1	774
7/1	312
8/1	373

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	61.4 %	1778	1778
				Arm 7 Ahead	Inf	38.6 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	36.9 %	1786	1786
				Arm 8 Ahead	Inf	63.1 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	71.9 %	1845	1845
				Arm 8 Left	13.00	28.1 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	26.4 %	1849	1849
				Arm 6 Ahead	Inf	73.6 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

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

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	145	109	128	382
	B	183	0	240	391	814
	C	130	158	0	80	368
	D	130	202	45	0	377
	Tot.	443	505	394	599	1941

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2027 With Jacks Development AM
Junction: Station Road/Parsonage Road	
1/1 (with short)	382(In) 254(Out)
1/2 (short)	128
2/1 (with short)	814(In) 631(Out)
2/2 (short)	183
3/1 (with short)	368(In) 210(Out)
3/2 (short)	158
4/1 (with short)	377(In) 332(Out)
4/2 (short)	45
5/1	443
6/1	505
7/1	394
8/1	599

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	57.1 %	1786	1786
				Arm 7 Ahead	Inf	42.9 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	38.0 %	1783	1783
				Arm 8 Ahead	Inf	62.0 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	61.9 %	1825	1825
				Arm 8 Left	13.00	38.1 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	39.2 %	1818	1818
				Arm 6 Ahead	Inf	60.8 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2027 With Jacks Development PM' (FG4: '2027 With Jacks Development PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	202	127	112	441
	B	89	0	122	212	423
	C	133	151	0	52	336
	D	115	329	63	0	507
	Tot.	337	682	312	376	1707

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2027 With Jacks Development PM
Junction: Station Road/Parsonage Road	
1/1 (with short)	441(In) 329(Out)
1/2 (short)	112
2/1 (with short)	423(In) 334(Out)
2/2 (short)	89
3/1 (with short)	336(In) 185(Out)
3/2 (short)	151
4/1 (with short)	507(In) 444(Out)
4/2 (short)	63
5/1	337
6/1	682
7/1	312
8/1	376

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	61.4 %	1778	1778
				Arm 7 Ahead	Inf	38.6 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	36.5 %	1787	1787
				Arm 8 Ahead	Inf	63.5 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	71.9 %	1845	1845
				Arm 8 Left	13.00	28.1 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	25.9 %	1850	1850
				Arm 6 Ahead	Inf	74.1 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2027 With 7 Acres Development AM' (FG5: '2027 With 7 Acres Development AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	151	111	144	406
	B	192	0	239	382	813
	C	133	157	0	80	370
	D	155	199	45	0	399
	Tot.	480	507	395	606	1988

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2027 With 7 Acres Development AM
Junction: Station Road/Parsonage Road	
1/1 (with short)	406(In) 262(Out)
1/2 (short)	144
2/1 (with short)	813(In) 621(Out)
2/2 (short)	192
3/1 (with short)	370(In) 213(Out)
3/2 (short)	157
4/1 (with short)	399(In) 354(Out)
4/2 (short)	45
5/1	480
6/1	507
7/1	395
8/1	606

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	57.6 %	1785	1785
				Arm 7 Ahead	Inf	42.4 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	38.5 %	1782	1782
				Arm 8 Ahead	Inf	61.5 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	62.4 %	1826	1826
				Arm 8 Left	13.00	37.6 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	43.8 %	1807	1807
				Arm 6 Ahead	Inf	56.2 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2027 With 7 Acres Development PM' (FG6: '2027 With 7 Acres Development PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	208	129	131	468
	B	98	0	122	213	433
	C	134	251	0	52	437
	D	124	321	63	0	508
	Tot.	356	780	314	396	1846

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2027 With 7 Acres Development PM
Junction: Station Road/Parsonage Road	
1/1 (with short)	468(In) 337(Out)
1/2 (short)	131
2/1 (with short)	433(In) 335(Out)
2/2 (short)	98
3/1 (with short)	437(In) 186(Out)
3/2 (short)	251
4/1 (with short)	508(In) 445(Out)
4/2 (short)	63
5/1	356
6/1	780
7/1	314
8/1	396

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	61.7 %	1777	1777
				Arm 7 Ahead	Inf	38.3 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	36.4 %	1787	1787
				Arm 8 Ahead	Inf	63.6 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	72.0 %	1845	1845
				Arm 8 Left	13.00	28.0 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	27.9 %	1845	1845
				Arm 6 Ahead	Inf	72.1 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2027 Sensitivity Test AM' (FG7: '2027 Sensitivity Test AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	151	111	144	406
	B	192	0	240	391	823
	C	133	158	0	80	371
	D	155	202	45	0	402
	Tot.	480	511	396	615	2002

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2027 Sensitivity Test AM
Junction: Station Road/Parsonage Road	
1/1 (with short)	406(In) 262(Out)
1/2 (short)	144
2/1 (with short)	823(In) 631(Out)
2/2 (short)	192
3/1 (with short)	371(In) 213(Out)
3/2 (short)	158
4/1 (with short)	402(In) 357(Out)
4/2 (short)	45
5/1	480
6/1	511
7/1	396
8/1	615

Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	57.6 %	1785	1785
				Arm 7 Ahead	Inf	42.4 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	38.0 %	1783	1783
				Arm 8 Ahead	Inf	62.0 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	62.4 %	1826	1826
				Arm 8 Left	13.00	37.6 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	43.4 %	1808	1808
				Arm 6 Ahead	Inf	56.6 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2027 Sensitivity Test PM' (FG8: '2027 Sensitivity Test PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	208	129	131	468
	B	99	0	122	217	438
	C	134	251	0	52	437
	D	124	329	63	0	516
	Tot.	357	788	314	400	1859

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2027 Sensitivity Test PM
Junction: Station Road/Parsonage Road	
1/1 (with short)	468(In) 337(Out)
1/2 (short)	131
2/1 (with short)	438(In) 339(Out)
2/2 (short)	99
3/1 (with short)	437(In) 186(Out)
3/2 (short)	251
4/1 (with short)	516(In) 453(Out)
4/2 (short)	63
5/1	357
6/1	788
7/1	314
8/1	400

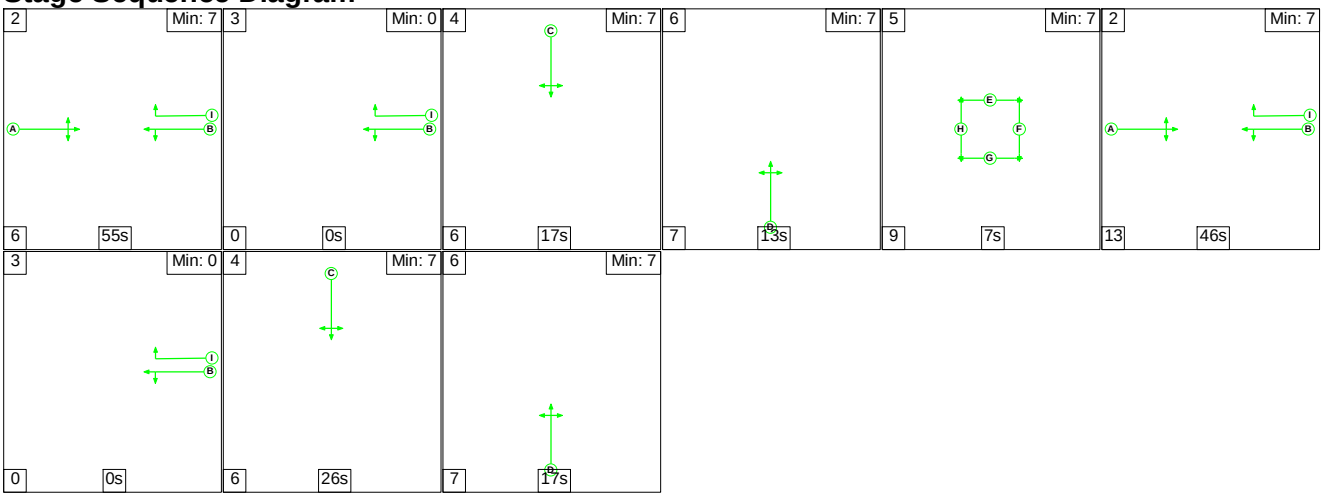
Full Input Data And Results

Lane Saturation Flows

Junction: Station Road/Parsonage Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Parsonage Road)	2.80	0.00	Y	Arm 6 Left	14.00	61.7 %	1777	1777
				Arm 7 Ahead	Inf	38.3 %		
1/2 (Parsonage Road)	2.80	0.00	N	Arm 8 Right	15.00	100.0 %	1850	1850
2/1 (B1256 East)	2.70	0.00	Y	Arm 7 Left	10.00	36.0 %	1788	1788
				Arm 8 Ahead	Inf	64.0 %		
2/2 (B1256 East)	2.80	0.00	N	Arm 5 Right	17.00	100.0 %	1870	1870
3/1 (Station Road)	2.90	0.00	Y	Arm 5 Ahead	Inf	72.0 %	1845	1845
				Arm 8 Left	13.00	28.0 %		
3/2 (Station Road)	2.90	0.00	N	Arm 6 Right	18.00	100.0 %	1888	1888
4/1 (B1256 West)	3.00	0.00	Y	Arm 5 Left	11.00	27.4 %	1846	1846
				Arm 6 Ahead	Inf	72.6 %		
4/2 (B1256 West)	3.00	0.00	N	Arm 7 Right	16.00	100.0 %	1879	1879
5/1 (Parsonage Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (B1256 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B1256 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2027 Base AM' (FG1: '2027 Base AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

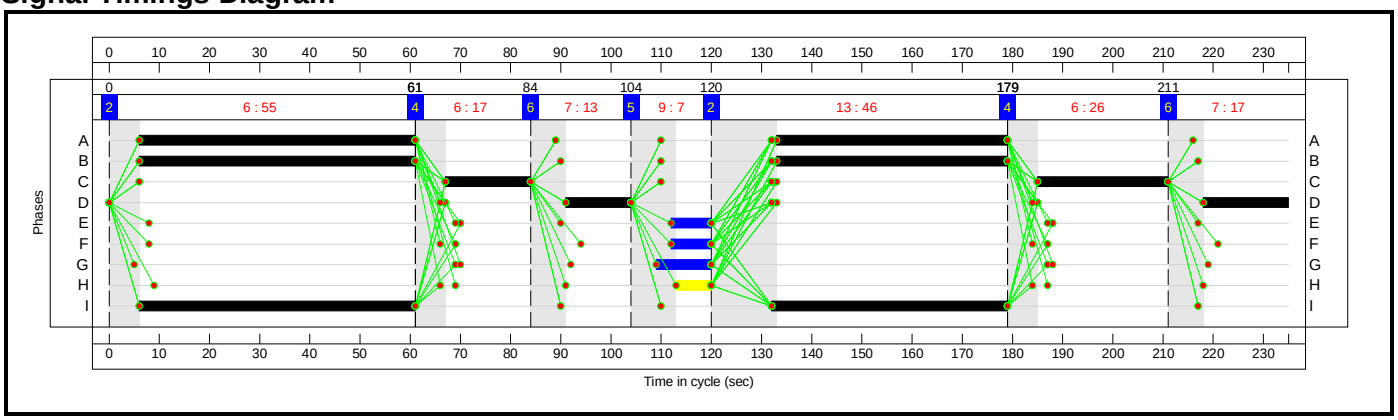


Full Input Data And Results

Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	55	0	17	13	7	46	0	26	17
Change Point	0	61	61	84	104	120	179	179	211

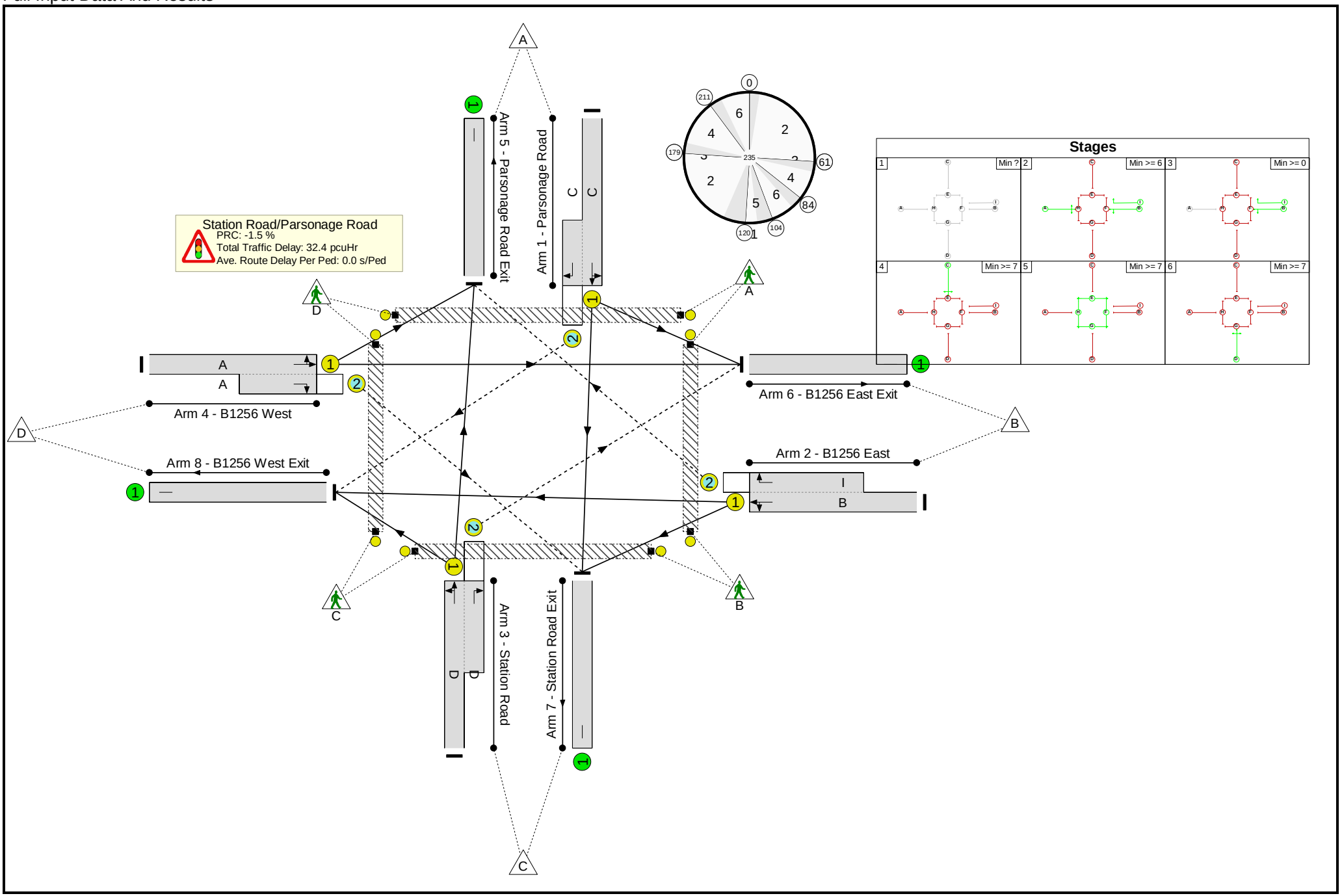
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
Station Road/Parsonage Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	43	-	382	1786:1850	281+142	90.4 : 90.4%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	101:102	-	803	1782:1870	680+199	91.4 : 91.4%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	30	-	367	1825:1888	233+174	90.3 : 90.3%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	101	-	374	1817:1879	735+101	44.7 : 44.7%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

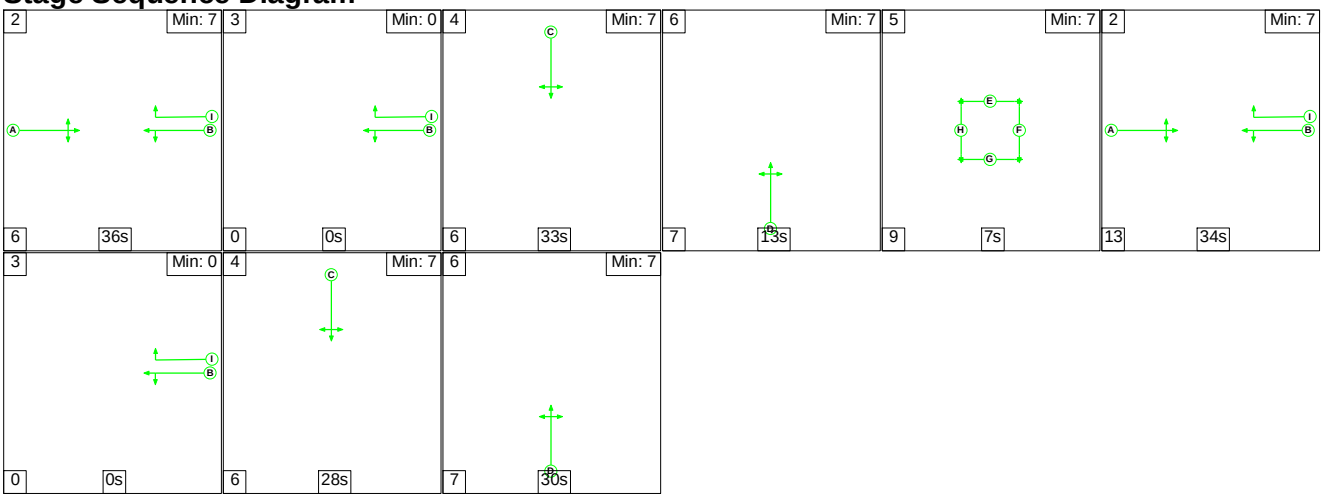
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**206**	**272**	**35**	**18.6**	**12.9**	**0.8**	**32.4**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**206**	**272**	**35**	**18.6**	**12.9**	**0.8**	**32.4**	**-**	**-**	**-**	**-**
1/1+1/2	382	382	0	119	9	4.8	3.9	0.0	8.7	82.1	10.2	3.9	14.2
2/1+2/2	803	803	182	0	0	6.5	4.7	0.3	11.5	51.7	23.5	4.7	28.3
3/1+3/2	367	367	0	153	4	5.0	3.9	0.1	9.0	88.3	7.8	3.9	11.7
4/1+4/2	374	374	24	0	21	2.3	0.4	0.4	3.1	30.3	8.1	0.4	8.5
5/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): -1.5 Total Delay for Signalled Lanes (pcuHr): 32.39 Cycle Time (s): 235
PRC Over All Lanes (%): -1.5 Total Delay Over All Lanes(pcuHr): 32.39

Full Input Data And Results

Scenario 2: '2027 Base PM' (FG2: '2027 Base PM', Plan 1: 'Network Control Plan 1')

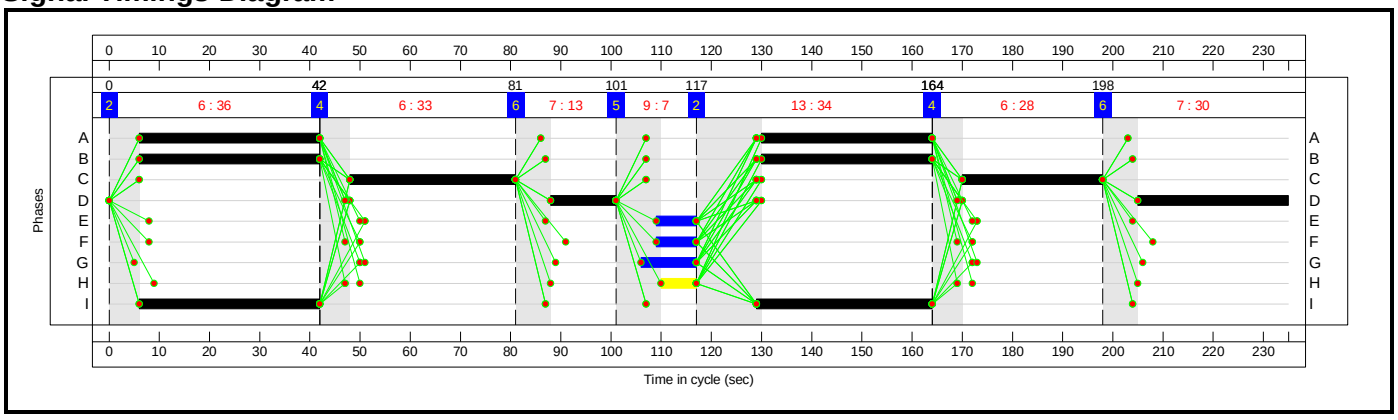
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	36	0	33	13	7	34	0	28	30
Change Point	0	42	42	81	101	117	164	164	198

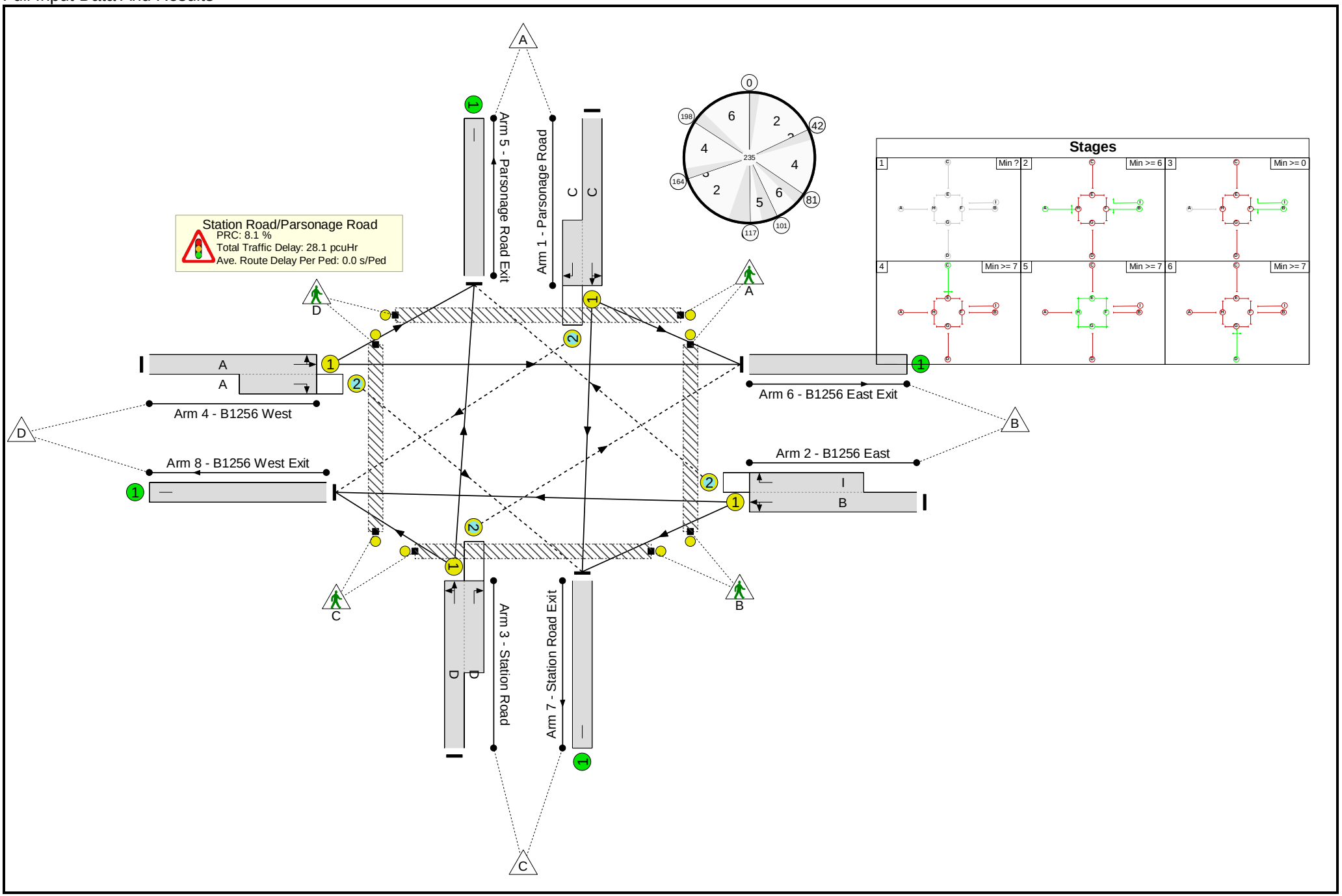
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.3%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.3%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	61	-	441	1778:1850	398+136	82.6 : 82.6%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	70:71	-	420	1786:1870	501+118	66.1 : 75.3%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	43	-	436	1845:1888	222+301	83.3 : 83.3%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	70	-	499	1849:1879	527+76	82.8 : 82.8%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	373	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

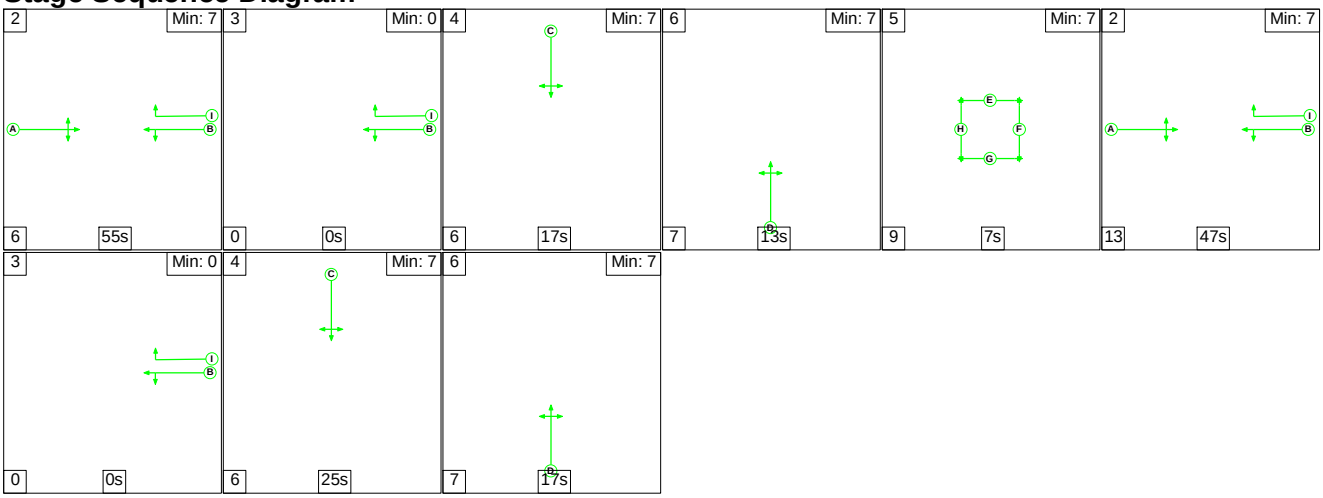
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**130**	**316**	**68**	**19.3**	**8.0**	**0.9**	**28.1**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**130**	**316**	**68**	**19.3**	**8.0**	**0.9**	**28.1**	**-**	**-**	**-**	**-**
1/1+1/2	441	441	0	109	3	4.8	2.3	0.0	7.0	57.4	12.0	2.3	14.3
2/1+2/2	420	420	67	0	22	4.0	1.0	0.5	5.6	48.1	10.1	1.0	11.1
3/1+3/2	436	436	0	207	44	5.3	2.4	0.2	7.9	64.8	9.4	2.4	11.7
4/1+4/2	499	499	63	0	0	5.1	2.3	0.2	7.6	55.0	15.2	2.3	17.5
5/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	373	373	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 8.1 Total Delay for Signalled Lanes (pcuHr): 28.13 Cycle Time (s): 235
PRC Over All Lanes (%): 8.1 Total Delay Over All Lanes(pcuHr): 28.13

Full Input Data And Results

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

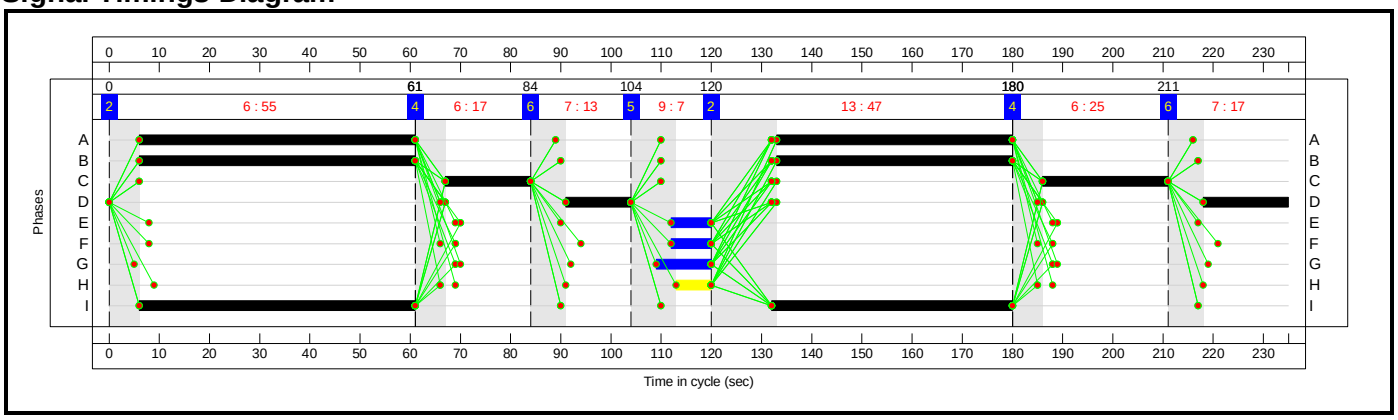
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	55	0	17	13	7	47	0	25	17
Change Point	0	61	61	84	104	120	180	180	211

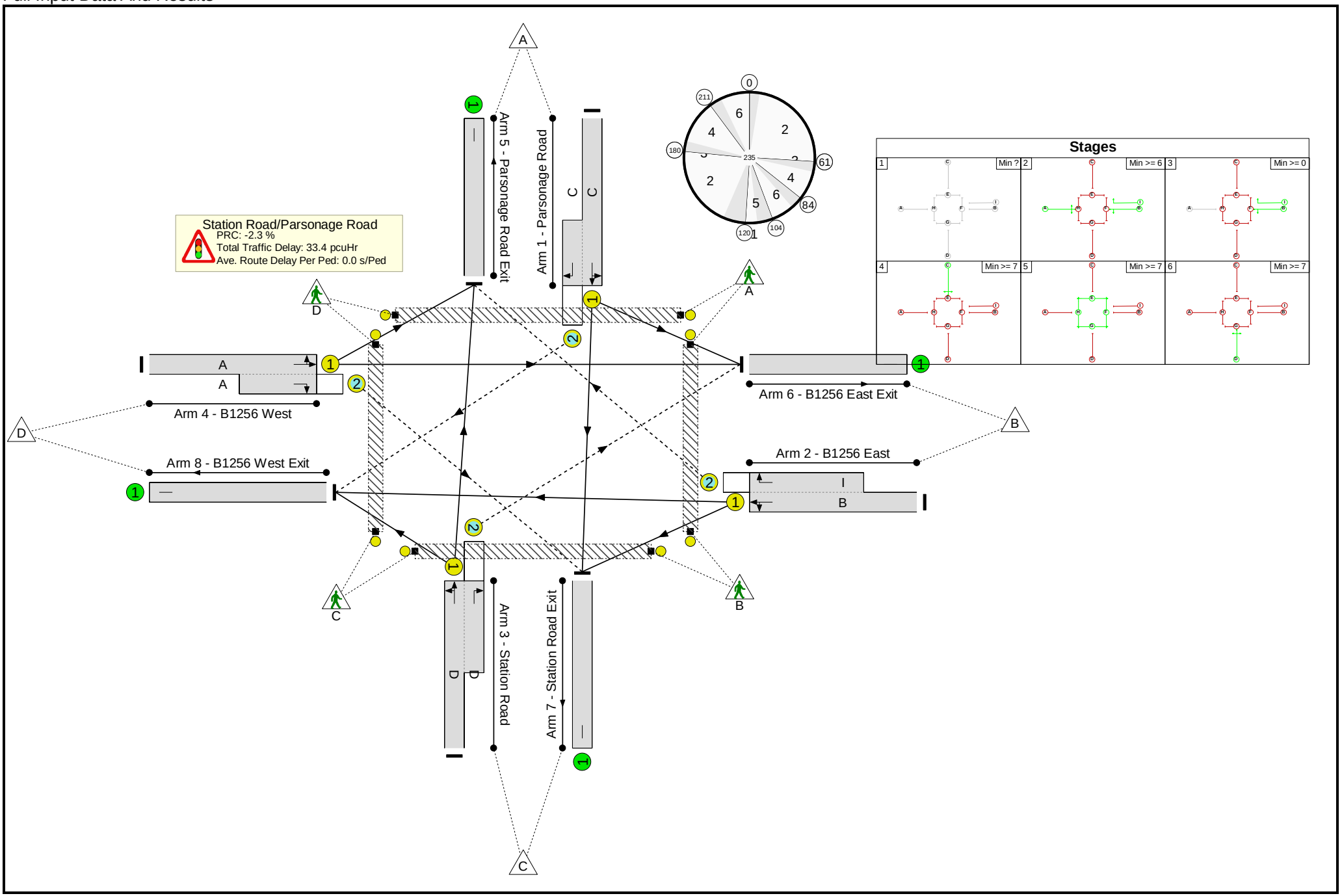
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.1%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.1%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	42	-	382	1786:1850	276+139	92.1 : 92.1%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	102:103	-	814	1783:1870	687+199	91.9 : 91.9%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	30	-	368	1825:1888	232+175	90.3 : 90.3%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	102	-	377	1818:1879	743+101	44.7 : 44.7%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	443	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

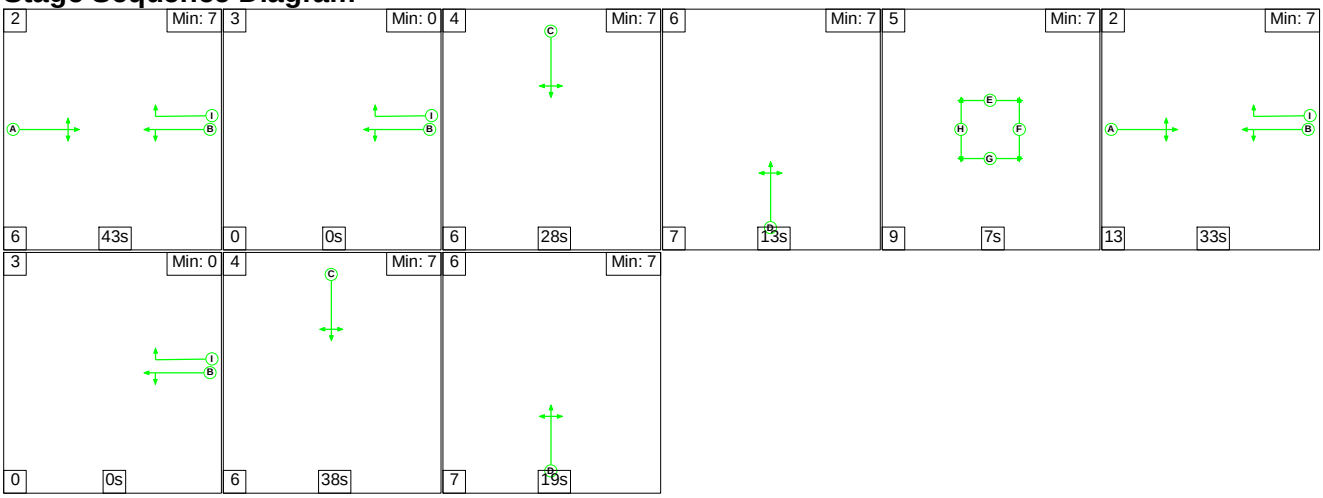
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**205**	**272**	**36**	**18.8**	**13.8**	**0.8**	**33.4**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**205**	**272**	**36**	**18.8**	**13.8**	**0.8**	**33.4**	**-**	**-**	**-**	**-**
1/1+1/2	382	382	0	119	9	4.8	4.5	0.0	9.4	88.4	10.3	4.5	14.9
2/1+2/2	814	814	183	0	0	6.6	5.0	0.3	11.9	52.4	24.2	5.0	29.1
3/1+3/2	368	368	0	153	5	5.1	3.9	0.1	9.0	88.2	7.8	3.9	11.7
4/1+4/2	377	377	22	0	23	2.3	0.4	0.4	3.1	30.0	8.2	0.4	8.6
5/1	443	443	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): -2.3 Total Delay for Signalled Lanes (pcuHr): 33.39 Cycle Time (s): 235
PRC Over All Lanes (%): -2.3 Total Delay Over All Lanes(pcuHr): 33.39

Full Input Data And Results

Scenario 4: '2027 With Jacks Development PM' (FG4: '2027 With Jacks Development PM', Plan 1: 'Network Control Plan 1')

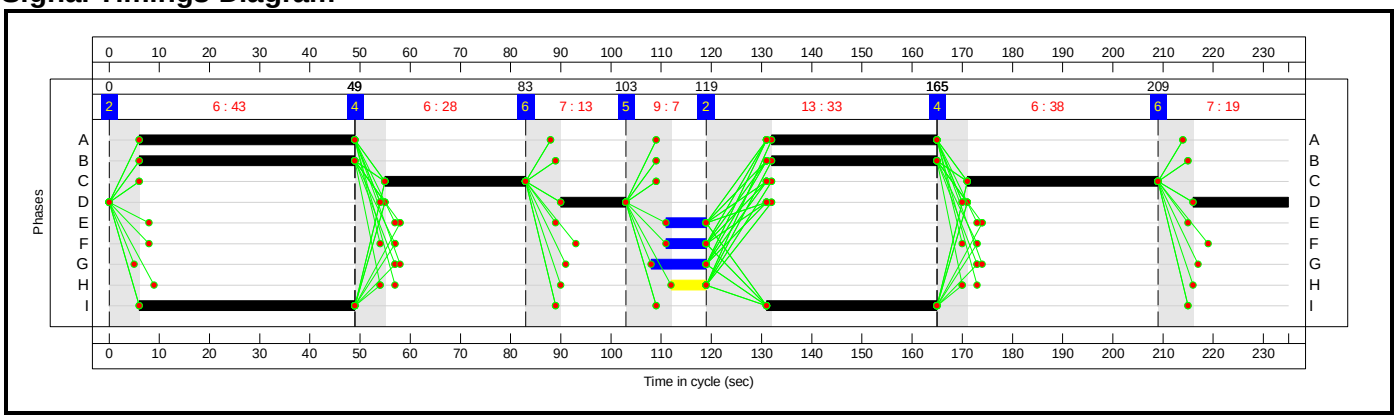
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	43	0	28	13	7	33	0	38	19
Change Point	0	49	49	83	103	119	165	165	209

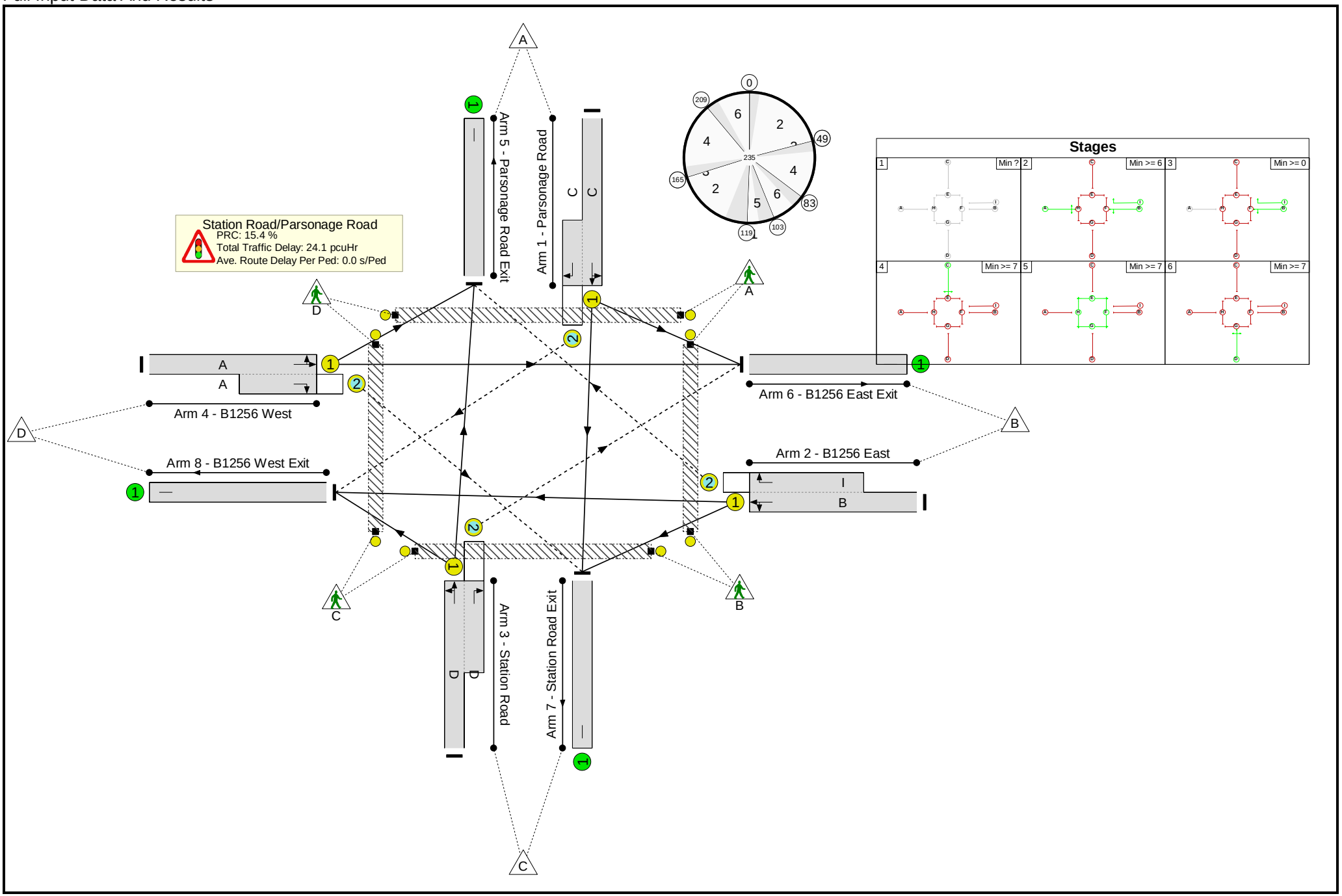
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.0%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.0%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	66	-	441	1778:1850	427+145	77.1 : 77.1%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	76:77	-	423	1787:1870	537+143	62.1 : 62.1%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	32	-	336	1845:1888	241+196	76.9 : 76.9%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	76	-	507	1850:1879	569+81	78.0 : 78.0%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

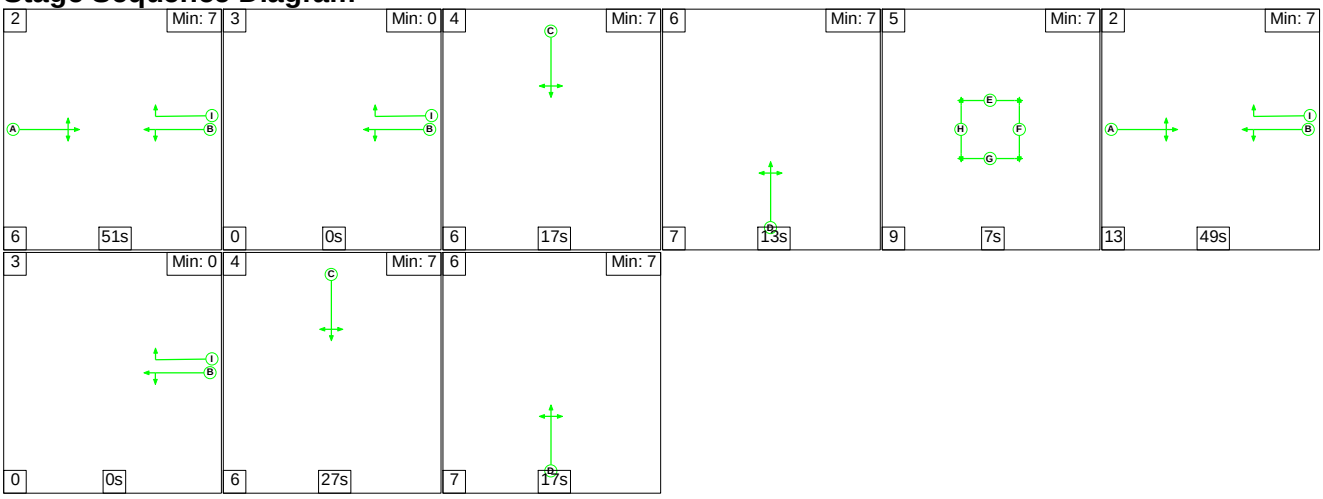
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**132**	**256**	**26**	**17.6**	**5.8**	**0.7**	**24.1**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**132**	**256**	**26**	**17.6**	**5.8**	**0.7**	**24.1**	**-**	**-**	**-**	**-**
1/1+1/2	441	441	0	109	3	4.5	1.6	0.0	6.1	50.1	11.8	1.6	13.4
2/1+2/2	423	423	69	0	20	3.8	0.8	0.5	5.1	43.3	9.5	0.8	10.3
3/1+3/2	336	336	0	147	4	4.5	1.6	0.1	6.1	65.8	6.4	1.6	8.0
4/1+4/2	507	507	63	0	0	4.9	1.7	0.2	6.8	48.0	14.5	1.7	16.2
5/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 15.4 Total Delay for Signalled Lanes (pcuHr): 24.14 Cycle Time (s): 235
PRC Over All Lanes (%): 15.4 Total Delay Over All Lanes(pcuHr): 24.14

Full Input Data And Results

Scenario 5: '2027 With 7 Acres Development AM' (FG5: '2027 With 7 Acres Development AM', Plan 1: 'Network Control Plan 1')

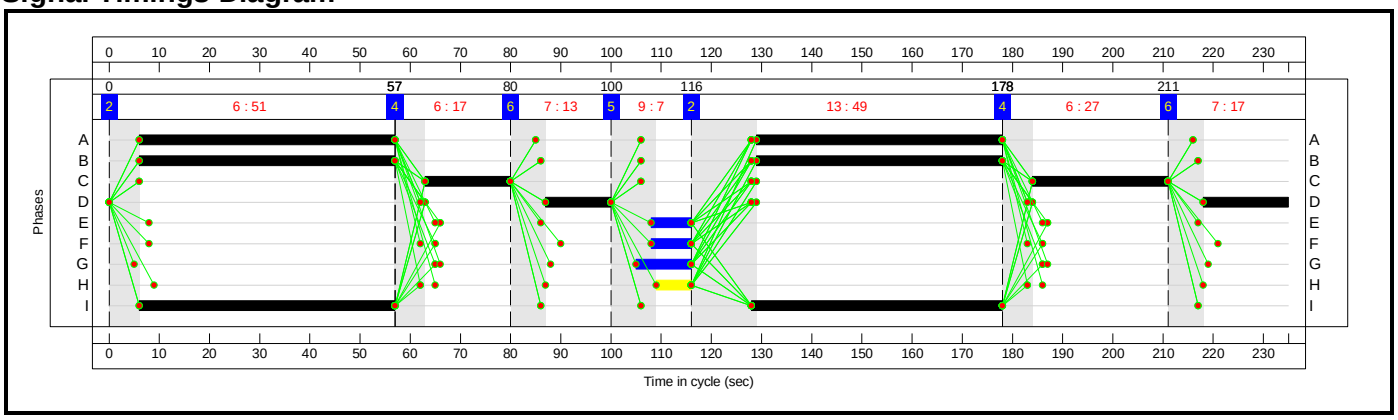
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	51	0	17	13	7	49	0	27	17
Change Point	0	57	57	80	100	116	178	178	211

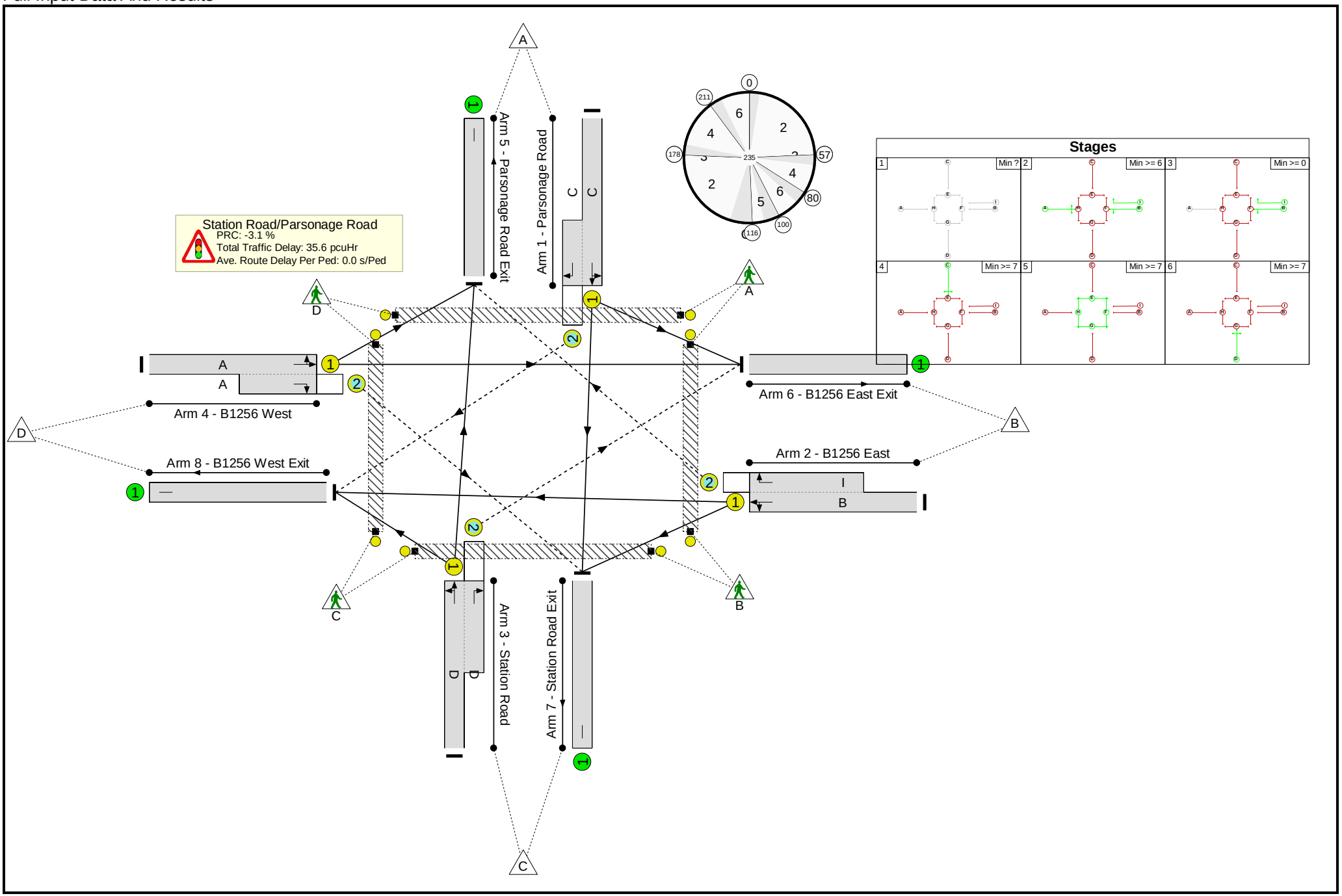
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.8%**
Station Road/Parsonage Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.8%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	44	-	406	1785:1850	282+155	92.8 : 92.8%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	100:101	-	813	1782:1870	669+207	92.8 : 92.8%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	30	-	370	1826:1888	233+171	91.6 : 91.6%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	100	-	399	1807:1879	730+93	48.5 : 48.5%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	480	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	606	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

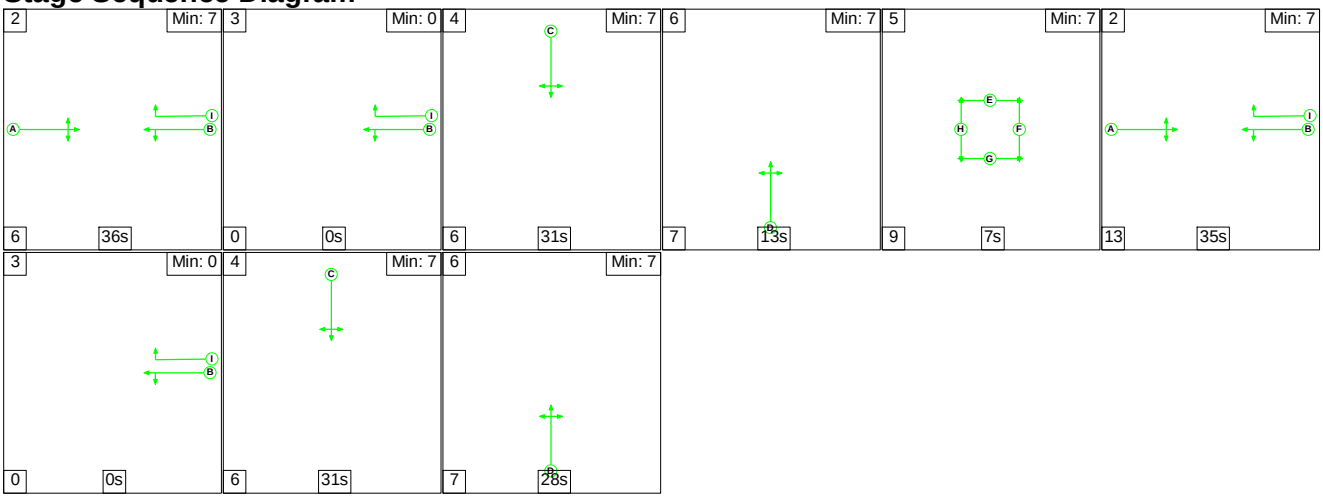
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**223**	**284**	**31**	**19.5**	**15.2**	**0.9**	**35.6**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**223**	**284**	**31**	**19.5**	**15.2**	**0.9**	**35.6**	**-**	**-**	**-**	**-**
1/1+1/2	406	406	0	134	10	5.1	4.9	0.0	10.0	88.9	11.3	4.9	16.3
2/1+2/2	813	813	192	0	0	6.7	5.5	0.4	12.6	55.8	24.0	5.5	29.5
3/1+3/2	370	370	0	150	7	5.2	4.3	0.1	9.5	92.8	8.6	4.3	12.9
4/1+4/2	399	399	31	0	14	2.6	0.5	0.4	3.5	31.3	9.0	0.5	9.5
5/1	480	480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	606	606	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): -3.1 Total Delay for Signalled Lanes (pcuHr): 35.64 Cycle Time (s): 235
PRC Over All Lanes (%): -3.1 Total Delay Over All Lanes(pcuHr): 35.64

Full Input Data And Results

Scenario 6: '2027 With 7 Acres Development PM' (FG6: '2027 With 7 Acres Development PM', Plan 1: 'Network Control Plan 1')

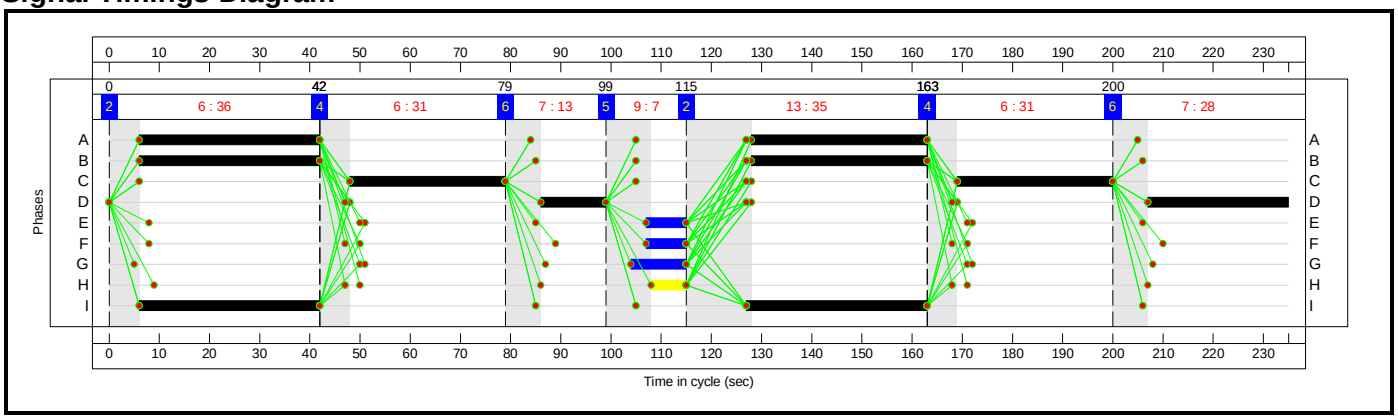
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	36	0	31	13	7	35	0	31	28
Change Point	0	42	42	79	99	115	163	163	200

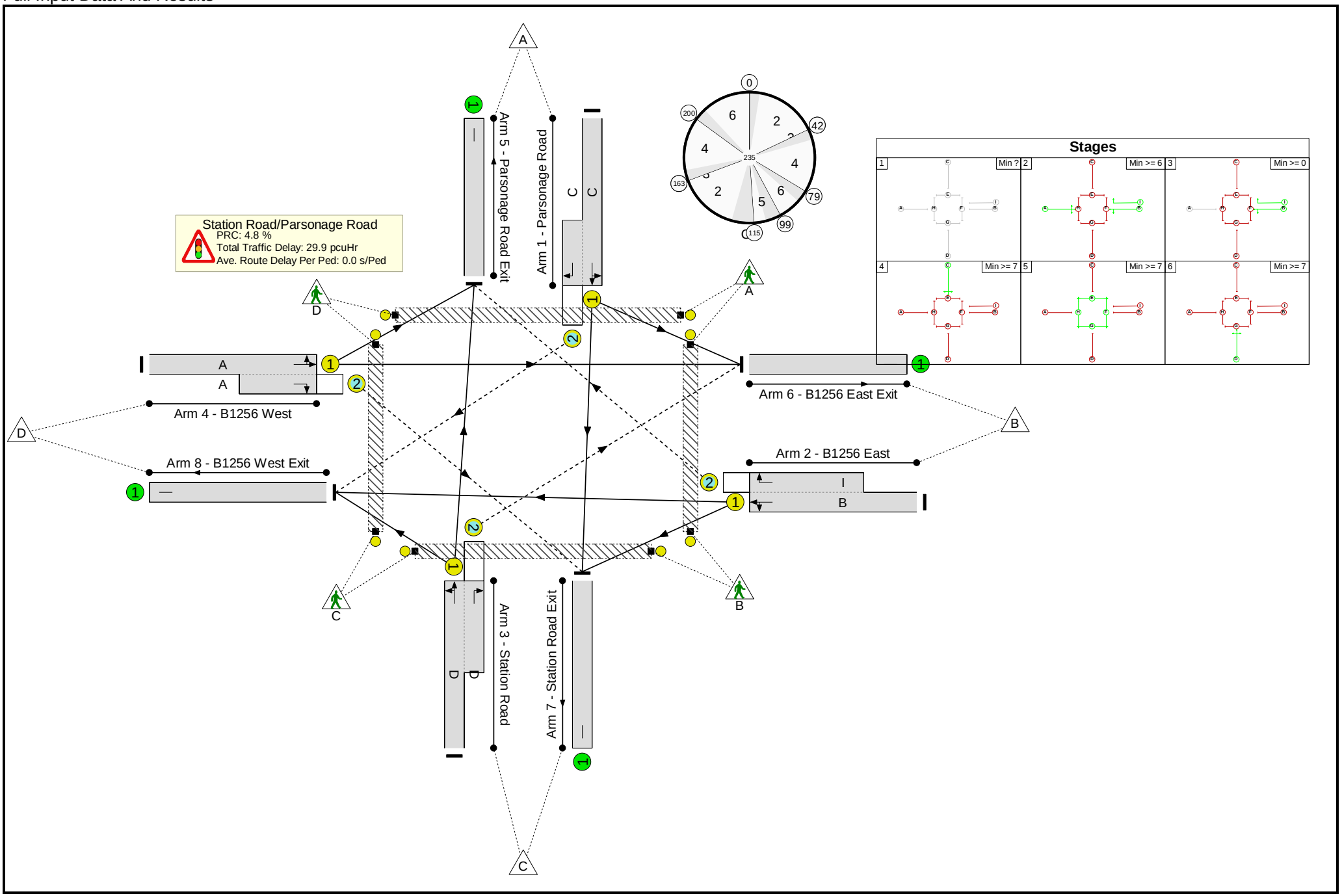
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.9%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.9%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	62	-	468	1777:1850	395+154	85.2 : 85.2%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	71:72	-	433	1787:1870	503+117	66.7 : 83.9%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	41	-	437	1845:1888	216+292	85.9 : 85.9%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	71	-	508	1845:1879	534+76	83.4 : 83.4%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	314	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

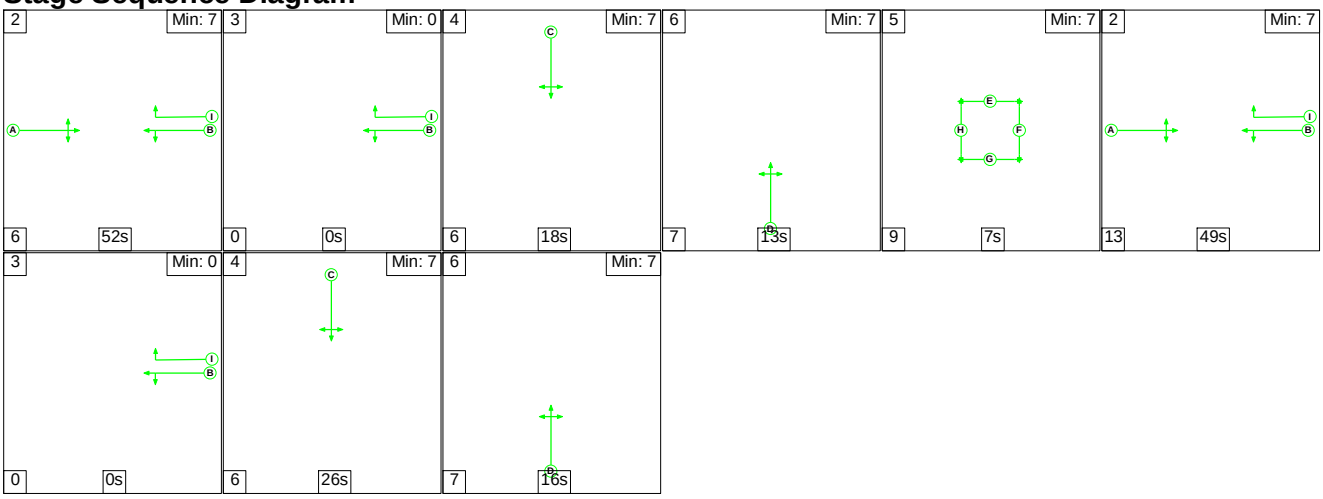
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**135**	**337**	**71**	**20.0**	**9.1**	**0.9**	**29.9**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**135**	**337**	**71**	**20.0**	**9.1**	**0.9**	**29.9**	**-**	**-**	**-**	**-**
1/1+1/2	468	468	0	128	3	5.1	2.7	0.0	7.8	59.8	13.0	2.7	15.7
2/1+2/2	433	433	72	0	26	4.2	1.1	0.6	5.9	48.9	10.0	1.1	11.2
3/1+3/2	437	437	0	209	42	5.5	2.8	0.2	8.5	69.9	10.0	2.8	12.8
4/1+4/2	508	508	63	0	0	5.2	2.4	0.2	7.8	55.1	15.3	2.4	17.6
5/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 4.8 Total Delay for Signalled Lanes (pcuHr): 29.91 Cycle Time (s): 235
PRC Over All Lanes (%): 4.8 Total Delay Over All Lanes(pcuHr): 29.91

Full Input Data And Results

Scenario 7: '2027 Sensitivity Test AM' (FG7: '2027 Sensitivity Test AM', Plan 1: 'Network Control Plan 1')

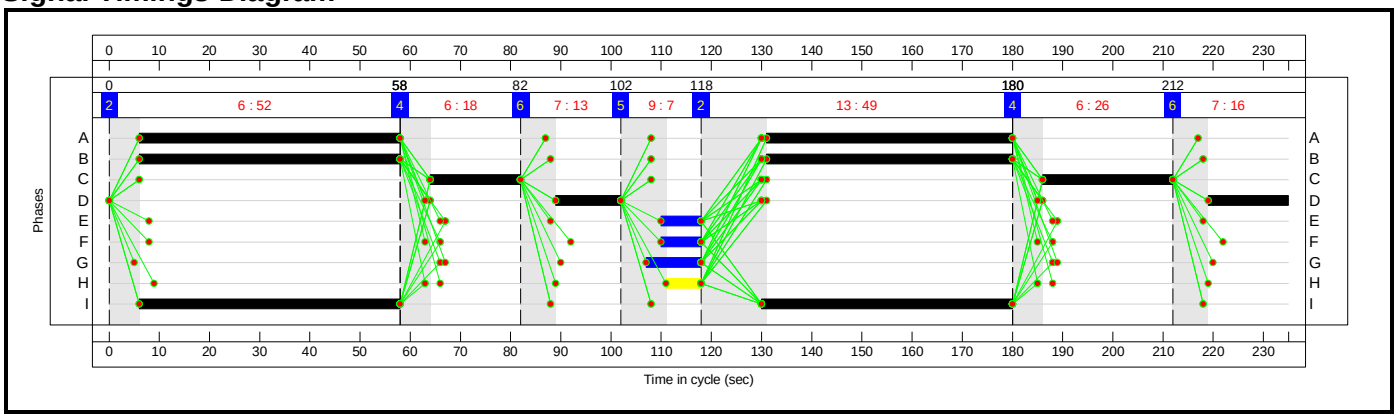
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	52	0	18	13	7	49	0	26	16
Change Point	0	58	58	82	102	118	180	180	212

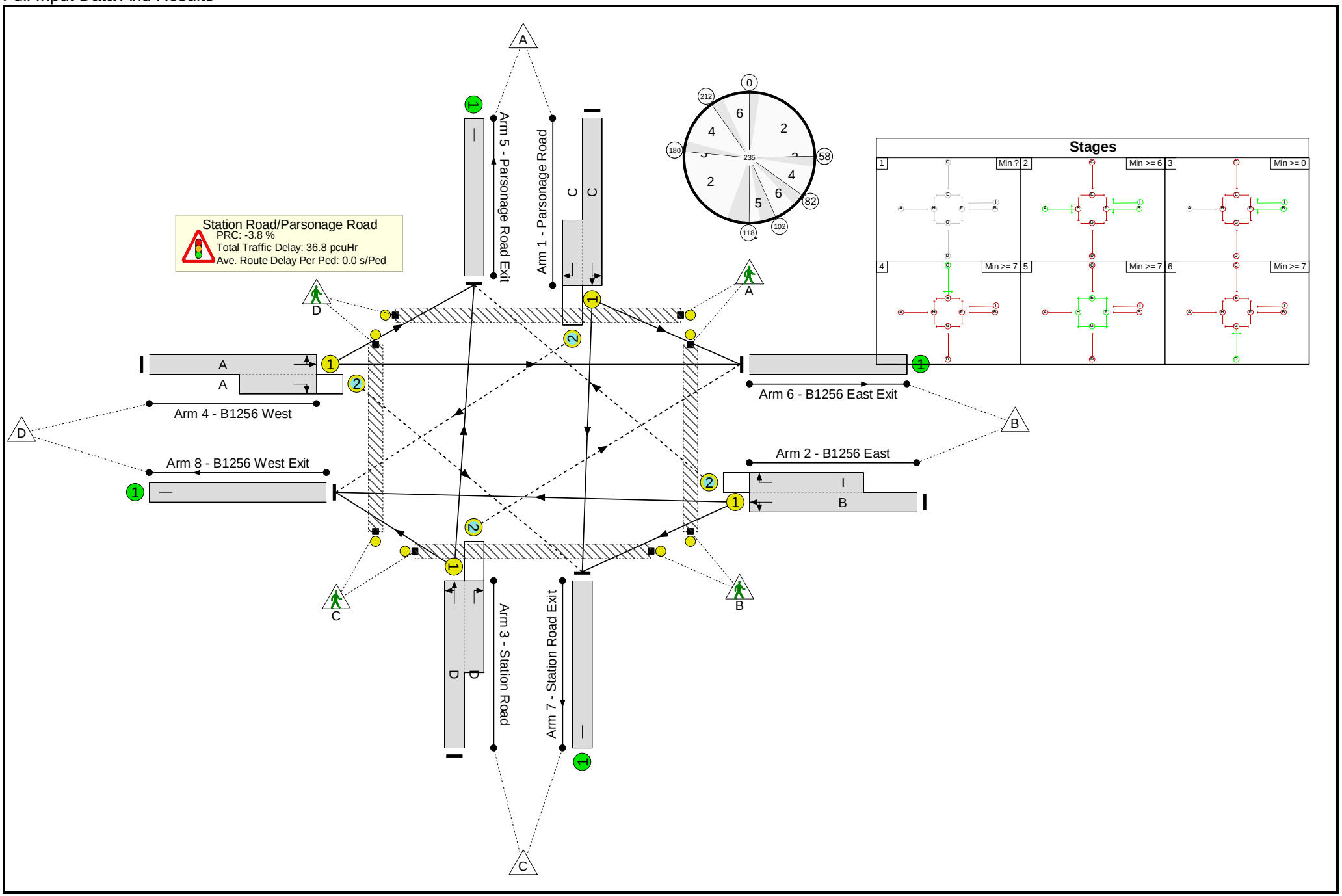
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.4%**
Station Road/Parsonage Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.4%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	44	-	406	1785:1850	282+155	92.8 : 92.8%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	101:102	-	823	1783:1870	677+206	93.3 : 93.3%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	29	-	371	1826:1888	228+169	93.4 : 93.4%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	101	-	402	1808:1879	738+93	48.4 : 48.4%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	480	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

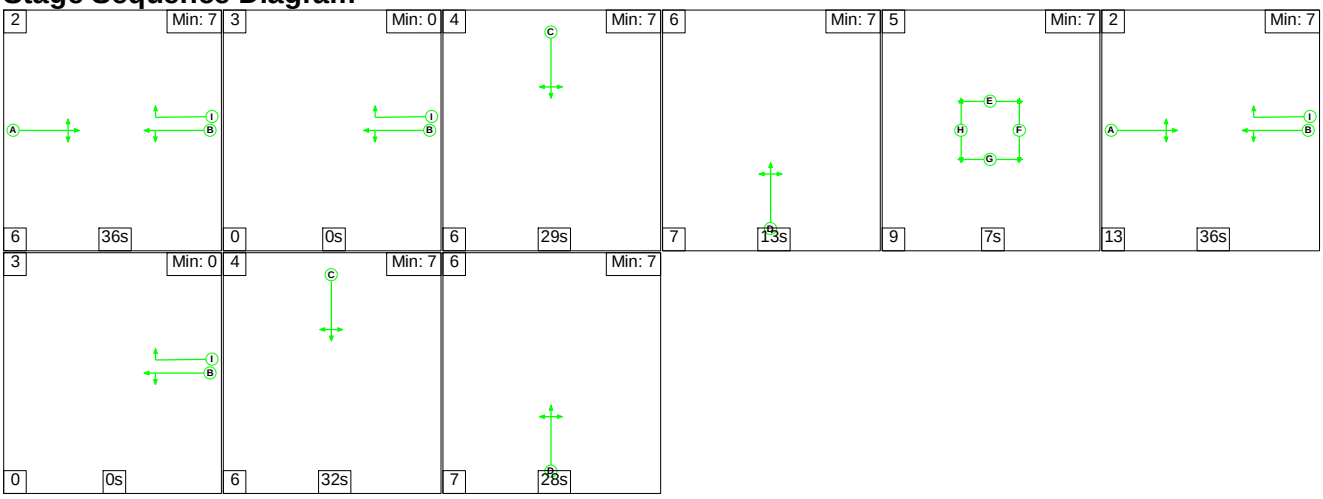
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**215**	**285**	**39**	**19.6**	**16.3**	**0.9**	**36.8**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**215**	**285**	**39**	**19.6**	**16.3**	**0.9**	**36.8**	**-**	**-**	**-**	**-**
1/1+1/2	406	406	0	136	8	5.1	4.9	0.0	10.0	88.9	11.3	4.9	16.3
2/1+2/2	823	823	192	0	0	6.8	5.8	0.4	13.0	56.8	25.0	5.8	30.8
3/1+3/2	371	371	0	149	9	5.2	5.1	0.1	10.3	100.4	8.4	5.1	13.5
4/1+4/2	402	402	23	0	22	2.6	0.5	0.4	3.5	31.0	9.2	0.5	9.7
5/1	480	480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): -3.8 Total Delay for Signalled Lanes (pcuHr): 36.82 Cycle Time (s): 235
PRC Over All Lanes (%): -3.8 Total Delay Over All Lanes(pcuHr): 36.82

Full Input Data And Results

Scenario 8: '2027 Sensitivity Test PM' (FG8: '2027 Sensitivity Test PM', Plan 1: 'Network Control Plan 1')

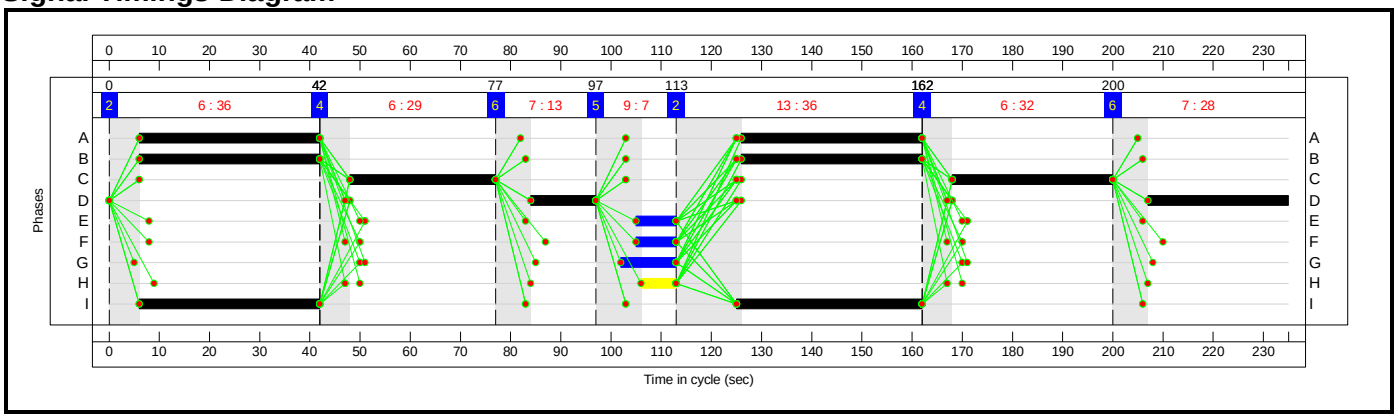
Stage Sequence Diagram



Stage Timings

Stage	2	3	4	6	5	2	3	4	6
Duration	36	0	29	13	7	36	0	32	28
Change Point	0	42	42	77	97	113	162	162	200

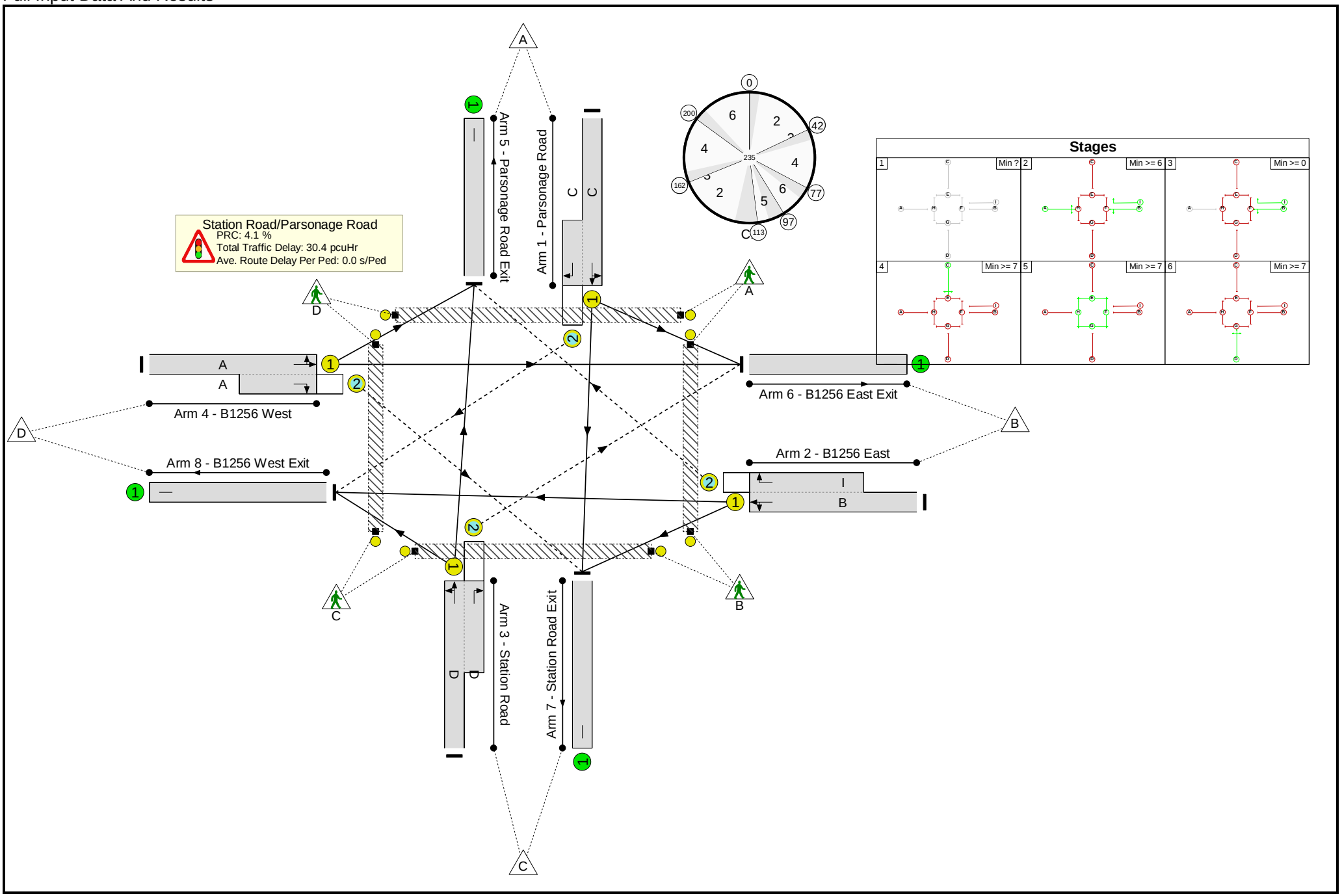
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.4%**
Station Road/Parsonage Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.4%**
1/1+1/2	Parsonage Road Left Ahead Right	U+O	N/A	N/A	C		2	61	-	468	1777:1850	390+152	86.4 : 86.4%
2/1+2/2	B1256 East Right Left Ahead	U+O	N/A	N/A	B I		2	72:73	-	438	1788:1870	509+116	66.6 : 85.0%
3/1+3/2	Station Road Ahead Right Left	U+O	N/A	N/A	D		2	41	-	437	1845:1888	216+292	85.9 : 85.9%
4/1+4/2	B1256 West Left Ahead Right	U+O	N/A	N/A	A		2	72	-	516	1846:1879	542+75	83.6 : 83.6%
5/1	Parsonage Road Exit	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
6/1	B1256 East Exit	U	N/A	N/A	-		-	-	-	788	Inf	Inf	0.0%
7/1	Station Road Exit	U	N/A	N/A	-		-	-	-	314	Inf	Inf	0.0%
8/1	B1256 West Exit	U	N/A	N/A	-		-	-	-	400	Inf	Inf	0.0%
Ped Link: P1	Parsonage Road Crossing	-	N/A	-	E		1	8	-	0	-	2451	0.0%
Ped Link: P2	B1256 East Crossing	-	N/A	-	F		1	8	-	0	-	2451	0.0%
Ped Link: P3	Station Road Crossing	-	N/A	-	G		1	11	-	0	-	3370	0.0%
Ped Link: P4	B1256 West Crossing	-	N/A	-	H		1	7	-	0	-	2145	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**134**	**339**	**71**	**20.1**	**9.4**	**0.9**	**30.4**	**-**	**-**	**-**	**-**
Station Road/Parsonage Road	**-**	**-**	**134**	**339**	**71**	**20.1**	**9.4**	**0.9**	**30.4**	**-**	**-**	**-**	**-**
1/1+1/2	468	468	0	128	3	5.1	2.9	0.0	8.1	62.1	13.1	2.9	16.1
2/1+2/2	438	438	71	0	28	4.2	1.2	0.6	5.9	48.5	9.8	1.2	11.0
3/1+3/2	437	437	0	212	39	5.5	2.8	0.2	8.5	70.2	10.4	2.8	13.2
4/1+4/2	516	516	63	0	0	5.2	2.4	0.2	7.9	54.8	15.2	2.4	17.7
5/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 PRC for Signalled Lanes (%): 4.1 Total Delay for Signalled Lanes (pcuHr): 30.36 Cycle Time (s): 235
PRC Over All Lanes (%): 4.1 Total Delay Over All Lanes(pcuHr): 30.36

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 3 - B1256-Roding Drive[2026].j9
Path: C:\Users\CharlotteHiscott\Documents\September 2022 Modelling
Report generation date: 15/09/2022 15:26:02

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2027 Base																
Arm 1	D1	0.9	11.28	0.49	B	8.53	A	48 % [Arm 1]	D2	0.3	9.90	0.22	A	16.46	C	8 % [Arm 3]
Arm 2		1.2	6.89	0.54	A					0.5	4.29	0.33	A			
Arm 3		1.4	9.18	0.57	A					4.9	22.71	0.84	C			
2027 With Jacks Development																
Arm 1	D3	0.9	11.34	0.49	B	8.55	A	48 % [Arm 1]	D4	0.3	9.90	0.22	A	16.50	C	8 % [Arm 3]
Arm 2		1.2	6.80	0.54	A					0.5	4.29	0.33	A			
Arm 3		1.4	9.28	0.58	A					4.9	22.80	0.84	C			
2027 with 7 Acres Development																
Arm 1	D5	0.9	11.42	0.49	B	8.64	A	47 % [Arm 1]	D6	0.3	9.96	0.23	A	17.18	C	7 % [Arm 3]
Arm 2		1.2	6.90	0.54	A					0.5	4.29	0.33	A			
Arm 3		1.4	9.38	0.58	A					5.2	23.81	0.85	C			
2027 Stress Test																
Arm 1	D7	0.9	11.34	0.49	B	8.55	A	48 % [Arm 1]	D8	0.3	9.90	0.22	A	16.56	C	8 % [Arm 3]
Arm 2		1.2	6.80	0.54	A					0.5	4.31	0.34	A			
Arm 3		1.4	9.28	0.58	A					4.9	22.89	0.84	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Junction 3 - B1256/Roding Drive
Location	Takeley
Site number	
Date	29/03/2018
Version	
Status	(new file)
Identifier	vitake
Client	Village Developments
Jobnumber	1802005
Enumerator	MOTION\GuestReading
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	PCU	perTimeSegment	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2027 Base	AM	DIRECT	08:00	09:00	60	15	✓
D2	2027 Base	PM	DIRECT	17:00	18:00	60	15	✓
D3	2027 With Jacks Development	AM	DIRECT	08:00	09:00	60	15	✓
D4	2027 With Jacks Development	PM	DIRECT	17:00	18:00	60	15	✓
D5	2027 with 7 Acres Development	AM	DIRECT	08:00	09:00	60	15	✓
D6	2027 with 7 Acres Development	PM	DIRECT	17:00	18:00	60	15	✓
D7	2027 Stress Test	AM	DIRECT	08:00	09:00	60	15	✓
D8	2027 Stress Test	PM	DIRECT	17:00	18:00	60	15	✓

Analysis Set Details

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

2027 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	8.53	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		48	Arm 1

Arms

Arms

Arm	Name	Description
1	Roding Drive	
2	B1256 East	
3	B1256 West	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.40	3.40	4.40	4.5	14.00	8.00	0.0	✓
2	3.00	3.00	3.60	4.0	20.00	20.00	0.0	
3	4.00	4.00	4.60	2.0	15.40	10.50	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1	0.517	202.559
2	0.909	336.639
3	0.531	243.719

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 period length (min)	Time segment length (min)	Run automatically
D1	2027 Base	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	0.00	52.00
	2	0.00	0.00	127.00
	3	8.00	110.00	0.00

08:15 - 08:30

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	2.00	0.00	150.00
	3	18.00	100.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	4.00	0.00	144.00
	3	46.00	84.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	14.00	61.00
	2	6.00	0.00	110.00
	3	31.00	84.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	1
	2	0	0	6
	3	1	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.49	11.28	0.9	B	55.29	221.15
2	0.54	6.89	1.2	A	143.72	574.86
3	0.57	9.18	1.4	A	129.01	516.05

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.57	52.57	118.80	141.12	0.373	51.98	8.01	0.0	0.6	10.142	B
2	134.62	134.62	51.98	289.37	0.465	133.71	118.80	0.0	0.9	6.094	A
3	127.98	127.98	0.00	243.72	0.525	126.80	185.69	0.0	1.2	8.268	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.45	46.45	109.09	146.14	0.318	46.56	20.07	0.6	0.5	9.137	A
2	161.00	161.00	41.61	298.79	0.539	160.69	114.04	0.9	1.2	6.887	A
3	127.18	127.18	1.98	242.66	0.524	127.18	200.32	1.2	1.2	8.398	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.45	46.45	91.65	155.16	0.299	46.49	50.15	0.5	0.4	8.368	A
2	156.64	156.64	41.49	298.91	0.524	156.68	96.65	1.2	1.2	6.701	A
3	138.02	138.02	3.99	241.60	0.571	137.81	194.18	1.2	1.4	9.177	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	75.67	75.67	91.63	155.17	0.488	75.17	37.48	0.4	0.9	11.281	B
2	122.60	122.60	61.30	280.90	0.436	122.95	105.51	1.2	0.8	6.035	A
3	122.87	122.87	5.99	240.54	0.511	123.12	178.26	1.4	1.1	8.208	A

2027 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	16.46	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		8	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2027 Base	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	4.00	19.00
	2	5.00	0.00	99.00
	3	35.00	157.00	0.00

17:15 - 17:30

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	17.00
	2	2.00	0.00	91.00
	3	49.00	150.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To		
		1	2	3
From	1	0.00	2.00	18.00
	2	1.00	0.00	78.00
	3	35.00	162.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To		
		1	2	3
From	1	0.00	12.00	15.00
	2	5.00	0.00	68.00
	3	45.00	141.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	2
	3	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.22	9.90	0.3	A	24.15	96.60
2	0.33	4.29	0.5	A	88.93	355.72
3	0.84	22.71	4.9	C	198.49	793.94

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.15	24.15	158.33	120.68	0.200	23.89	39.59	0.0	0.3	9.740	A
2	105.98	105.98	19.74	318.69	0.333	105.48	162.49	0.0	0.5	4.295	A
3	197.06	197.06	4.98	241.07	0.817	192.95	120.24	0.0	4.1	17.915	C

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	23.10	23.10	154.18	122.82	0.188	23.11	51.06	0.3	0.2	9.478	A
2	94.82	94.82	17.87	320.38	0.296	94.89	159.42	0.5	0.4	4.072	A
3	203.99	203.99	2.01	242.65	0.841	203.22	110.75	4.1	4.9	22.709	C

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.00	21.00	166.50	116.45	0.180	21.01	36.68	0.2	0.2	9.904	A
2	80.56	80.56	18.88	319.47	0.252	80.65	168.63	0.4	0.3	3.845	A
3	202.21	202.21	1.00	243.18	0.832	202.17	98.52	4.9	4.9	22.395	C

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.35	28.35	146.13	126.99	0.223	28.29	50.30	0.2	0.3	9.568	A
2	74.36	74.36	15.79	322.28	0.231	74.40	158.62	0.3	0.3	3.698	A
3	190.68	190.68	4.98	241.07	0.791	191.45	85.21	4.9	4.2	18.961	C

2027 With Jacks Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	8.55	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		48	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2027 With Jacks Development	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To		
		1	2	3
From	1	0.00	0.00	52.00
	2	0.00	0.00	127.00
	3	8.00	111.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	2.00	0.00	151.00
	3	18.00	101.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	4.00	0.00	144.00
	3	46.00	85.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	14.00	61.00
	2	6.00	0.00	110.00
	3	31.00	85.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	1
	2	0	0	5
	3	1	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.49	11.34	0.9	B	55.24	220.95
2	0.54	6.80	1.2	A	142.65	570.60
3	0.58	9.28	1.4	A	130.10	520.41

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.52	52.52	119.87	140.57	0.374	51.93	8.01	0.0	0.6	10.190	B
2	133.35	133.35	51.93	289.42	0.461	132.46	119.87	0.0	0.9	5.988	A
3	129.07	129.07	0.00	243.72	0.530	127.87	184.39	0.0	1.2	8.344	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.41	46.41	110.18	145.58	0.319	46.52	20.07	0.6	0.5	9.177	A
2	160.55	160.55	41.57	298.83	0.537	160.24	115.13	0.9	1.2	6.799	A
3	128.27	128.27	1.99	242.66	0.529	128.27	199.83	1.2	1.2	8.479	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.41	46.41	92.74	154.60	0.300	46.45	50.14	0.5	0.4	8.399	A
2	155.20	155.20	41.45	298.95	0.519	155.25	97.74	1.2	1.1	6.573	A
3	139.11	139.11	3.99	241.60	0.576	138.90	192.71	1.2	1.4	9.283	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	75.61	75.61	92.73	154.61	0.489	75.11	37.48	0.4	0.9	11.341	B
2	121.50	121.50	61.23	280.95	0.432	121.84	106.60	1.1	0.8	5.938	A
3	123.96	123.96	5.99	240.54	0.515	124.21	177.08	1.4	1.2	8.288	A

2027 With Jacks Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	16.50	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		8	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2027 With Jacks Development	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	4.00	19.00
	2	5.00	0.00	99.00
	3	35.00	158.00	0.00

17:15 - 17:30

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	17.00
	2	2.00	0.00	92.00
	3	49.00	150.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To		
		1	2	3
From	1	0.00	2.00	18.00
	2	1.00	0.00	79.00
	3	35.00	162.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To		
		1	2	3
From	1	0.00	12.00	15.00
	2	5.00	0.00	68.00
	3	45.00	141.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	2
	3	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.22	9.90	0.3	A	24.15	96.60
2	0.33	4.29	0.5	A	89.44	357.76
3	0.84	22.80	4.9	C	198.74	794.97

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.15	24.15	159.28	120.19	0.201	23.89	39.57	0.0	0.3	9.787	A
2	105.98	105.98	19.73	318.69	0.333	105.48	163.43	0.0	0.5	4.295	A
3	198.09	198.09	4.98	241.07	0.822	193.87	120.23	0.0	4.2	18.221	C

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	23.10	23.10	154.25	122.79	0.188	23.11	51.07	0.3	0.2	9.482	A
2	95.84	95.84	17.88	320.38	0.299	95.91	159.49	0.5	0.4	4.090	A
3	203.99	203.99	2.01	242.65	0.841	203.31	111.77	4.2	4.9	22.795	C

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.00	21.00	166.50	116.45	0.180	21.01	36.68	0.2	0.2	9.904	A
2	81.58	81.58	18.88	319.47	0.255	81.67	168.63	0.4	0.4	3.860	A
3	202.21	202.21	1.00	243.18	0.832	202.18	99.54	4.9	4.9	22.408	C

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.35	28.35	146.14	126.98	0.223	28.29	50.31	0.2	0.3	9.569	A
2	74.36	74.36	15.79	322.28	0.231	74.40	158.63	0.4	0.3	3.701	A
3	190.68	190.68	4.98	241.07	0.791	191.46	85.22	4.9	4.2	18.969	C

2027 with 7 Acres Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	8.64	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		47	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2027 with 7 Acres Development	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	0.00	52.00
	2	0.00	0.00	129.00
	3	8.00	111.00	0.00

08:15 - 08:30

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	2.00	0.00	153.00
	3	18.00	102.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	4.00	0.00	146.00
	3	46.00	86.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	14.00	61.00
	2	6.00	0.00	112.00
	3	31.00	86.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	1
	2	0	0	5
	3	1	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.49	11.42	0.9	B	55.24	220.95
2	0.54	6.90	1.2	A	144.75	579.00
3	0.58	9.38	1.4	A	130.92	523.68

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.52	52.52	119.87	140.57	0.374	51.93	8.01	0.0	0.6	10.190	B
2	135.45	135.45	51.93	289.42	0.468	134.54	119.87	0.0	0.9	6.067	A
3	129.07	129.07	0.00	243.72	0.530	127.87	186.47	0.0	1.2	8.344	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.41	46.41	111.26	145.02	0.320	46.52	20.07	0.6	0.5	9.229	A
2	162.65	162.65	41.57	298.83	0.544	162.33	116.21	0.9	1.2	6.901	A
3	129.36	129.36	1.98	242.66	0.533	129.34	201.92	1.2	1.2	8.558	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.41	46.41	93.82	154.04	0.301	46.45	50.14	0.5	0.4	8.445	A
2	157.30	157.30	41.45	298.95	0.526	157.35	98.83	1.2	1.2	6.668	A
3	140.20	140.20	3.99	241.60	0.580	139.98	194.82	1.2	1.4	9.384	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	75.61	75.61	93.82	154.04	0.491	75.10	37.48	0.4	0.9	11.421	B
2	123.60	123.60	61.23	280.96	0.440	123.95	107.69	1.2	0.8	6.019	A
3	125.05	125.05	5.99	240.54	0.520	125.31	179.19	1.4	1.2	8.368	A

2027 with 7 Acres Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	17.18	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		7	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2027 with 7 Acres Development	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	4.00	19.00
	2	5.00	0.00	99.00
	3	35.00	159.00	0.00

17:15 - 17:30

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	17.00
	2	2.00	0.00	92.00
	3	49.00	152.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To		
		1	2	3
From	1	0.00	2.00	18.00
	2	1.00	0.00	79.00
	3	35.00	163.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To		
		1	2	3
From	1	0.00	12.00	15.00
	2	5.00	0.00	68.00
	3	45.00	143.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	2
	3	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.23	9.96	0.3	A	24.15	96.60
2	0.33	4.29	0.5	A	89.44	357.76
3	0.85	23.81	5.2	C	200.29	801.15

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.15	24.15	160.22	119.70	0.202	23.89	39.56	0.0	0.3	9.837	A
2	105.98	105.98	19.73	318.69	0.333	105.48	164.37	0.0	0.5	4.295	A
3	199.12	199.12	4.98	241.07	0.826	194.80	120.23	0.0	4.3	18.538	C

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	23.10	23.10	156.19	121.78	0.190	23.11	51.03	0.3	0.2	9.580	A
2	95.84	95.84	17.87	320.38	0.299	95.91	161.43	0.5	0.4	4.088	A
3	206.05	206.05	2.01	242.65	0.849	205.21	111.77	4.3	5.2	23.809	C

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.00	21.00	167.54	115.91	0.181	21.01	36.70	0.2	0.2	9.959	A
2	81.58	81.58	18.88	319.47	0.255	81.67	169.67	0.4	0.4	3.860	A
3	203.24	203.24	1.00	243.18	0.836	203.23	99.54	5.2	5.2	23.076	C

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.35	28.35	148.20	125.91	0.225	28.28	50.30	0.2	0.3	9.672	A
2	74.36	74.36	15.79	322.28	0.231	74.40	160.69	0.4	0.3	3.698	A
3	192.74	192.74	4.98	241.07	0.800	193.52	85.22	5.2	4.4	19.818	C

2027 Stress Test, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	8.55	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		48	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2027 Stress Test	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	0.00	52.00
	2	0.00	0.00	129.00
	3	8.00	112.00	0.00

08:15 - 08:30

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	2.00	0.00	151.00
	3	18.00	101.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	5.00	41.00
	2	4.00	0.00	144.00
	3	46.00	85.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To		
		1	2	3
From	1	0.00	14.00	61.00
	2	6.00	0.00	110.00
	3	31.00	85.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	1
	2	0	0	5
	3	1	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.49	11.34	0.9	B	55.24	220.95
2	0.54	6.80	1.2	A	143.18	572.70
3	0.58	9.28	1.4	A	130.38	521.50

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.52	52.52	120.94	140.02	0.375	51.92	8.00	0.0	0.6	10.252	B
2	135.45	135.45	51.92	289.42	0.468	134.54	120.94	0.0	0.9	6.067	A
3	130.16	130.16	0.00	243.72	0.534	128.94	186.46	0.0	1.2	8.419	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.41	46.41	110.19	145.57	0.319	46.53	20.07	0.6	0.5	9.178	A
2	160.55	160.55	41.58	298.83	0.537	160.26	115.14	0.9	1.2	6.802	A
3	128.27	128.27	1.99	242.66	0.529	128.28	199.86	1.2	1.2	8.483	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	46.41	46.41	92.75	154.59	0.300	46.45	50.15	0.5	0.4	8.401	A
2	155.20	155.20	41.45	298.95	0.519	155.25	97.75	1.2	1.1	6.570	A
3	139.11	139.11	3.99	241.60	0.576	138.91	192.71	1.2	1.4	9.285	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	75.61	75.61	92.73	154.61	0.489	75.11	37.48	0.4	0.9	11.341	B
2	121.50	121.50	61.23	280.95	0.432	121.84	106.60	1.1	0.8	5.938	A
3	123.96	123.96	5.99	240.54	0.515	124.21	177.08	1.4	1.2	8.287	A

2027 Stress Test, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 92% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	16.56	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		8	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2027 Stress Test	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To		
		1	2	3
From	1	0.00	4.00	19.00
	2	5.00	0.00	100.00
	3	35.00	159.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To		
		1	2	3
From	1	0.00	5.00	17.00
	2	2.00	0.00	92.00
	3	49.00	150.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To		
		1	2	3
From	1	0.00	2.00	18.00
	2	1.00	0.00	79.00
	3	35.00	162.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To		
		1	2	3
From	1	0.00	12.00	15.00
	2	5.00	0.00	68.00
	3	45.00	141.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	2
	3	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.22	9.90	0.3	A	24.15	96.60
2	0.34	4.31	0.5	A	89.70	358.78
3	0.84	22.89	4.9	C	199.00	796.00

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.15	24.15	160.22	119.70	0.202	23.89	39.56	0.0	0.3	9.837	A
2	107.00	107.00	19.73	318.69	0.336	106.49	164.37	0.0	0.5	4.311	A
3	199.12	199.12	4.98	241.07	0.826	194.80	121.25	0.0	4.3	18.538	C

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	23.10	23.10	154.33	122.75	0.188	23.12	51.08	0.3	0.2	9.486	A
2	95.84	95.84	17.88	320.38	0.299	95.91	159.57	0.5	0.4	4.089	A
3	203.99	203.99	2.01	242.65	0.841	203.39	111.77	4.3	4.9	22.886	C

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.00	21.00	166.50	116.45	0.180	21.01	36.68	0.2	0.2	9.903	A
2	81.58	81.58	18.88	319.47	0.255	81.67	168.64	0.4	0.4	3.860	A
3	202.21	202.21	1.00	243.18	0.832	202.18	99.54	4.9	4.9	22.426	C

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.35	28.35	146.15	126.98	0.223	28.29	50.31	0.2	0.3	9.569	A
2	74.36	74.36	15.79	322.28	0.231	74.40	158.64	0.4	0.3	3.698	A
3	190.68	190.68	4.98	241.07	0.791	191.47	85.22	4.9	4.2	18.977	C

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

Filename: Junction 4 - B1256-Warwick Road[2026].j9
Path: C:\Users\CharlotteHiscott\Documents\September 2022 Modelling
Report generation date: 15/09/2022 16:03:28

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2027 Base																
Arm 1	D1	0.4	4.54	0.28	A	6.03	A	64 % [Arm 2]	D2	0.1	4.12	0.10	A	5.55	A	83 % [Arm 4]
Arm 2		1.3	7.82	0.56	A					0.7	5.41	0.41	A			
Arm 3		0.0	4.44	0.02	A					0.0	3.85	0.02	A			
Arm 4		0.5	4.47	0.33	A					1.1	6.01	0.51	A			
2027 With Jacks Development																
Arm 1	D3	0.4	4.55	0.28	A	6.04	A	64 % [Arm 2]	D4	0.1	4.12	0.10	A	5.57	A	83 % [Arm 4]
Arm 2		1.3	7.82	0.56	A					0.7	5.44	0.41	A			
Arm 3		0.0	4.44	0.02	A					0.0	3.86	0.02	A			
Arm 4		0.5	4.49	0.33	A					1.1	6.01	0.51	A			
2027 With 7 Acres Development																
Arm 1	D5	0.4	4.57	0.28	A	6.02	A	65 % [Arm 2]								
Arm 2		1.3	7.79	0.56	A											
Arm 3		0.0	4.45	0.02	A											
Arm 4		0.5	4.51	0.33	A											
2027 with 7 Acres Development																
Arm 1									D6	0.1	4.14	0.10	A	5.61	A	81 % [Arm 4]
Arm 2										0.7	5.44	0.41	A			
Arm 3										0.0	3.86	0.02	A			
Arm 4										1.1	6.09	0.52	A			
2027 Stress Test																
Arm 1	D7	0.4	4.57	0.28	A	6.05	A	63 % [Arm 2]	D8	0.1	4.14	0.10	A	5.62	A	81 % [Arm 4]
Arm 2		1.3	7.81	0.56	A					0.7	5.48	0.41	A			
Arm 3		0.0	4.45	0.02	A					0.0	3.87	0.02	A			
Arm 4		0.5	4.51	0.33	A					1.1	6.09	0.52	A			

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

File summary

File Description

Title	Junction 4 - B1256-Warwick Road
Location	Takeley
Site number	
Date	29/03/2018
Version	
Status	(new file)
Identifier	vitake
Client	Village Developments
Jobnumber	1802005
Enumerator	MOTION\GuestReading
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	PCU	perTimeSegment	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2027 Base	AM	DIRECT	08:00	09:00	60	15	✓
D2	2027 Base	PM	DIRECT	17:00	18:00	60	15	✓
D3	2027 With Jacks Development	AM	DIRECT	08:00	09:00	60	15	✓
D4	2027 With Jacks Development	PM	DIRECT	17:00	18:00	60	15	✓
D5	2027 With 7 Acres Development	AM	DIRECT	08:00	09:00	60	15	✓
D6	2027 with 7 Acres Development	PM	DIRECT	17:00	18:00	60	15	✓
D7	2027 Stress Test	AM	DIRECT	08:00	09:00	60	15	✓
D8	2027 Stress Test	PM	DIRECT	17:00	18:00	60	15	✓

Analysis Set Details

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

2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.03	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	Arm 2

Arms

Arms

Arm	Name	Description
1	Warwick Road	
2	B1256 East	
3	Flitchside Drive	
4	B1256 West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.00	4.70	2.5	30.0	28.0	35.0	
2	3.10	5.00	3.5	30.0	28.0	35.0	
3	3.30	4.80	5.0	17.0	28.0	35.0	
4	3.70	5.00	6.0	25.0	28.0	35.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/TS)
1	0.582	330.619
2	0.546	287.105
3	0.549	299.947
4	0.584	335.868

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 period length (min)	Time segment length (min)	Run automatically
D1	2027 Base	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	27.00	0.00	33.00
	2	11.00	0.00	1.00	108.00
	3	0.00	3.00	0.00	1.00
	4	6.00	64.00	0.00	0.00

08:15 - 08:30

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	32.00	0.00	20.00
	2	15.00	0.00	1.00	127.00
	3	0.00	1.00	0.00	2.00
	4	13.00	67.00	1.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	46.00	0.00	30.00
	2	20.00	0.00	0.00	104.00
	3	0.00	2.00	0.00	2.00
	4	12.00	84.00	1.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	26.00	0.00	28.00
	2	24.00	0.00	0.00	88.00
	3	1.00	0.00	0.00	1.00
	4	16.00	74.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	8	0	0	7
	3	0	0	0	0
	4	2	9	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.28	4.54	0.4	A	60.83	243.31
2	0.56	7.82	1.3	A	133.62	534.49
3	0.02	4.44	0.0	A	3.25	13.00
4	0.33	4.47	0.5	A	91.49	365.95

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	60.27	60.27	72.45	288.46	0.209	60.01	17.88	0.0	0.3	3.953	A
2	128.44	128.44	32.86	269.16	0.477	127.48	99.60	0.0	1.0	6.753	A
3	4.00	4.00	159.34	212.47	0.019	3.98	0.99	0.0	0.0	4.316	A
4	75.88	75.88	14.78	327.23	0.232	75.55	148.54	0.0	0.3	3.872	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.32	52.32	75.01	286.97	0.182	52.36	29.38	0.3	0.2	3.860	A
2	153.09	153.09	21.05	275.61	0.555	152.74	106.31	1.0	1.3	7.819	A
3	3.00	3.00	171.80	205.63	0.015	3.00	1.99	0.0	0.0	4.443	A
4	87.29	87.29	17.16	325.84	0.268	87.22	157.64	0.3	0.4	4.063	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	76.46	76.46	94.43	275.67	0.277	76.30	33.81	0.2	0.4	4.537	A
2	132.88	132.88	30.94	270.21	0.492	133.14	139.80	1.3	1.1	7.049	A
3	4.00	4.00	163.07	210.42	0.019	4.00	1.01	0.0	0.0	4.359	A
4	104.80	104.80	23.56	322.10	0.325	104.67	143.50	0.4	0.5	4.470	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	54.26	54.26	81.73	283.06	0.192	54.40	43.20	0.4	0.2	3.957	A
2	120.08	120.08	29.03	271.25	0.443	120.27	107.11	1.1	0.9	6.398	A
3	2.00	2.00	148.30	218.53	0.009	2.01	1.00	0.0	0.0	4.156	A
4	97.98	97.98	26.91	320.15	0.306	98.02	123.40	0.5	0.5	4.363	A

2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.55	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	83	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2027 Base	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To			
		1	2	3	4
From	1	0.00	17.00	0.00	4.00
	2	32.00	0.00	0.00	81.00
	3	0.00	0.00	0.00	1.00
	4	14.00	140.00	1.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To			
		1	2	3	4
From	1	0.00	24.00	0.00	4.00
	2	25.00	0.00	1.00	57.00
	3	0.00	3.00	0.00	2.00
	4	35.00	70.00	1.00	0.00

Demand (Veh/TS)

17:30 - 17:45

		To			
		1	2	3	4
From	1	0.00	14.00	2.00	10.00
	2	30.00	0.00	3.00	56.00
	3	0.00	0.00	0.00	2.00
	4	15.00	87.00	4.00	0.00

Demand (Veh/TS)

17:45 - 18:00

		To			
		1	2	3	4
From	1	0.00	14.00	0.00	10.00
	2	29.00	0.00	1.00	57.00
	3	0.00	3.00	0.00	1.00
	4	21.00	77.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	4
	2	3	0	0	2
	3	0	0	0	0
	4	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.10	4.12	0.1	A	25.38	101.50
2	0.41	5.41	0.7	A	95.13	380.50
3	0.02	3.85	0.0	A	3.00	12.00
4	0.51	6.01	1.1	A	121.39	485.55

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.50	21.50	147.01	245.07	0.088	21.40	46.81	0.0	0.1	4.117	A
2	115.58	115.58	5.13	284.30	0.407	114.89	163.28	0.0	0.7	5.412	A
3	1.00	1.00	119.03	234.60	0.004	1.00	0.99	0.0	0.0	3.852	A
4	162.14	162.14	32.76	316.73	0.512	161.06	87.26	0.0	1.1	6.008	A

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.64	28.64	78.10	285.17	0.100	28.62	61.08	0.1	0.1	3.587	A
2	84.89	84.89	5.16	284.28	0.299	85.15	101.56	0.7	0.4	4.629	A
3	5.00	5.00	88.31	251.46	0.020	4.98	2.00	0.0	0.0	3.650	A
4	109.85	109.85	28.80	319.04	0.344	110.38	64.49	1.1	0.5	4.482	A

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26.68	26.68	95.26	275.19	0.097	26.68	46.12	0.1	0.1	3.718	A
2	91.02	91.02	16.35	278.17	0.327	90.96	105.59	0.4	0.5	4.915	A
3	2.00	2.00	98.35	245.95	0.008	2.01	8.97	0.0	0.0	3.691	A
4	110.50	110.50	30.88	317.83	0.348	110.49	69.48	0.5	0.6	4.524	A

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.68	24.68	84.91	281.20	0.088	24.69	51.06	0.1	0.1	3.607	A
2	89.01	89.01	11.42	280.87	0.317	89.03	98.18	0.5	0.5	4.801	A
3	4.00	4.00	98.42	245.92	0.016	3.99	2.03	0.0	0.0	3.719	A
4	103.06	103.06	32.86	316.67	0.325	103.11	69.54	0.6	0.5	4.389	A

2027 With Jacks Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.04	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2027 With Jacks Development	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To			
		1	2	3	4
From	1	0.00	27.00	0.00	33.00
	2	11.00	0.00	1.00	109.00
	3	0.00	3.00	0.00	1.00
	4	6.00	64.00	0.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To			
		1	2	3	4
From	1	0.00	32.00	0.00	20.00
	2	15.00	0.00	1.00	127.00
	3	0.00	1.00	0.00	2.00
	4	13.00	68.00	1.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	46.00	0.00	30.00
	2	20.00	0.00	0.00	104.00
	3	0.00	2.00	0.00	2.00
	4	12.00	85.00	1.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	26.00	0.00	28.00
	2	24.00	0.00	0.00	88.00
	3	1.00	0.00	0.00	1.00
	4	16.00	75.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	8	0	0	7
	3	0	0	0	0
	4	2	9	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.28	4.55	0.4	A	60.83	243.31
2	0.56	7.82	1.3	A	133.89	535.56
3	0.02	4.44	0.0	A	3.25	13.00
4	0.33	4.49	0.5	A	92.31	369.22

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	60.27	60.27	72.45	288.46	0.209	60.01	17.88	0.0	0.3	3.953	A
2	129.51	129.51	32.86	269.16	0.481	128.53	99.60	0.0	1.0	6.805	A
3	4.00	4.00	160.39	211.89	0.019	3.98	0.99	0.0	0.0	4.328	A
4	75.88	75.88	14.78	327.24	0.232	75.55	149.60	0.0	0.3	3.872	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.32	52.32	76.09	286.34	0.183	52.36	29.38	0.3	0.2	3.870	A
2	153.09	153.09	21.05	275.61	0.555	152.75	107.39	1.0	1.3	7.821	A
3	3.00	3.00	171.81	205.62	0.015	3.00	1.99	0.0	0.0	4.441	A
4	88.38	88.38	17.16	325.84	0.271	88.31	157.66	0.3	0.4	4.083	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	76.46	76.46	95.52	275.03	0.278	76.30	33.81	0.2	0.4	4.552	A
2	132.88	132.88	30.94	270.21	0.492	133.14	140.89	1.3	1.1	7.049	A
3	4.00	4.00	163.07	210.42	0.019	4.00	1.01	0.0	0.0	4.359	A
4	105.89	105.89	23.56	322.10	0.329	105.76	143.50	0.4	0.5	4.492	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	54.26	54.26	82.82	282.42	0.192	54.40	43.20	0.4	0.2	3.969	A
2	120.08	120.08	29.03	271.25	0.443	120.27	108.20	1.1	0.9	6.401	A
3	2.00	2.00	148.30	218.53	0.009	2.01	1.00	0.0	0.0	4.156	A
4	99.07	99.07	26.91	320.15	0.309	99.11	123.40	0.5	0.5	4.385	A

2027 With Jacks Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.57	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	83	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2027 With Jacks Development	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	17.00	0.00	4.00
	2	32.00	0.00	0.00	82.00
	3	0.00	0.00	0.00	1.00
	4	14.00	140.00	1.00	0.00

17:15 - 17:30

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	24.00	0.00	4.00
	2	25.00	0.00	1.00	58.00
	3	0.00	3.00	0.00	2.00
	4	35.00	70.00	1.00	0.00

17:30 - 17:45

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	14.00	2.00	10.00
	2	30.00	0.00	3.00	56.00
	3	0.00	0.00	0.00	2.00
	4	15.00	87.00	4.00	0.00

17:45 - 18:00

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	14.00	0.00	10.00
	2	29.00	0.00	1.00	58.00
	3	0.00	3.00	0.00	1.00
	4	21.00	78.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	4
	2	3	0	0	2
	3	0	0	0	0
	4	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.10	4.12	0.1	A	25.38	101.50
2	0.41	5.44	0.7	A	95.89	383.56
3	0.02	3.86	0.0	A	3.00	12.00
4	0.51	6.01	1.1	A	121.65	486.60

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.50	21.50	147.01	245.07	0.088	21.40	46.81	0.0	0.1	4.117	A
2	116.60	116.60	5.13	284.30	0.410	115.90	163.28	0.0	0.7	5.443	A
3	1.00	1.00	120.04	234.05	0.004	1.00	0.99	0.0	0.0	3.861	A
4	162.14	162.14	32.76	316.73	0.512	161.06	88.27	0.0	1.1	6.008	A

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.64	28.64	78.10	285.17	0.100	28.62	61.08	0.1	0.1	3.587	A
2	85.91	85.91	5.16	284.28	0.302	86.17	101.56	0.7	0.4	4.653	A
3	5.00	5.00	89.34	250.90	0.020	4.98	2.00	0.0	0.0	3.659	A
4	109.85	109.85	28.80	319.04	0.344	110.38	65.52	1.1	0.5	4.481	A

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26.68	26.68	95.26	275.19	0.097	26.68	46.12	0.1	0.1	3.718	A
2	91.02	91.02	16.35	278.17	0.327	90.97	105.59	0.4	0.5	4.915	A
3	2.00	2.00	98.36	245.95	0.008	2.01	8.97	0.0	0.0	3.691	A
4	110.50	110.50	30.88	317.83	0.348	110.49	69.49	0.5	0.6	4.524	A

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.68	24.68	85.96	280.60	0.088	24.69	51.06	0.1	0.1	3.615	A
2	90.03	90.03	11.42	280.87	0.321	90.04	99.22	0.5	0.5	4.826	A
3	4.00	4.00	99.43	245.36	0.016	3.99	2.03	0.0	0.0	3.727	A
4	104.11	104.11	32.86	316.67	0.329	104.15	70.56	0.6	0.5	4.411	A

2027 With 7 Acres Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.02	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	65	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2027 With 7 Acres Development	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To			
		1	2	3	4
From	1	0.00	27.00	0.00	33.00
	2	1.00	0.00	1.00	111.00
	3	0.00	3.00	0.00	1.00
	4	6.00	65.00	0.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To			
		1	2	3	4
From	1	0.00	32.00	0.00	20.00
	2	15.00	0.00	1.00	129.00
	3	0.00	1.00	0.00	2.00
	4	13.00	68.00	1.00	0.00

Demand (Veh/TS)

08:30 - 08:45

		To			
		1	2	3	4
From	1	0.00	46.00	0.00	30.00
	2	20.00	0.00	0.00	106.00
	3	0.00	2.00	0.00	2.00
	4	12.00	86.00	1.00	0.00

Demand (Veh/TS)

08:45 - 09:00

		To			
		1	2	3	4
From	1	0.00	26.00	0.00	28.00
	2	24.00	0.00	0.00	90.00
	3	1.00	0.00	0.00	1.00
	4	16.00	76.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	8	0	0	6
	3	0	0	0	0
	4	2	9	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.28	4.57	0.4	A	60.83	243.31
2	0.56	7.79	1.3	A	132.24	528.96
3	0.02	4.45	0.0	A	3.25	13.00
4	0.33	4.51	0.5	A	93.12	372.49

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	60.27	60.27	73.54	287.82	0.209	60.01	7.17	0.0	0.3	3.964	A
2	119.74	119.74	32.86	269.16	0.445	118.90	100.69	0.0	0.8	6.312	A
3	4.00	4.00	150.76	217.18	0.018	3.98	0.99	0.0	0.0	4.221	A
4	76.97	76.97	4.06	333.50	0.231	76.65	150.69	0.0	0.3	3.793	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.32	52.32	76.09	286.34	0.183	52.36	29.29	0.3	0.2	3.872	A
2	153.94	153.94	21.05	275.61	0.559	153.46	107.39	0.8	1.3	7.791	A
3	3.00	3.00	172.52	205.23	0.015	3.00	1.99	0.0	0.0	4.451	A
4	88.38	88.38	17.08	325.89	0.271	88.30	158.45	0.3	0.4	4.082	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	76.46	76.46	96.60	274.40	0.279	76.30	33.81	0.2	0.4	4.566	A
2	133.96	133.96	30.93	270.21	0.496	134.22	141.97	1.3	1.1	7.049	A
3	4.00	4.00	164.14	209.83	0.019	4.00	1.01	0.0	0.0	4.372	A
4	106.98	106.98	23.56	322.10	0.332	106.85	144.58	0.4	0.5	4.515	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	54.26	54.26	83.91	281.79	0.193	54.41	43.20	0.4	0.2	3.980	A
2	121.32	121.32	29.03	271.25	0.447	121.51	109.29	1.1	0.9	6.406	A
3	2.00	2.00	149.54	217.85	0.009	2.01	1.00	0.0	0.0	4.169	A
4	100.16	100.16	26.91	320.15	0.313	100.20	124.64	0.5	0.5	4.409	A

2027 with 7 Acres Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	81	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2027 with 7 Acres Development	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To			
		1	2	3	4
From	1	0.00	17.00	0.00	4.00
	2	32.00	0.00	0.00	82.00
	3	0.00	0.00	0.00	1.00
	4	14.00	142.00	1.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To			
		1	2	3	4
From	1	0.00	24.00	0.00	4.00
	2	25.00	0.00	1.00	58.00
	3	0.00	3.00	0.00	2.00
	4	35.00	72.00	1.00	0.00

17:30 - 17:45

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	14.00	2.00	10.00
	2	30.00	0.00	3.00	56.00
	3	0.00	0.00	0.00	2.00
	4	15.00	89.00	4.00	0.00

17:45 - 18:00

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	14.00	0.00	10.00
	2	29.00	0.00	1.00	58.00
	3	0.00	3.00	0.00	1.00
	4	21.00	79.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	4
	2	3	0	0	2
	3	0	0	0	0
	4	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.10	4.14	0.1	A	25.38	101.50
2	0.41	5.44	0.7	A	95.89	383.56
3	0.02	3.86	0.0	A	3.00	12.00
4	0.52	6.09	1.1	A	123.49	493.95

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.50	21.50	149.08	243.86	0.088	21.40	46.81	0.0	0.1	4.140	A
2	116.60	116.60	5.13	284.30	0.410	115.90	165.35	0.0	0.7	5.443	A
3	1.00	1.00	120.04	234.05	0.004	1.00	0.99	0.0	0.0	3.861	A
4	164.24	164.24	32.76	316.73	0.519	163.13	88.27	0.0	1.1	6.086	A

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.64	28.64	80.22	283.94	0.101	28.62	61.08	0.1	0.1	3.604	A
2	85.91	85.91	5.16	284.28	0.302	86.17	103.68	0.7	0.4	4.651	A
3	5.00	5.00	89.34	250.90	0.020	4.98	2.00	0.0	0.0	3.659	A
4	111.95	111.95	28.80	319.04	0.351	112.50	65.52	1.1	0.6	4.528	A

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26.68	26.68	97.36	273.96	0.097	26.68	46.12	0.1	0.1	3.733	A
2	91.02	91.02	16.35	278.17	0.327	90.97	107.69	0.4	0.5	4.915	A
3	2.00	2.00	98.36	245.95	0.008	2.01	8.97	0.0	0.0	3.691	A
4	112.60	112.60	30.88	317.83	0.354	112.59	69.49	0.6	0.6	4.571	A

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.68	24.68	87.01	279.98	0.088	24.69	51.06	0.1	0.1	3.627	A
2	90.03	90.03	11.42	280.86	0.321	90.04	100.28	0.5	0.5	4.825	A
3	4.00	4.00	99.43	245.36	0.016	3.99	2.03	0.0	0.0	3.727	A
4	105.16	105.16	32.86	316.67	0.332	105.21	70.56	0.6	0.5	4.433	A

2027 Stress Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.05	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	63	Arm 2

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2027 Stress Test	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

08:00 - 08:15

		To			
		1	2	3	4
From	1	0.00	27.00	0.00	33.00
	2	11.00	0.00	1.00	111.00
	3	0.00	3.00	0.00	1.00
	4	6.00	66.00	0.00	0.00

Demand (Veh/TS)

08:15 - 08:30

		To			
		1	2	3	4
From	1	0.00	32.00	0.00	20.00
	2	15.00	0.00	1.00	129.00
	3	0.00	1.00	0.00	2.00
	4	13.00	69.00	1.00	0.00

08:30 - 08:45

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	46.00	0.00	30.00
	2	20.00	0.00	0.00	107.00
	3	0.00	2.00	0.00	2.00
	4	12.00	86.00	1.00	0.00

08:45 - 09:00

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	26.00	0.00	28.00
	2	24.00	0.00	0.00	91.00
	3	1.00	0.00	0.00	1.00
	4	16.00	77.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	1	0	0
	2	8	0	0	6
	3	0	0	0	0
	4	2	9	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.28	4.57	0.4	A	60.83	243.31
2	0.56	7.81	1.3	A	135.47	541.88
3	0.02	4.45	0.0	A	3.25	13.00
4	0.33	4.51	0.5	A	93.94	375.76

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	60.27	60.27	74.61	287.20	0.210	60.00	17.88	0.0	0.3	3.975	A
2	130.54	130.54	32.85	269.16	0.485	129.56	101.76	0.0	1.0	6.795	A
3	4.00	4.00	161.42	211.33	0.019	3.98	0.99	0.0	0.0	4.340	A
4	78.06	78.06	14.78	327.24	0.239	77.72	150.62	0.0	0.3	3.906	A

08:15 - 08:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	52.32	52.32	77.19	285.70	0.183	52.36	29.38	0.3	0.2	3.882	A
2	153.94	153.94	21.05	275.61	0.559	153.61	108.49	1.0	1.3	7.810	A
3	3.00	3.00	172.67	205.15	0.015	3.00	1.99	0.0	0.0	4.451	A
4	89.47	89.47	17.16	325.84	0.275	89.40	158.51	0.3	0.4	4.102	A

08:30 - 08:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	76.46	76.46	96.61	274.40	0.279	76.30	33.81	0.2	0.4	4.566	A
2	135.02	135.02	30.93	270.21	0.500	135.26	141.97	1.3	1.1	7.105	A
3	4.00	4.00	165.19	209.26	0.019	4.00	1.01	0.0	0.0	4.384	A
4	106.98	106.98	23.56	322.10	0.332	106.85	145.62	0.4	0.5	4.515	A

08:45 - 09:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	54.26	54.26	84.99	281.16	0.193	54.40	43.20	0.4	0.2	3.991	A
2	122.38	122.38	29.03	271.25	0.451	122.57	110.37	1.1	0.9	6.449	A
3	2.00	2.00	150.60	217.27	0.009	2.01	1.00	0.0	0.0	4.182	A
4	101.25	101.25	26.91	320.15	0.316	101.28	125.70	0.5	0.5	4.429	A

2027 Stress Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.62	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	81	Arm 4

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2027 Stress Test	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
1		DIRECT	✓	100.000
2		DIRECT	✓	100.000
3		DIRECT	✓	100.000
4		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

17:00 - 17:15

		To			
		1	2	3	4
From	1	0.00	17.00	0.00	4.00
	2	32.00	0.00	0.00	83.00
	3	0.00	0.00	0.00	1.00
	4	14.00	142.00	1.00	0.00

Demand (Veh/TS)

17:15 - 17:30

		To			
		1	2	3	4
From	1	0.00	24.00	0.00	4.00
	2	25.00	0.00	1.00	58.00
	3	0.00	3.00	0.00	2.00
	4	35.00	72.00	1.00	0.00

17:30 - 17:45

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	14.00	2.00	10.00
	2	30.00	0.00	3.00	57.00
	3	0.00	0.00	0.00	2.00
	4	15.00	89.00	4.00	0.00

17:45 - 18:00

Demand (Veh/TS)

		To			
		1	2	3	4
From	1	0.00	14.00	0.00	10.00
	2	29.00	0.00	1.00	58.00
	3	0.00	3.00	0.00	1.00
	4	21.00	79.00	1.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	2	0	4
	2	3	0	0	2
	3	0	0	0	0
	4	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/TS)	Total Junction Arrivals (PCU)
1	0.10	4.14	0.1	A	25.38	101.50
2	0.41	5.48	0.7	A	96.40	385.60
3	0.02	3.87	0.0	A	3.00	12.00
4	0.52	6.09	1.1	A	123.49	493.95

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	21.50	21.50	149.08	243.86	0.088	21.40	46.80	0.0	0.1	4.140	A
2	117.62	117.62	5.13	284.30	0.414	116.91	165.35	0.0	0.7	5.476	A
3	1.00	1.00	121.05	233.49	0.004	1.00	0.99	0.0	0.0	3.870	A
4	164.24	164.24	32.76	316.73	0.519	163.13	89.28	0.0	1.1	6.086	A

17:15 - 17:30

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	28.64	28.64	80.22	283.94	0.101	28.62	61.08	0.1	0.1	3.604	A
2	85.91	85.91	5.16	284.28	0.302	86.18	103.68	0.7	0.4	4.653	A
3	5.00	5.00	89.35	250.89	0.020	4.98	2.00	0.0	0.0	3.659	A
4	111.95	111.95	28.80	319.04	0.351	112.50	65.53	1.1	0.6	4.530	A

17:30 - 17:45

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	26.68	26.68	97.36	273.96	0.097	26.68	46.12	0.1	0.1	3.736	A
2	92.04	92.04	16.35	278.17	0.331	91.98	107.69	0.4	0.5	4.942	A
3	2.00	2.00	99.37	245.39	0.008	2.01	8.97	0.0	0.0	3.697	A
4	112.60	112.60	30.88	317.83	0.354	112.59	70.50	0.6	0.6	4.571	A

17:45 - 18:00

Arm	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Circulating flow (PCU/TS)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Throughput (exit side) (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	24.68	24.68	87.01	279.98	0.088	24.69	51.06	0.1	0.1	3.627	A
2	90.03	90.03	11.42	280.86	0.321	90.05	100.28	0.5	0.5	4.827	A
3	4.00	4.00	99.44	245.36	0.016	3.99	2.03	0.0	0.0	3.727	A
4	105.16	105.16	32.86	316.67	0.332	105.21	70.56	0.6	0.5	4.432	A

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Smiths Green-Dunmow Road.j9
Path: C:\Users\CharlotteHiscott\Motion\StaffSite - wetak2 2007045\Analysis\Junctions9\September 2022 Modelling
Report generation date: 15/09/2022 16:38:32

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2027 Base											
Stream B-C	D1	0.0	7.93	0.03	A	152 %	D2	0.0	9.66	0.03	A	127 %
Stream B-A		0.3	10.01	0.25	B			0.4	10.50	0.30	B	
Stream C-AB		0.3	6.54	0.25	A	[Stream B-A]		0.2	5.90	0.16	A	[Stream B-A]
	2027 with Jacks Development											
Stream B-C	D3	0.0	7.85	0.03	A	148 %	D4	0.0	6.10	0.02	A	126 %
Stream B-A		0.3	10.10	0.26	B			0.4	10.55	0.30	B	
Stream C-AB		0.3	6.54	0.25	A	[Stream B-A]		0.2	5.91	0.16	A	[Stream B-A]
	2027 with 7 Acres Development											
Stream B-C	D5	0.0	7.94	0.03	A	151 %	D6	0.1	12.69	0.04	B	126 %
Stream B-A		0.3	10.03	0.25	B			0.4	10.52	0.30	B	
Stream C-AB		0.3	6.53	0.25	A	[Stream B-A]		0.2	5.90	0.16	A	[Stream B-A]
	2027 Stress Test											
Stream B-C	D7	0.0	7.85	0.03	A	148 %	D8	0.1	12.28	0.04	B	125 %
Stream B-A		0.3	10.10	0.26	B			0.4	10.55	0.30	B	
Stream C-AB		0.4	6.54	0.25	A	[Stream B-A]		0.2	5.91	0.16	A	[Stream B-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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Westons Business Park Access
Location	Takeley
Site number	
Date	04/03/2021
Version	
Status	(new file)
Identifier	wetak2
Client	Weston Homes
Jobnumber	
Enumerator	MOTION\GuestReading
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	PCU	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2027 Base	AM	DIRECT	08:00	09:00	60	15	✓
D2	2027 Base	PM	DIRECT	17:00	18:00	60	15	✓
D3	2027 with Jacks Development	AM	DIRECT	08:00	09:00	60	15	✓
D4	2027 with Jacks Development	PM	DIRECT	17:00	18:00	60	15	✓
D5	2027 with 7 Acres Development	AM	DIRECT	08:00	09:00	60	15	✓
D6	2027 with 7 Acres Development	PM	DIRECT	17:00	18:00	60	15	✓
D7	2027 Stress Test	AM	DIRECT	08:00	09:00	60	15	✓
D8	2027 Stress Test	PM	DIRECT	17:00	18:00	60	15	✓

Analysis Set Details

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

2027 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.98	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	152	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Parsonage Road North		Major
B	Site Access		Minor
C	Parsonage Road South		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	6.70			250.0	✓	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	8.40	3.30	2.75	2.40	2.40	✓	1.00	100	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	539	0.095	0.241	0.151	0.344
B-C	675	0.100	0.254	-	-
C-B	719	0.270	0.270	-	-

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 period length (min)	Time segment length (min)	Run automatically
D1	2027 Base	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	9
	B	75	0	10
	C	30	177	0

08:15 - 08:30

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	9
	B	80	0	13
	C	24	133	0

08:30 - 08:45

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	11
	B	98	0	9
	C	25	116	0

08:45 - 09:00

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	10
	B	119	0	14
	C	22	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	32
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.93	0.0	A	15	15
B-A	0.25	10.01	0.3	B	94	94
C-AB	0.25	6.54	0.3	A	149	149
C-A					23	23
A-B					0.25	0.25
A-C					10	10

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	642	0.021	13	0.0	0.0	7.558	A
B-A	76	19	471	0.161	75	0.0	0.2	9.175	A
C-AB	186	46	737	0.252	184	0.0	0.3	6.540	A
C-A	26	7			26				
A-B	0	0			0				
A-C	9	2			9				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	640	0.027	17	0.0	0.0	7.625	A
B-A	81	20	486	0.166	81	0.2	0.2	8.968	A
C-AB	138	35	733	0.189	139	0.3	0.2	6.099	A
C-A	23	6			23				
A-B	0	0			0				
A-C	9	2			9				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	631	0.019	12	0.0	0.0	7.681	A
B-A	99	25	491	0.201	99	0.2	0.3	9.254	A
C-AB	121	30	733	0.165	121	0.2	0.2	5.918	A
C-A	24	6			24				
A-B	1	0.25			1				
A-C	11	3			11				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	5	617	0.030	18	0.0	0.0	7.933	A
B-A	120	30	483	0.249	120	0.3	0.3	10.013	B
C-AB	149	37	732	0.204	149	0.2	0.3	6.213	A
C-A	20	5			20				
A-B	0	0			0				
A-C	10	3			10				

2027 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	127	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2027 Base	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

17:00 - 17:15

		To		
		A	B	C
From	A	0	0	22
	B	147	0	11
	C	16	110	0

Demand (Veh/hr)

17:15 - 17:30

		To		
		A	B	C
From	A	0	0	19
	B	146	0	1
	C	17	109	0

17:30 - 17:45

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	19
	B	101	0	3
	C	13	70	0

17:45 - 18:00

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	16
	B	0	0	0
	C	10	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	55
	C	18	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	9.66	0.0	A	6	6
B-A	0.30	10.50	0.4	B	99	99
C-AB	0.16	5.90	0.2	A	76	76
C-A					15	15
A-B					0	0
A-C					19	19

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	594	0.029	17	0.0	0.0	9.658	A
B-A	148	37	493	0.301	147	0.0	0.4	10.464	B
C-AB	113	28	724	0.156	112	0.0	0.2	5.898	A
C-A	16	4			16				
A-B	0	0			0				
A-C	22	6			22				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.39	594	0.003	2	0.0	0.0	9.429	A
B-A	147	37	494	0.299	147	0.4	0.4	10.503	B
C-AB	112	28	726	0.154	112	0.2	0.2	5.893	A
C-A	17	4			17				
A-B	0	0			0				
A-C	19	5			19				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	627	0.007	5	0.0	0.0	8.968	A
B-A	102	26	508	0.201	103	0.4	0.3	8.994	A
C-AB	72	18	723	0.099	72	0.2	0.1	5.553	A
C-A	14	3			14				
A-B	0	0			0				
A-C	19	5			19				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	0	671	0.000	0.05	0.0	0.0	0.000	A
B-A	0	0	530	0.000	1	0.3	0.0	0.000	A
C-AB	8	2	722	0.011	9	0.1	0.0	5.067	A
C-A	12	3			12				
A-B	0	0			0				
A-C	16	4			16				

2027 with Jacks Development, 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.02	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	148	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2027 with Jacks Development	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

08:00 - 08:15

		To		
		A	B	C
From	A	0	1	9
	B	78	0	11
	C	30	177	0

Demand (Veh/hr)

08:15 - 08:30

		To		
		A	B	C
From	A	0	1	9
	B	83	0	14
	C	24	133	0

08:30 - 08:45

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	11
	B	100	0	10
	C	25	116	0

08:45 - 09:00

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	1	10
	B	122	0	15
	C	22	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	30
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.85	0.0	A	16	16
B-A	0.26	10.10	0.3	B	97	97
C-AB	0.25	6.54	0.3	A	149	149
C-A					23	23
A-B					1	1
A-C					10	10

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	640	0.022	14	0.0	0.0	7.474	A
B-A	79	20	470	0.167	78	0.0	0.2	9.246	A
C-AB	186	46	737	0.252	184	0.0	0.3	6.543	A
C-A	26	7			26				
A-B	1	0.25			1				
A-C	9	2			9				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	5	639	0.028	18	0.0	0.0	7.540	A
B-A	84	21	486	0.172	84	0.2	0.2	9.038	A
C-AB	138	35	733	0.189	139	0.3	0.2	6.104	A
C-A	23	6			23				
A-B	1	0.25			1				
A-C	9	2			9				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	630	0.021	13	0.0	0.0	7.592	A
B-A	101	25	491	0.206	101	0.2	0.3	9.304	A
C-AB	121	30	733	0.165	121	0.2	0.2	5.921	A
C-A	24	6			24				
A-B	2	0.50			2				
A-C	11	3			11				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	615	0.032	19	0.0	0.0	7.850	A
B-A	123	31	483	0.255	123	0.3	0.3	10.101	B
C-AB	149	37	731	0.204	149	0.2	0.3	6.216	A
C-A	20	5			20				
A-B	1	0.25			1				
A-C	10	3			10				

2027 with Jacks Development, 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.09	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	126	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2027 with Jacks Development	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

17:00 - 17:15

		To		
		A	B	C
From	A	0	2	22
	B	148	0	12
	C	16	111	0

Demand (Veh/hr)

17:15 - 17:30

		To		
		A	B	C
From	A	0	2	19
	B	147	0	1
	C	17	110	0

17:30 - 17:45

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	19
	B	102	0	3
	C	13	71	0

17:45 - 18:00

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	16
	B	1	0	0
	C	10	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	0
	C	18	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	6.10	0.0	A	4	4
B-A	0.30	10.55	0.4	B	100	100
C-AB	0.16	5.91	0.2	A	77	77
C-A					15	15
A-B					2	2
A-C					19	19

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	602	0.020	12	0.0	0.0	6.099	A
B-A	149	37	492	0.304	148	0.0	0.4	10.499	B
C-AB	114	28	724	0.157	113	0.0	0.2	5.913	A
C-A	16	4			16				
A-B	2	0.50			2				
A-C	22	6			22				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	1	0.25	602	0.002	1	0.0	0.0	5.994	A
B-A	148	37	493	0.301	148	0.4	0.4	10.550	B
C-AB	113	28	725	0.156	113	0.2	0.2	5.905	A
C-A	17	4			17				
A-B	2	0.50			2				
A-C	19	5			19				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3	0.75	630	0.005	3	0.0	0.0	5.740	A
B-A	103	26	507	0.203	104	0.4	0.3	9.026	A
C-AB	73	18	722	0.100	73	0.2	0.1	5.569	A
C-A	14	3			14				
A-B	2	0.50			2				
A-C	19	5			19				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	0	670	0.000	0.02	0.0	0.0	0.000	A
B-A	1	0.25	530	0.002	2	0.3	0.0	6.903	A
C-AB	9	2	721	0.013	10	0.1	0.0	5.078	A
C-A	12	3			12				
A-B	2	0.50			2				
A-C	16	4			16				

2027 with 7 Acres Development, 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	151	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2027 with 7 Acres Development	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

08:00 - 08:15

		To		
		A	B	C
From	A	0	0	10
	B	75	0	10
	C	32	177	0

Demand (Veh/hr)

08:15 - 08:30

		To		
		A	B	C
From	A	0	0	10
	B	80	0	13
	C	26	133	0

08:30 - 08:45

Demand (Veh/hr)

From \ To	A	B	C
A	0	1	13
B	98	0	9
C	27	116	0

08:45 - 09:00

Demand (Veh/hr)

From \ To	A	B	C
A	0	0	11
B	119	0	14
C	24	144	0

Vehicle Mix

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	0
B	1	0	32
C	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.94	0.0	A	15	15
B-A	0.25	10.03	0.3	B	94	94
C-AB	0.25	6.53	0.3	A	149	149
C-A					25	25
A-B					0.25	0.25
A-C					11	11

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	642	0.021	13	0.0	0.0	7.561	A
B-A	76	19	470	0.161	75	0.0	0.2	9.187	A
C-AB	186	47	738	0.252	185	0.0	0.3	6.535	A
C-A	28	7			28				
A-B	0	0			0				
A-C	10	3			10				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	640	0.027	17	0.0	0.0	7.628	A
B-A	81	20	486	0.166	81	0.2	0.2	8.980	A
C-AB	139	35	734	0.189	139	0.3	0.2	6.094	A
C-A	24	6			24				
A-B	0	0			0				
A-C	10	3			10				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	630	0.019	12	0.0	0.0	7.688	A
B-A	99	25	491	0.202	99	0.2	0.3	9.272	A
C-AB	121	30	734	0.165	121	0.2	0.2	5.913	A
C-A	26	7			26				
A-B	1	0.25			1				
A-C	13	3			13				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	5	617	0.030	18	0.0	0.0	7.937	A
B-A	120	30	482	0.249	120	0.3	0.3	10.029	B
C-AB	150	37	733	0.204	149	0.2	0.3	6.208	A
C-A	22	6			22				
A-B	0	0			0				
A-C	11	3			11				

2027 with 7 Acres Development, 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	126	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2027 with 7 Acres Development	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

17:00 - 17:15

		To		
		A	B	C
From	A	0	0	24
	B	147	0	11
	C	17	110	0

Demand (Veh/hr)

17:15 - 17:30

		To		
		A	B	C
From	A	0	0	20
	B	146	0	1
	C	18	109	0

17:30 - 17:45

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	20
	B	101	0	3
	C	13	70	0

17:45 - 18:00

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	0	17
	B	0	0	0
	C	10	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	100
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	12.69	0.1	B	8	8
B-A	0.30	10.52	0.4	B	99	99
C-AB	0.16	5.90	0.2	A	76	76
C-A					15	15
A-B					0	0
A-C					20	20

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	6	589	0.037	22	0.0	0.1	12.694	B
B-A	148	37	491	0.302	147	0.0	0.4	10.498	B
C-AB	113	28	724	0.156	112	0.0	0.2	5.899	A
C-A	17	4			17				
A-B	0	0			0				
A-C	24	6			24				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.50	588	0.003	2	0.1	0.0	12.287	B
B-A	147	37	493	0.299	147	0.4	0.4	10.516	B
C-AB	112	28	726	0.155	112	0.2	0.2	5.889	A
C-A	18	4			18				
A-B	0	0			0				
A-C	20	5			20				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	624	0.010	6	0.0	0.0	11.648	B
B-A	102	26	507	0.201	103	0.4	0.3	9.000	A
C-AB	72	18	723	0.099	72	0.2	0.1	5.556	A
C-A	14	3			14				
A-B	0	0			0				
A-C	20	5			20				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	0	670	0.000	0.08	0.0	0.0	0.000	A
B-A	0	0	530	0.000	1	0.3	0.0	0.000	A
C-AB	8	2	721	0.011	9	0.1	0.0	5.069	A
C-A	12	3			12				
A-B	0	0			0				
A-C	17	4			17				

2027 Stress Test, 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	148	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2027 Stress Test	AM	DIRECT	08:00	09:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

08:00 - 08:15

		To		
		A	B	C
From	A	0	1	10
	B	78	0	11
	C	32	177	0

Demand (Veh/hr)

08:15 - 08:30

		To		
		A	B	C
From	A	0	1	9
	B	83	0	14
	C	24	133	0

08:30 - 08:45

Demand (Veh/hr)

From \ To	A	B	C
A	0	2	11
B	100	0	10
C	25	116	0

08:45 - 09:00

Demand (Veh/hr)

From \ To	A	B	C
A	0	1	10
B	122	0	15
C	22	144	0

Vehicle Mix

Heavy Vehicle Percentages

From \ To	A	B	C
A	0	0	0
B	1	0	30
C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.85	0.0	A	16	16
B-A	0.26	10.10	0.3	B	97	97
C-AB	0.25	6.54	0.4	A	149	149
C-A					24	24
A-B					1	1
A-C					10	10

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	640	0.022	14	0.0	0.0	7.478	A
B-A	79	20	470	0.168	78	0.0	0.2	9.260	A
C-AB	186	47	738	0.253	185	0.0	0.4	6.540	A
C-A	28	7			28				
A-B	1	0.25			1				
A-C	10	3			10				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	5	639	0.028	18	0.0	0.0	7.540	A
B-A	84	21	486	0.172	84	0.2	0.2	9.038	A
C-AB	138	35	733	0.189	139	0.4	0.2	6.106	A
C-A	23	6			23				
A-B	1	0.25			1				
A-C	9	2			9				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	630	0.021	13	0.0	0.0	7.589	A
B-A	101	25	491	0.206	101	0.2	0.3	9.304	A
C-AB	121	30	733	0.165	121	0.2	0.2	5.921	A
C-A	24	6			24				
A-B	2	0.50			2				
A-C	11	3			11				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	615	0.032	19	0.0	0.0	7.850	A
B-A	123	31	483	0.255	123	0.3	0.3	10.101	B
C-AB	149	37	731	0.204	149	0.2	0.3	6.216	A
C-A	20	5			20				
A-B	1	0.25			1				
A-C	10	3			10				

2027 Stress Test, 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.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.27	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	125	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2027 Stress Test	PM	DIRECT	17:00	18:00	60	15	✓

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	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/hr)

17:00 - 17:15

		To		
		A	B	C
From	A	0	2	24
	B	148	0	12
	C	17	111	0

Demand (Veh/hr)

17:15 - 17:30

		To		
		A	B	C
From	A	0	2	19
	B	147	0	1
	C	17	110	0

17:30 - 17:45

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	19
	B	102	0	3
	C	13	71	0

17:45 - 18:00

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	2	16
	B	1	0	0
	C	10	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	1	0	93
	C	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	12.28	0.1	B	8	8
B-A	0.30	10.55	0.4	B	100	100
C-AB	0.16	5.91	0.2	A	77	77
C-A					15	15
A-B					2	2
A-C					20	20

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	588	0.039	23	0.0	0.1	12.284	B
B-A	149	37	491	0.305	148	0.0	0.4	10.547	B
C-AB	114	29	724	0.158	113	0.0	0.2	5.914	A
C-A	17	4			17				
A-B	2	0.50			2				
A-C	24	6			24				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.48	588	0.003	2	0.1	0.0	11.859	B
B-A	148	37	493	0.301	148	0.4	0.4	10.550	B
C-AB	113	28	725	0.156	113	0.2	0.2	5.908	A
C-A	17	4			17				
A-B	2	0.50			2				
A-C	19	5			19				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	1	624	0.009	6	0.0	0.0	11.241	B
B-A	103	26	507	0.203	104	0.4	0.3	9.028	A
C-AB	73	18	722	0.100	73	0.2	0.1	5.566	A
C-A	14	3			14				
A-B	2	0.50			2				
A-C	19	5			19				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	0	0	670	0.000	0.07	0.0	0.0	0.000	A
B-A	1	0.25	530	0.002	2	0.3	0.0	6.900	A
C-AB	9	2	721	0.013	10	0.1	0.0	5.078	A
C-A	12	3			12				
A-B	2	0.50			2				
A-C	16	4			16				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Westons Business Park Access.j9
Path: C:\Users\calummcgoff\OneDrive - Motion\Desktop
Report generation date: 20/09/2022 10:35:34

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2027 Base											
Stream B-C	D3	0.1	6.41	0.06	A	61 % [Stream C-AB]	D4	0.5	9.08	0.32	A	69 % [Stream B-A]
Stream B-A		0.0	12.14	0.01	B			0.2	11.94	0.15	B	
Stream C-AB		1.0	7.55	0.38	A			0.1	4.99	0.04	A	
	2027 With Jacks Development											
Stream B-C	D5	0.1	6.41	0.06	A	61 % [Stream C-AB]	D6	0.5	9.08	0.32	A	69 % [Stream B-A]
Stream B-A		0.0	12.14	0.01	B			0.2	11.94	0.15	B	
Stream C-AB		1.0	7.55	0.38	A			0.1	4.99	0.04	A	
	2027 With 7 Acres Development											
Stream B-C	D7	0.1	6.77	0.11	A	42 % [Stream C-AB]	D8	0.6	9.93	0.38	A	56 % [Stream B-A]
Stream B-A		0.0	12.99	0.03	B			0.2	12.67	0.17	B	
Stream C-AB		1.5	9.05	0.49	A			0.2	5.10	0.08	A	
	2027 Stress Test											
Stream B-C	D9	0.1	6.77	0.11	A	42 % [Stream C-AB]	D10	0.6	9.93	0.38	A	56 % [Stream B-A]
Stream B-A		0.0	12.99	0.03	B			0.2	12.67	0.17	B	
Stream C-AB		1.5	9.05	0.49	A			0.2	5.10	0.08	A	

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

File summary

File Description

Title	Westons Business Park Access
Location	Takeley
Site number	
Date	04/03/2021
Version	
Status	(new file)
Identifier	wetak2
Client	Weston Homes
Jobnumber	
Enumerator	MOTION\GuestReading
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	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2027 Base	AM	ONE HOUR	08:00	09:30	15
D4	2027 Base	PM	ONE HOUR	17:00	18:30	15
D5	2027 With Jacks Development	AM	ONE HOUR	08:00	09:30	15
D6	2027 With Jacks Development	PM	ONE HOUR	17:00	18:30	15
D7	2027 With 7 Acres Development	AM	ONE HOUR	08:00	09:30	15
D8	2027 With 7 Acres Development	PM	ONE HOUR	17:00	18:30	15
D9	2027 Stress Test	AM	ONE HOUR	08:00	09:30	15
D10	2027 Stress Test	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Parsonage Road North		Major
B	Site Access		Minor
C	Parsonage Road South		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	6.30			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.10	3.80	3.25	3.25	✓	1.00	35	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	509	0.091	0.231	0.145	0.330
B-C	715	0.108	0.273	-	-
C-B	661	0.253	0.253	-	-

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)
D3	2027 Base	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	385	100.000
B		✓	37	100.000
C		✓	469	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	71	314
	B	3	0	34
	C	322	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.41	0.1	A
B-A	0.01	12.14	0.0	B
C-AB	0.38	7.55	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	635	0.040	25	0.0	5.900	A
B-A	2	367	0.006	2	0.0	9.881	A
C-AB	172	764	0.225	170	0.4	6.288	A
C-A	211			211			
A-B	53			53			
A-C	265			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	620	0.049	31	0.1	6.106	A
B-A	3	339	0.008	3	0.0	10.719	B
C-AB	225	788	0.286	225	0.6	6.673	A
C-A	231			231			
A-B	64			64			
A-C	316			316			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	599	0.063	37	0.1	6.414	A
B-A	3	300	0.011	3	0.0	12.125	B
C-AB	315	821	0.384	314	1.0	7.459	A
C-A	244			244			
A-B	78			78			
A-C	387			387			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	599	0.063	37	0.1	6.414	A
B-A	3	300	0.011	3	0.0	12.139	B
C-AB	316	822	0.384	316	1.0	7.546	A
C-A	243			243			
A-B	78			78			
A-C	387			387			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	620	0.049	31	0.1	6.110	A
B-A	3	338	0.008	3	0.0	10.737	B
C-AB	226	789	0.287	228	0.6	6.801	A
C-A	230			230			
A-B	64			64			
A-C	316			316			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	635	0.040	26	0.0	5.903	A
B-A	2	366	0.006	2	0.0	9.899	A
C-AB	173	765	0.225	173	0.4	6.375	A
C-A	210			210			
A-B	53			53			
A-C	265			265			

2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.50	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	69	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 Base	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	301	100.000
B		✓	222	100.000
C		✓	330	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	287
	B	50	0	172
	C	312	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	9.08	0.5	A
B-A	0.15	11.94	0.2	B
C-AB	0.04	4.99	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	628	0.206	128	0.3	7.185	A
B-A	38	411	0.092	37	0.1	9.612	A
C-AB	21	773	0.027	20	0.0	4.966	A
C-A	256			256			
A-B	11			11			
A-C	242			242			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	155	611	0.253	154	0.3	7.875	A
B-A	45	389	0.115	45	0.1	10.449	B
C-AB	27	797	0.034	27	0.0	4.868	A
C-A	304			304			
A-B	13			13			
A-C	289			289			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	586	0.323	189	0.5	9.051	A
B-A	55	357	0.154	55	0.2	11.915	B
C-AB	37	831	0.045	37	0.1	4.754	A
C-A	368			368			
A-B	15			15			
A-C	354			354			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	586	0.323	189	0.5	9.078	A
B-A	55	357	0.154	55	0.2	11.935	B
C-AB	37	831	0.045	37	0.1	4.772	A
C-A	368			368			
A-B	15			15			
A-C	354			354			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	155	611	0.253	155	0.3	7.909	A
B-A	45	389	0.116	45	0.1	10.472	B
C-AB	27	797	0.034	27	0.0	4.908	A
C-A	304			304			
A-B	13			13			
A-C	289			289			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	628	0.206	130	0.3	7.230	A
B-A	38	411	0.092	38	0.1	9.641	A
C-AB	21	773	0.027	21	0.0	4.987	A
C-A	256			256			
A-B	11			11			
A-C	242			242			

2027 With Jacks Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	Stream C-AB

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)
D5	2027 With Jacks Development	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	385	100.000
B		✓	37	100.000
C		✓	469	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	71	314
	B	3	0	34
	C	322	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.41	0.1	A
B-A	0.01	12.14	0.0	B
C-AB	0.38	7.55	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	635	0.040	25	0.0	5.900	A
B-A	2	367	0.006	2	0.0	9.881	A
C-AB	172	764	0.225	170	0.4	6.288	A
C-A	211			211			
A-B	53			53			
A-C	265			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	620	0.049	31	0.1	6.106	A
B-A	3	339	0.008	3	0.0	10.719	B
C-AB	225	788	0.286	225	0.6	6.673	A
C-A	231			231			
A-B	64			64			
A-C	316			316			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	599	0.063	37	0.1	6.414	A
B-A	3	300	0.011	3	0.0	12.125	B
C-AB	315	821	0.384	314	1.0	7.459	A
C-A	244			244			
A-B	78			78			
A-C	387			387			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	599	0.063	37	0.1	6.414	A
B-A	3	300	0.011	3	0.0	12.139	B
C-AB	316	822	0.384	316	1.0	7.546	A
C-A	243			243			
A-B	78			78			
A-C	387			387			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	620	0.049	31	0.1	6.110	A
B-A	3	338	0.008	3	0.0	10.737	B
C-AB	226	789	0.287	228	0.6	6.801	A
C-A	230			230			
A-B	64			64			
A-C	316			316			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	635	0.040	26	0.0	5.903	A
B-A	2	366	0.006	2	0.0	9.899	A
C-AB	173	765	0.225	173	0.4	6.375	A
C-A	210			210			
A-B	53			53			
A-C	265			265			

2027 With Jacks Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.50	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	69	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 With Jacks Development	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	301	100.000
B		✓	222	100.000
C		✓	330	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	287
	B	50	0	172
	C	312	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	9.08	0.5	A
B-A	0.15	11.94	0.2	B
C-AB	0.04	4.99	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	628	0.206	128	0.3	7.185	A
B-A	38	411	0.092	37	0.1	9.612	A
C-AB	21	773	0.027	20	0.0	4.966	A
C-A	256			256			
A-B	11			11			
A-C	242			242			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	155	611	0.253	154	0.3	7.875	A
B-A	45	389	0.115	45	0.1	10.449	B
C-AB	27	797	0.034	27	0.0	4.868	A
C-A	304			304			
A-B	13			13			
A-C	289			289			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	586	0.323	189	0.5	9.051	A
B-A	55	357	0.154	55	0.2	11.915	B
C-AB	37	831	0.045	37	0.1	4.754	A
C-A	368			368			
A-B	15			15			
A-C	354			354			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	586	0.323	189	0.5	9.078	A
B-A	55	357	0.154	55	0.2	11.935	B
C-AB	37	831	0.045	37	0.1	4.772	A
C-A	368			368			
A-B	15			15			
A-C	354			354			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	155	611	0.253	155	0.3	7.909	A
B-A	45	389	0.116	45	0.1	10.472	B
C-AB	27	797	0.034	27	0.0	4.908	A
C-A	304			304			
A-B	13			13			
A-C	289			289			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	628	0.206	130	0.3	7.230	A
B-A	38	411	0.092	38	0.1	9.641	A
C-AB	21	773	0.027	21	0.0	4.987	A
C-A	256			256			
A-B	11			11			
A-C	242			242			

2027 With 7 Acres Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	42	Stream C-AB

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)
D7	2027 With 7 Acres Development	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	390	100.000
B		✓	65	100.000
C		✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	76	314
	B	7	0	58
	C	322	185	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.11	6.77	0.1	A
B-A	0.03	12.99	0.0	B
C-AB	0.49	9.05	1.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	634	0.069	43	0.1	6.096	A
B-A	5	357	0.015	5	0.0	10.241	B
C-AB	216	764	0.283	214	0.6	6.798	A
C-A	195			195			
A-B	57			57			
A-C	265			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	618	0.084	52	0.1	6.364	A
B-A	6	327	0.019	6	0.0	11.240	B
C-AB	284	787	0.361	283	0.8	7.457	A
C-A	206			206			
A-B	68			68			
A-C	316			316			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	596	0.107	64	0.1	6.767	A
B-A	8	285	0.027	8	0.0	12.961	B
C-AB	397	820	0.484	395	1.4	8.894	A
C-A	204			204			
A-B	84			84			
A-C	387			387			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	596	0.107	64	0.1	6.770	A
B-A	8	285	0.027	8	0.0	12.989	B
C-AB	398	821	0.485	398	1.5	9.053	A
C-A	202			202			
A-B	84			84			
A-C	387			387			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	618	0.084	52	0.1	6.367	A
B-A	6	326	0.019	6	0.0	11.274	B
C-AB	285	788	0.362	288	0.9	7.649	A
C-A	205			205			
A-B	68			68			
A-C	316			316			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	634	0.069	44	0.1	6.103	A
B-A	5	356	0.015	5	0.0	10.271	B
C-AB	217	765	0.284	219	0.6	6.922	A
C-A	193			193			
A-B	57			57			
A-C	265			265			

2027 With 7 Acres Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.03	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	56	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2027 With 7 Acres Development	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	303	100.000
B		✓	254	100.000
C		✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	16	287
	B	54	0	200
	C	312	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.38	9.93	0.6	A
B-A	0.17	12.67	0.2	B
C-AB	0.08	5.10	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	627	0.240	149	0.3	7.509	A
B-A	41	404	0.101	40	0.1	9.872	A
C-AB	37	773	0.047	36	0.1	5.074	A
C-A	251			251			
A-B	12			12			
A-C	242			242			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	609	0.295	179	0.4	8.366	A
B-A	49	380	0.128	48	0.1	10.846	B
C-AB	48	796	0.060	48	0.1	5.006	A
C-A	295			295			
A-B	14			14			
A-C	289			289			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	583	0.378	219	0.6	9.889	A
B-A	59	344	0.173	59	0.2	12.639	B
C-AB	66	831	0.079	66	0.2	4.936	A
C-A	354			354			
A-B	18			18			
A-C	354			354			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	583	0.378	220	0.6	9.933	A
B-A	59	344	0.173	59	0.2	12.668	B
C-AB	66	831	0.079	66	0.2	4.956	A
C-A	354			354			
A-B	18			18			
A-C	354			354			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	609	0.295	181	0.4	8.415	A
B-A	49	380	0.128	49	0.1	10.880	B
C-AB	48	797	0.060	48	0.1	5.051	A
C-A	295			295			
A-B	14			14			
A-C	289			289			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	627	0.240	151	0.3	7.566	A
B-A	41	404	0.101	41	0.1	9.911	A
C-AB	37	773	0.047	37	0.1	5.098	A
C-A	251			251			
A-B	12			12			
A-C	242			242			

2027 Stress Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	42	Stream C-AB

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)
D9	2027 Stress Test	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	390	100.000
B		✓	65	100.000
C		✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	76	314
	B	7	0	58
	C	322	185	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.11	6.77	0.1	A
B-A	0.03	12.99	0.0	B
C-AB	0.49	9.05	1.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	634	0.069	43	0.1	6.096	A
B-A	5	357	0.015	5	0.0	10.241	B
C-AB	216	764	0.283	214	0.6	6.798	A
C-A	195			195			
A-B	57			57			
A-C	265			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	618	0.084	52	0.1	6.364	A
B-A	6	327	0.019	6	0.0	11.240	B
C-AB	284	787	0.361	283	0.8	7.457	A
C-A	206			206			
A-B	68			68			
A-C	316			316			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	596	0.107	64	0.1	6.767	A
B-A	8	285	0.027	8	0.0	12.961	B
C-AB	397	820	0.484	395	1.4	8.894	A
C-A	204			204			
A-B	84			84			
A-C	387			387			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	596	0.107	64	0.1	6.770	A
B-A	8	285	0.027	8	0.0	12.989	B
C-AB	398	821	0.485	398	1.5	9.053	A
C-A	202			202			
A-B	84			84			
A-C	387			387			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	618	0.084	52	0.1	6.367	A
B-A	6	326	0.019	6	0.0	11.274	B
C-AB	285	788	0.362	288	0.9	7.649	A
C-A	205			205			
A-B	68			68			
A-C	316			316			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	634	0.069	44	0.1	6.103	A
B-A	5	356	0.015	5	0.0	10.271	B
C-AB	217	765	0.284	219	0.6	6.922	A
C-A	193			193			
A-B	57			57			
A-C	265			265			

2027 Stress Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.03	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	56	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2027 Stress Test	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	303	100.000
B		✓	254	100.000
C		✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	16	287
	B	54	0	200
	C	312	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.38	9.93	0.6	A
B-A	0.17	12.67	0.2	B
C-AB	0.08	5.10	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	627	0.240	149	0.3	7.509	A
B-A	41	404	0.101	40	0.1	9.872	A
C-AB	37	773	0.047	36	0.1	5.074	A
C-A	251			251			
A-B	12			12			
A-C	242			242			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	609	0.295	179	0.4	8.366	A
B-A	49	380	0.128	48	0.1	10.846	B
C-AB	48	796	0.060	48	0.1	5.006	A
C-A	295			295			
A-B	14			14			
A-C	289			289			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	583	0.378	219	0.6	9.889	A
B-A	59	344	0.173	59	0.2	12.639	B
C-AB	66	831	0.079	66	0.2	4.936	A
C-A	354			354			
A-B	18			18			
A-C	354			354			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	583	0.378	220	0.6	9.933	A
B-A	59	344	0.173	59	0.2	12.668	B
C-AB	66	831	0.079	66	0.2	4.956	A
C-A	354			354			
A-B	18			18			
A-C	354			354			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	609	0.295	181	0.4	8.415	A
B-A	49	380	0.128	49	0.1	10.880	B
C-AB	48	797	0.060	48	0.1	5.051	A
C-A	295			295			
A-B	14			14			
A-C	289			289			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	627	0.240	151	0.3	7.566	A
B-A	41	404	0.101	41	0.1	9.911	A
C-AB	37	773	0.047	37	0.1	5.098	A
C-A	251			251			
A-B	12			12			
A-C	242			242			

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Hall Road Mini Rbt 2027.j9
Path: C:\Users\calummcgoff\OneDrive - Motion\Desktop
Report generation date: 23/09/2022 08:45:54

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Network Residual Capacity
2027 Base														
Arm 1	D1	1.6	13.99	0.60	B	D	-6 % [Arm 2]	D2	3.4	22.49	0.76	C	C	10 % [Arm 1]
Arm 2		7.2	49.08	0.89	E				2.0	18.69	0.65	C		
Arm 3		1.4	14.25	0.56	B				1.2	12.14	0.54	B		
2027 With Jacks Development														
Arm 1	D3	1.6	13.99	0.60	B	D	-6 % [Arm 2]	D4	3.5	22.77	0.77	C	C	10 % [Arm 1]
Arm 2		7.2	49.08	0.89	E				2.0	18.94	0.65	C		
Arm 3		1.4	14.25	0.56	B				1.2	11.85	0.52	B		
2027 With 7 Acres Development														
Arm 1	D5	1.7	14.32	0.61	B	D	-6 % [Arm 2]	D6	3.5	23.05	0.77	C	C	10 % [Arm 1]
Arm 2		7.5	51.18	0.89	F				2.0	19.06	0.66	C		
Arm 3		1.4	14.41	0.57	B				1.2	12.01	0.53	B		
2027 Stress Test														
Arm 1	D7	1.7	14.32	0.61	B	D	-6 % [Arm 2]	D8	3.5	23.05	0.77	C	C	10 % [Arm 1]
Arm 2		7.5	51.18	0.89	F				2.0	19.06	0.66	C		
Arm 3		1.4	14.41	0.57	B				1.2	12.01	0.53	B		

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

File summary

File Description

Title	
Location	
Site number	
Date	01/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\GuestReading
Description	

Units

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

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9		✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2027 Base	AM	ONE HOUR	08:00	09:30	15
D2	2027 Base	PM	ONE HOUR	17:00	18:30	15
D3	2027 With Jacks Development	AM	ONE HOUR	08:00	09:30	15
D4	2027 With Jacks Development	PM	ONE HOUR	17:00	18:30	15
D5	2027 With 7 Acres Development	AM	ONE HOUR	08:00	09:30	15
D6	2027 With 7 Acres Development	PM	ONE HOUR	17:00	18:30	15
D7	2027 Stress Test	AM	ONE HOUR	08:00	09:30	15
D8	2027 Stress Test	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2027 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	28.68	D

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-6	Arm 2

Arms

Arms

Arm	Name	Description
1	Parsonage Road North	
2	Hall Road	
3	Parsonage Road South	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.65	3.65	4.30	4.0	16.00	6.50	0.0	
2	3.30	3.30	3.30	0.0	19.50	14.50	0.0	
3	3.00	3.00	4.20	5.0	19.00	12.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.631	824
2	0.621	740
3	0.621	875

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)
D1	2027 Base	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	391	100.000
2		✓	512	100.000
3		✓	326	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	237	154
	2	351	0	161
	3	167	159	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.60	13.99	1.6	B
2	0.89	49.08	7.2	E
3	0.56	14.25	1.4	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	294	119	749	0.393	292	0.7	8.611	A
2	385	115	668	0.577	380	1.4	13.467	B
3	245	260	713	0.344	243	0.6	8.385	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	142	734	0.479	350	1.0	10.299	B
2	460	138	654	0.704	456	2.4	19.626	C
3	293	313	681	0.431	292	0.8	10.166	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	174	714	0.603	428	1.6	13.738	B
2	564	169	635	0.888	548	6.3	39.935	E
3	359	376	641	0.560	357	1.4	13.809	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	175	713	0.604	430	1.6	13.989	B
2	564	170	634	0.889	560	7.2	49.077	E
3	359	384	636	0.564	359	1.4	14.251	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	144	733	0.480	354	1.0	10.522	B
2	460	139	653	0.705	478	2.8	24.422	C
3	293	327	671	0.436	295	0.9	10.580	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	294	120	748	0.394	296	0.7	8.783	A
2	385	116	667	0.578	391	1.6	14.557	B
3	245	268	709	0.346	247	0.6	8.592	A

2027 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	18.46	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		10	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2027 Base	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	513	100.000
2		✓	356	100.000
3		✓	341	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	313	200
	2	254	0	102
	3	219	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.76	22.49	3.4	C
2	0.65	18.69	2.0	C
3	0.54	12.14	1.2	B

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	386	91	766	0.504	382	1.1	10.195	B
2	268	149	647	0.414	265	0.8	10.283	B
3	257	189	757	0.339	254	0.6	7.839	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	461	109	755	0.611	459	1.7	13.284	B
2	320	179	629	0.509	319	1.1	12.718	B
3	307	227	734	0.418	306	0.8	9.232	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	565	134	739	0.764	558	3.3	21.177	C
2	392	218	604	0.649	389	1.9	18.079	C
3	375	277	703	0.534	374	1.2	11.970	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	565	134	739	0.765	564	3.4	22.492	C
2	392	220	603	0.650	392	2.0	18.690	C
3	375	279	701	0.535	375	1.2	12.143	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	461	110	754	0.612	468	1.8	14.119	B
2	320	182	626	0.511	323	1.2	13.196	B
3	307	231	732	0.419	308	0.8	9.394	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	386	92	765	0.505	389	1.1	10.587	B
2	268	152	645	0.415	270	0.8	10.577	B
3	257	192	755	0.340	258	0.6	7.971	A

2027 With Jacks Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	28.68	D

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-6	Arm 2

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)
D3	2027 With Jacks Development	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	391	100.000
2		✓	512	100.000
3		✓	326	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	237	154
	2	351	0	161
	3	167	159	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.60	13.99	1.6	B
2	0.89	49.08	7.2	E
3	0.56	14.25	1.4	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	294	119	749	0.393	292	0.7	8.611	A
2	385	115	668	0.577	380	1.4	13.467	B
3	245	260	713	0.344	243	0.6	8.385	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	142	734	0.479	350	1.0	10.299	B
2	460	138	654	0.704	456	2.4	19.626	C
3	293	313	681	0.431	292	0.8	10.166	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	174	714	0.603	428	1.6	13.738	B
2	564	169	635	0.888	548	6.3	39.935	E
3	359	376	641	0.560	357	1.4	13.809	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	175	713	0.604	430	1.6	13.989	B
2	564	170	634	0.889	560	7.2	49.077	E
3	359	384	636	0.564	359	1.4	14.251	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	144	733	0.480	354	1.0	10.522	B
2	460	139	653	0.705	478	2.8	24.422	C
3	293	327	671	0.436	295	0.9	10.580	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	294	120	748	0.394	296	0.7	8.783	A
2	385	116	667	0.578	391	1.6	14.557	B
3	245	268	709	0.346	247	0.6	8.592	A

2027 With Jacks Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	18.62	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		10	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2027 With Jacks Development	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	515	100.000
2		✓	358	100.000
3		✓	333	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	314	201
	2	255	0	103
	3	211	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.77	22.77	3.5	C
2	0.65	18.94	2.0	C
3	0.52	11.85	1.2	B

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	388	91	766	0.506	383	1.1	10.231	B
2	270	150	647	0.417	266	0.8	10.334	B
3	251	190	757	0.331	249	0.5	7.756	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	463	109	755	0.614	461	1.7	13.363	B
2	322	180	628	0.513	320	1.1	12.813	B
3	299	228	733	0.408	299	0.7	9.093	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	567	134	739	0.767	561	3.3	21.403	C
2	394	219	604	0.653	391	2.0	18.305	C
3	367	278	702	0.522	365	1.2	11.688	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	567	134	739	0.768	566	3.5	22.769	C
2	394	221	602	0.654	394	2.0	18.943	C
3	367	281	701	0.523	367	1.2	11.847	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	463	110	754	0.614	470	1.8	14.223	B
2	322	183	626	0.514	325	1.2	13.311	B
3	299	232	731	0.410	301	0.8	9.245	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	388	92	765	0.507	390	1.2	10.632	B
2	270	152	645	0.418	271	0.8	10.637	B
3	251	193	755	0.332	252	0.6	7.882	A

2027 With 7 Acres Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	29.59	D

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-6	Arm 2

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)
D5	2027 With 7 Acres Development	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	397	100.000
2		✓	512	100.000
3		✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	237	160
	2	351	0	161
	3	170	159	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	14.32	1.7	B
2	0.89	51.18	7.5	F
3	0.57	14.41	1.4	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	299	119	749	0.399	296	0.7	8.694	A
2	385	119	666	0.579	380	1.5	13.592	B
3	248	260	713	0.347	245	0.6	8.424	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	357	142	734	0.486	356	1.0	10.442	B
2	460	143	651	0.707	456	2.5	19.937	C
3	296	313	681	0.435	295	0.8	10.234	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	437	174	714	0.612	434	1.7	14.046	B
2	564	175	631	0.894	548	6.5	41.172	E
3	362	375	642	0.565	360	1.4	13.949	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	437	175	713	0.613	437	1.7	14.321	B
2	564	176	630	0.894	560	7.5	51.184	F
3	362	384	636	0.569	362	1.4	14.413	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	357	144	733	0.487	359	1.1	10.683	B
2	460	145	650	0.709	479	2.9	25.180	D
3	296	328	671	0.441	298	0.9	10.673	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	299	120	748	0.400	300	0.7	8.876	A
2	385	121	664	0.580	391	1.6	14.726	B
3	248	268	709	0.350	249	0.6	8.637	A

2027 With 7 Acres Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	18.80	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		10	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 With 7 Acres Development	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	517	100.000
2		✓	358	100.000
3		✓	337	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	314	203
	2	255	0	103
	3	215	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.77	23.05	3.5	C
2	0.66	19.06	2.0	C
3	0.53	12.01	1.2	B

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	389	91	766	0.508	385	1.1	10.271	B
2	270	151	646	0.417	266	0.8	10.357	B
3	254	190	757	0.335	252	0.5	7.801	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	465	109	755	0.616	462	1.7	13.441	B
2	322	182	627	0.513	320	1.1	12.860	B
3	303	228	733	0.413	302	0.8	9.169	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	569	134	739	0.770	563	3.4	21.632	C
2	394	221	602	0.654	391	2.0	18.412	C
3	371	278	702	0.529	369	1.2	11.839	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	569	134	739	0.770	569	3.5	23.051	C
2	394	223	601	0.656	394	2.0	19.063	C
3	371	281	701	0.530	371	1.2	12.006	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	465	110	754	0.616	471	1.8	14.329	B
2	322	185	625	0.515	325	1.2	13.366	B
3	303	232	731	0.414	305	0.8	9.326	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	389	92	765	0.509	392	1.2	10.677	B
2	270	154	644	0.418	271	0.8	10.662	B
3	254	193	755	0.336	255	0.6	7.930	A

2027 Stress Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	29.59	D

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		-6	Arm 2

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)
D7	2027 Stress Test	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	397	100.000
2		✓	512	100.000
3		✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	237	160
	2	351	0	161
	3	170	159	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	14.32	1.7	B
2	0.89	51.18	7.5	F
3	0.57	14.41	1.4	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	299	119	749	0.399	296	0.7	8.694	A
2	385	119	666	0.579	380	1.5	13.592	B
3	248	260	713	0.347	245	0.6	8.424	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	357	142	734	0.486	356	1.0	10.442	B
2	460	143	651	0.707	456	2.5	19.937	C
3	296	313	681	0.435	295	0.8	10.234	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
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3	362	375	642	0.565	360	1.4	13.949	B

08:45 - 09:00

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09:00 - 09:15

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Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
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2027 Stress Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	18.80	C

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		10	Arm 1

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2027 Stress Test	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
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3		✓	337	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	314	203
	2	255	0	103
	3	215	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.77	23.05	3.5	C
2	0.66	19.06	2.0	C
3	0.53	12.01	1.2	B

Main Results for each time segment

17:00 - 17:15

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3	371	278	702	0.529	369	1.2	11.839	B

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3	371	281	701	0.530	371	1.2	12.006	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
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2	322	185	625	0.515	325	1.2	13.366	B
3	303	232	731	0.414	305	0.8	9.326	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
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2	270	154	644	0.418	271	0.8	10.662	B
3	254	193	755	0.336	255	0.6	7.930	A