NOVEMBER 2016

Transport Assessment

Drive-Thru Coffee Unit, Langstone Gate, Havant

Iceni Projects Limited on behalf of
Seaward Properties Limited

November 2016

ICENI PROJECTS LIMITED
ON BEHALF OF SEAWARD
PROPERTIES LIMITED

Transport Assessment

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1. INTRODUCTION

1.1 Iceni Projects Ltd has been appointed by Seaward Properties Limited to provide transportation advice with regard to a proposal at Langstone Gate, Havant. A Site Location Plan is attached at **Appendix A1**.

1.2 The report has been prepared in support of an application associated with the installation of a stand-alone coffee drive-thru unit (class A3) with sit-in and take-away facilities within the curtilage of the car park (circa 167sqm floor area).

1.3 The proposals were discussed in advance of preparing the report with Holly Drury (Senior Engineer at Hampshire County Council) and Peter Marshall (Development Engineer Havant Borough Council). A copy of the scoping discussions is included at **Appendix A2**.

1.4 The report is arranged as follows:

- **Section 2** provides a description of the existing site conditions including site use, local highway network, existing levels of public transport provision, cycling and walking.
- **Section 3** provides an overview of the National and Local Transport Policies.
- **Section 4** provides a description of the development proposals.
- **Section 5** considers the proposed and existing parking provision details a parking accumulation assessment.
- **Section 6** includes details of the trip generation and distribution.
- **Section 7** considers the impact of the development proposals on the local highway network.
- **Section 8** provides a summary and draws conclusions.

1.5 The results of this assessment clearly demonstrate that the impact of the development proposal is acceptable from a transportation perspective.

2. THE SITE AND SURROUNDINGS

Site Description

2.1 The application site comprises a small portion of the car park (north-east corner) that serves the Langstone Gate office campus. The site is accessed off Solent Road directly west of the Solent Road / Park Road South signalised junction.

2.2 The existing Langstone Gate office and the associated car park provide 143 spaces, including 140 standard bays and 3 disabled bays. Entry and exit to / from the car park is controlled via two sets of barriers.

2.3 The vehicular access to the site is via an all-movements T-junction priority junction. There is a dedicated right turn lane into the car park from Solent Road and a single lane including a short flare when leaving the site.

Surrounding Highway Network

2.4 Solent Road runs along the northern boundary of the site between Park Road South in the east and Brockhampton Road in the west. To the north of the site, Solent Road provides two eastbound lanes on approach to the signalised T-junction in the east and one westbound lane. There is a dedicated right turn lane when turning into the site from Solent Road.

2.5 Park Road South runs along the eastern boundary of the site, between the A27 grade separated roundabout in the south and Park Road North in the north. In the vicinity of the site, Park Road South provides two lanes in each direction and contains a central reserve along the majority of its length. At the Solent Road / Park Road South signalised junction, the road provides three lanes on the northbound approach and three lanes on the southbound approach.

2.6 The A27 is located towards the south of the site is a strategic route between Portsmouth and Eastbourne. In the vicinity of the site the road meets Park Road South and Langstone Road at a grade separated roundabout with slip roads. The A27 is dual carriageway, providing two lanes in each direction with a kerbed central reserve.

2.7 The site is well connected to the local and regional highway network, with links to surrounding residential areas and the town centre as well as being within close proximity of strategic routes.

2.8 This site is conveniently located to enable existing and future staff and customers to arrive by various transport alternatives to private car as it is in close proximity to both bus and cycle routes.

Havant Bus Station is located circa 300m to the north east of the site along Elm Lane and Havant Railway Station is located circa 630m towards the north east.

Walking

2.9 Solent Road and Park Road South provide footways on both sides of the carriageway and contain adequate street-lighting.

2.10 There are signalised pedestrian crossings, containing dropped kerbs and tactile paving at the Park Road South / Solent Road signalised junction. In addition to this, there is a crossing point along the site access junction. A further pedestrian refuge island is located along Solent Road between the site access and the Solent Retail Park egress.

Cycling

2.11 An extract of the Havant Cycle Map is shown in **Plate 1** below:

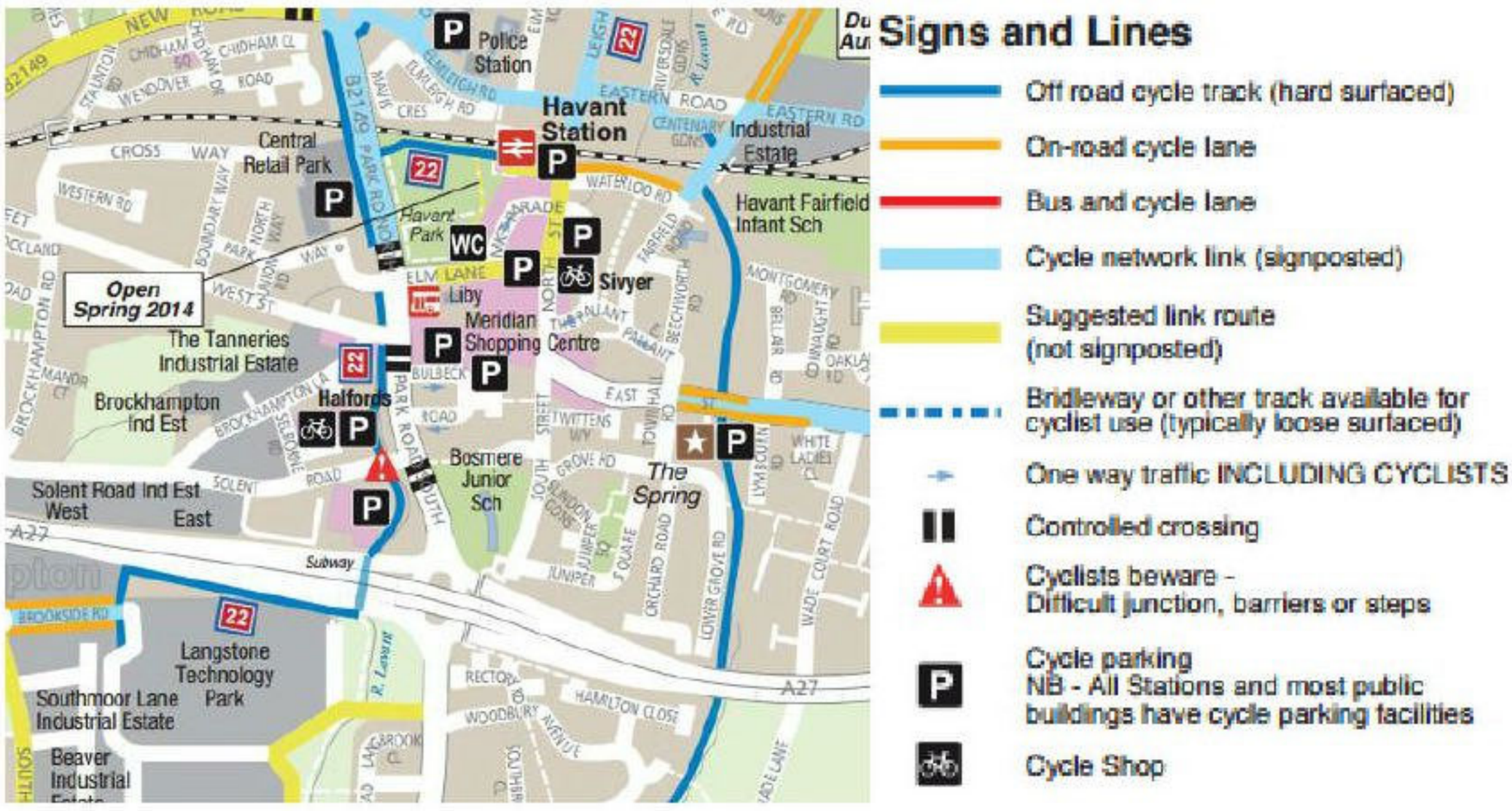


Plate 1 – Havant Cycle Map

2.12 As shown above there a number of local cycles facilities in the surrounding area.

2.13 Within the Langstone Gate site there is cycle parking, however, none of this will be accessible to the proposed site, which will provide its own dedicated on-site cycle parking spaces which will be provided in accordance with standards.

Train Services

2.14 Havant Railway Station is located circa 630m towards the north of the site and is accessed via North Street. Services are operated by GWR, Southern and South West Trains to destinations including Southampton Central, Portsmouth and Southsea, London Victoria via Horsham, London Waterloo, Portsmouth Harbour and Littlehampton. Approximately 14 trains per hour operate in both directions throughout the day. The station is within a reasonable walking and cycling distance of the site and, as such, will provide staff in particular with an alternative to the private car for accessing the site.

Bus Services

2.15 The nearest bus stops to the site are located on Park Road South. The nearest northbound stop is located circa 80m to the north and the nearest southbound stop is located circa 130m to the south. The services adjacent to the site provide services on bus routes 30, 31 and 700. **Table 2.1** below details the routes that can be accessed from these stops, with further routes available at the bus station circa 300m in the north east; a bus map is included at **Appendix A3**.

Table 2.1 **Bus Services**

Bus	Route	Frequency		
		Monday to Friday	Saturday	Sunday
30/31	Havant, Mengham, Hayling Island, Havant	2 per hour	2 per hour	1 per hour
700	Portsmouth, Havant, Littlehampton	3 per hour	2 per hour	2 per hour

Summary

2.16 It has been shown that the site is located in a sustainable location with pedestrian and cycle facilities and links and is close to bus services, which supply good area coverage / services. It has also been shown that the site is accessible to / from Havant Railway Station which promotes travel by active and public transport modes.

2.17 In conclusion, the proposal provides opportunities to use modes other than the car and will provide staff and customers with alternative modes of travel.

3. TRANSPORTATION POLICY

3.1 This section summarises the relevant transport policies as they relate to the development site on both a National, Regional and Local level.

National Planning Policy Framework (NPPF) – March 2012

3.2 The National Planning Policy Framework (NPPF), which was adopted in March 2012, sets out the Government's planning policies for England and how these are expected to be applied. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities. As a result of this policy being adopted, all Planning Policy Guidance and Planning Policy Statements have been superseded, including PPG13 (Transport), which was formerly used as a basis for national transport policy. As such, any detailed policy guidance previously provided within PPG13 will no longer act as the default policy where no policy has been set by the local authority. All detailed transport policies should now be found within Unitary Development Plan and Local Development Framework documents adopted by each local authority.

3.3 While no longer policy, there are two key aspects within PPG13 which are still of relevance when determining a site's level of sustainable travel access. Paragraph 74 states with regard to walking that:

> "Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under two kilometres. Walking also forms an often forgotten part of all longer journeys by public transport and car."

3.4 Paragraph 77 goes on to state that:

> "Cycling also has potential to substitute for short car trips, particularly those under five kilometres, and to form part of a longer journey by public transport"

3.5 It is considered that the walking and cycling distances referred to in PPG13 remain valid and should not be overlooked when determining the walking and cycling accessibility of development sites.

3.6 With regard to transport policy, the NPPF states in Paragraph 32 that:

> "All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:
>
> - the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
> - safe and suitable access to the site can be achieved for all people; and
> - improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."

Note: Iceni Projects' underlining

3.7 Paragraphs 34 to 36 go on to say that:

"Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. However, this needs to take account of policies set out elsewhere in this Framework, particularly in rural areas.

Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.

A key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan."

3.8 With regard to sustainable development, the NPPF states in Paragraph 14 that:

"At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.

For plan-making this means that:

- local planning authorities should positively seek opportunities to meet the development needs of their area;

- Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:

- any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or

- specific policies in this Framework indicate development should be restricted.

For decision-taking this means:

- approving development proposals that accord with the development plan without delay; and

- Where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:

- any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or

- specific policies in this Framework indicate development should be restricted."

3.9 The NPPF also supports the development of a mix of uses within all areas in order to encourage travel by non-car modes and to reduce the length of journeys being undertaken for employment, shopping, leisure, education and other activities.

3.10 The site is well connected to the pedestrian and cycling network and within close proximity to public transport services and surrounding residential areas and Havant town centre.

3.11 The site is also located close to a mix of uses, with retail, leisure and commercial uses located close to the site all within a reasonable walking distance, thus providing the opportunity for linked trips.

3.12 Sustainable travel will be further encouraged through an employee Travel Plan and it is therefore considered that the site accords well with NPPF.

National Planning Policy Guidance (NPPG) – March 2014

3.13 Information contained as part of the National Planning Policy Guidance (NPPG), provides advice for travel plans, transport assessments and statements in decision-taking.

> "Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements."

3.14 This report follows the advice within the guidance and accords with providing the information which should be included as part of a Transport Assessment.

3.15 The site is located in an area with good public transport accessibility providing opportunities for both staff and customers to use modes other than the car.

3.16 The proposed development conforms with the ideals of NPPF being well located to the existing pedestrian network linking with the surrounding area and public transport facilities. The proposed development site is also well located to encourage cycle accessibility being adjacent to and linking with local cycle routes.

3.17 Furthermore, the proposed use will generate a low number of new vehicular movements on the highway network, with the majority being linked, passby and diverted trips and, as such, any impact on the surrounding highway network will be negligible. This is discussed in more detail in Section 4 of this report.

3.18 The Core Strategy sets the planning framework for the Borough and states that:

"Development will be permitted that:

- *Is consistent with and contributes to the implementation of the 'Reduce, Manage and Invest' strategy.*
- *Does not increase congestion and promotes better use of existing transport networks.*
- *Improves accessibility to goods, services and employment and promotes equality in the transport system.*
- *Provides transport management measures to ensure the safe and efficient operation of the strategic and local road network.*
- *Ensures that highway design responds positively to the characteristics of the area and delivers a high quality public realm for all users.*
- *Maintains or improves the range of transport modes accessible to the users of the development site with specific emphasis on public transport, especially high quality/frequency buses and includes walking and cycling where appropriate."*

Policy DM11

"DM11 Planning for More Sustainable Travel

The council will seek to ensure that every opportunity is taken to increase integration of sustainable travel modes and availability of non-motorised modes by appropriate measures including:

- *Securing on-site and/or off-site interventions that promote integrated travel and access by non-motorised modes.*
- *Requiring safe and secure vehicular and cycle parking and turning facilities to adopted standards.*
- *Securing appropriate improvements to public and community transport (including infrastructure requirements) in accordance with the Hampshire Local Transport Plan and (where applicable) the relevant sub-regional transport strategy.*
- *Proposals for reducing opportunities for informal parking in the area surrounding the development where this would impact on the capacity, operation and safety of the local highway network and/or the amenity of the locality.*
- *Ensuring that new developments are located and designed at the outset to encourage lower vehicle speeds and safe, permeable, inclusive layouts that integrate with existing pedestrian, cycle and public transport routes. This will facilitate and encourage short distance trips by cycle and walking, including to public transport interchanges."*

Policy DM12

"DM12 Mitigating the Impacts of Travel

New developments will be required to mitigate their travel impact, including the environmental impacts of travel (such as noise, air and visual pollution) and impacts on amenity, health and climate change by ensuring that, where relevant, the following criteria are met:

- *Adequate provision is made for integrated and improved transport infrastructure or appropriate mitigation measures, through direct improvements and S106 contributions in accordance with the Hampshire County Council Transport Contributions Policy.*
- *The submission of a transport assessment and travel plan alongside any planning application on proposals for major development or where a proposal is likely to have significant transport implications.*
- *The submission of a transport statement must accompany planning applications to explain changes to travel demand.*
- *A bond is provided which will be used to mitigate negative travel impacts of the development, should the travel plan fail to achieve its targets. This bond will be held by the relevant local transport authority.*
- *In relation to outline planning applications, a framework for the preparation of travel assessments and travel plans will be submitted with the planning application proposals."*

Policy DM14

"DM14 Car and Cycle Parking on Development (excluding residential)

Development will only be permitted where it provides parking for cars, motor cycles and cycles in accordance with the relevant standards. Such parking provision must be appropriately located in relation to the development and be practical for its intended use."

Summary

3.19 Based on the foregoing, it is clear that the proposed development accords well with national and local policies, not least given the existing links to sustainable modes of transport.

4. PROPOSED DEVELOPMENT

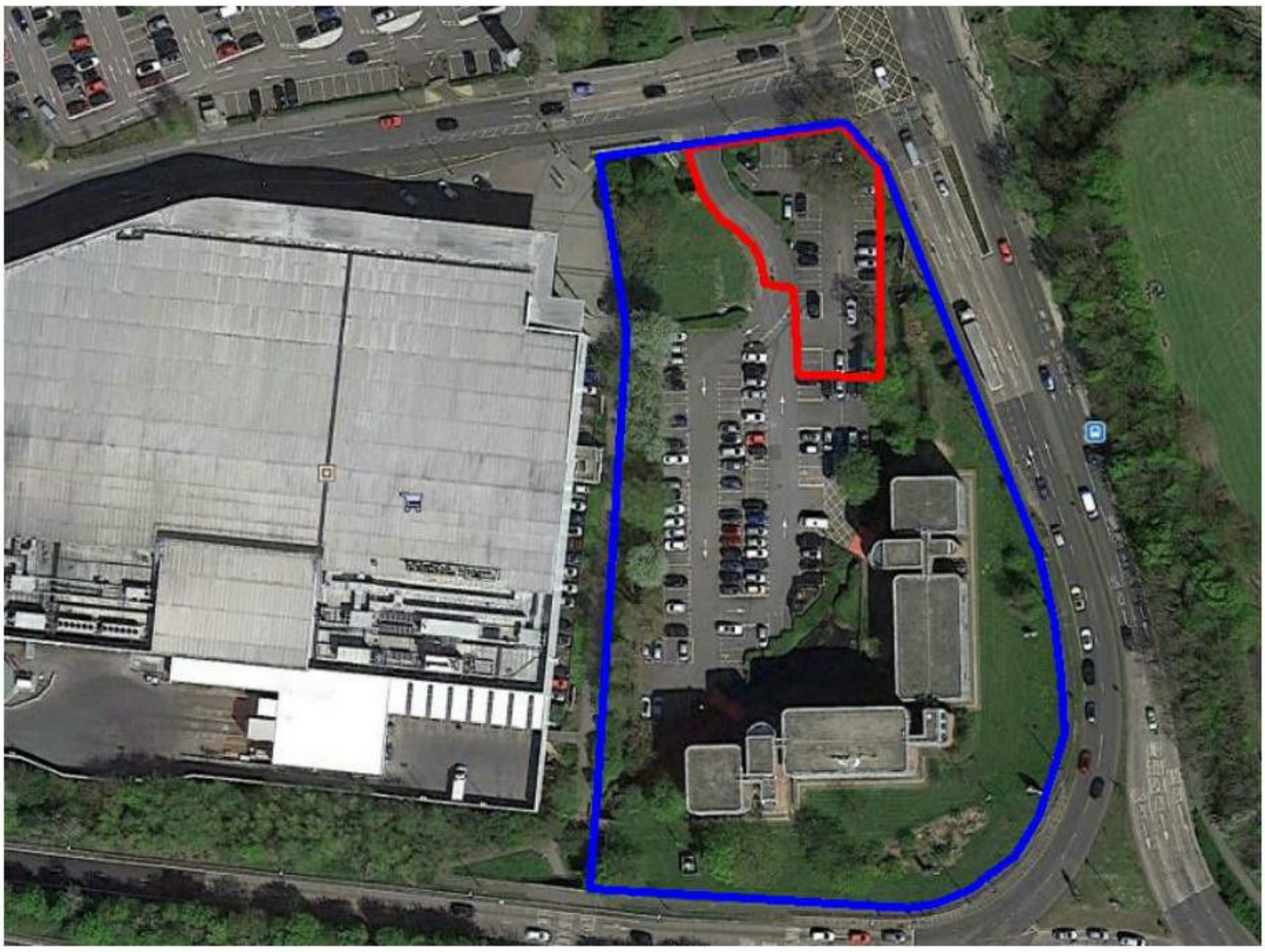
Introduction

4.1 A full description of the proposed development scheme is contained in the supporting documents accompanying the planning application. The following description is pertinent in transport terms. A proposed site layout plan is included at **Appendix A4**.

Development Proposals

4.2 It is proposed to development site is currently located within an existing office development, making use of space currently used as car parking. For ease when reading this section of the report, **Figure 4.1** below shows both the existing office use, outlined in **blue,** and the proposed Starbucks unit (167m^2 GFA) outlined in **red**.

Figure 4.1 – Site Delineation



Site Access/Solent Road Junction

4.3 The location of the existing access from Solent Road will remain unchanged with the existing Langstone Gate office development, and the proposed Starbuck served from the priority junction with Solent Road.

4.4 It is proposed to make minor modifications to the layout of the existing junction to improve access for both the office and Starbucks uses. The existing bellmouth of the junction will be widened to provide a flared approach to make an easier turn into the site for vehicles travelling from the east from the junction with Park Road south. The existing barriers which restrict access to the existing office car park will also be relocated further south to accommodate the proposed Starbucks operation.

Starbucks Access

4.5 Entry into the Starbucks will be taken from the internal road serving the existing office car park, located approximately 20m south of the junction with Solent Road. This access will be approximately 5m widening, increasing to 10m at the bellmouth and will serve both the drive-thru the northern section of the Starbucks car park.

4.6 A further access/egress will be located 20m further south, to the south of the proposed Starbucks building which will act as the main exit for the drive-thru and provide access to the southern car parking area.

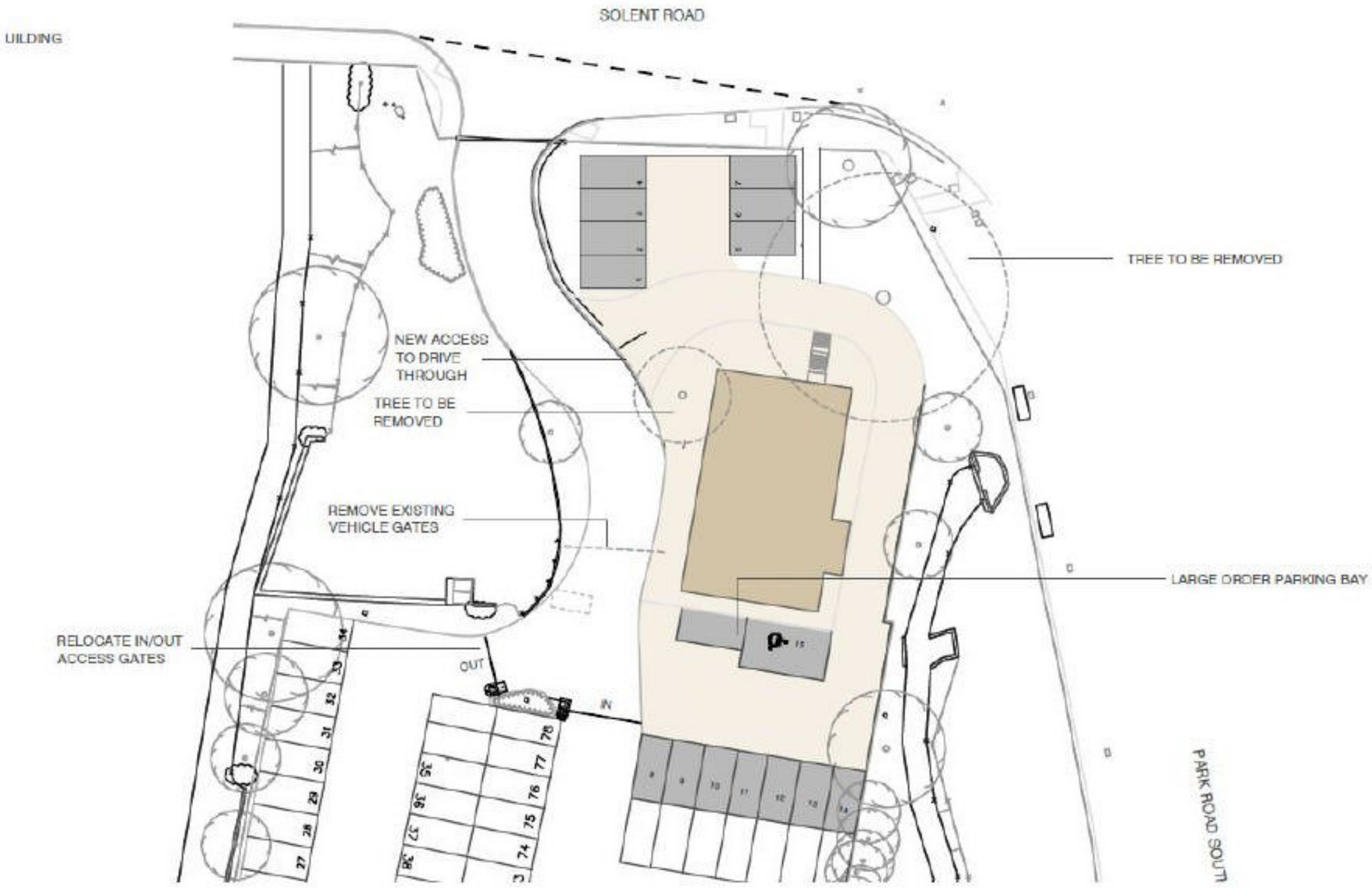
Internal Starbucks Layout

4.7 The Starbucks building will be located centrally within the site, with two main parking areas located to the north and south of the building. The northern parking area will contain 7 car parking spaces, with a further 9 spaces in the southern car parking area, which will include 1 disabled parking space.

4.8 A drive-thru lane will be provided which will wrap around the east of the proposed Starbucks building. The lane will be approximately 35m in total length, with a distance of 18m from the speaker box to the dispenser, which should be noted is longer than that provided for the usual Starbucks template.

4.9 **Figure 4.2** overleaf shows an extract of the proposed masterplan and provides details of the proposed Starbucks layout. Full details are attached at **Appendix A4**.

Figure 4.2 – Proposed Site Layout



4.10 Swept path analysis of the parking area and of the proposed drive-thru lane to demonstrate that a large car can successfully manoeuvre in, out and through the proposed site. This is shown on the drawings attached at **Appendix A5.**

Pedestrian Access

4.11 There is currently no segregated pedestrian access into the site with the only route available via the main vehicular access. As part of the development proposals, a footpath will be provided at the north eastern corner of the site from Solent Road. This will provide direct access to the proposed Starbucks unit and provide a safer access for pedestrians travelling to the existing office building.

Servicing and Refuse Collection

4.12 It is envisaged that servicing and refuse collection will be combined with the existing office operation within the site and therefore undertaken from within the car park of the site and is as such considered to remain fit for purpose.

Proposed Starbucks Operation

4.13 Details of the proposed operation of the site have been provided by Starbucks and are based on the trading levels and comparison with other existing Starbucks outlets. These are outlined below, and are discussed in greater detail in regard to potential traffic impact in sections 6 and 7 of this report.

Expected Vehicle Movements

4.14 Based on the expected trading level of the proposed store and comparisons with other Starbucks drive thru facilities, Starbucks would expect in the order of 30 to 40 vehicle arrivals in the busiest hour. Also based on surveys and operational information at other drive-thru facilities, around 50% to 60% of vehicle arrivals could be expected to use the drive thru lane.

4.15 Assuming the top end of the vehicular traffic range (40) and higher end of the drive thru range (60%) would suggest in the order of 24 drive thru vehicles in the busiest hour. This represents around 4 vehicles using the drive-thru every 10 minutes. On the basis that 3 or 4 vehicles can be accommodated in the drive-thru lane before the first order point (and not allowing for vehicles beyond the order point that are waiting to collect orders), it is clear that there is unlikely to be any queuing that will have a significant effect on the operation of the car park and will certainly not affect the local highway network.

Expected Transactions

4.16 Expected daily transactions are between 530 and 650, with associated expected trading pattern are as follows:

- Take Away - 15%
- Dine In - 35%
- Drive-Thru - 50%

4.17 The average time in DT lane varies on different day parts but at the end of the day we expect to average around 3m to 3m30sec. Starbucks operatives aim to meet a target of 3 minute to turn transactions around quickly.

4.18 In respect of staff, it is expected that Starbucks will be hiring 15 full time and five part time members of staff from the area. These will be encouraged to travel to the site by sustainable travel modes.

Expected Delivery Schedule

4.19 Delivery times can be arranged for certain timeframes to reduce noise and traffic movement outside the opening hours of the store. Starbucks expect the following regular deliveries:

- Daily fresh delivery
- Two weekly ambient deliveries
- Weekly delivery of cleaning chemicals

4.20 These deliveries would be managed by on-site operatives to ensure that they do not conflict with either the proposed Starbuck use, or existing adjacent office use.

5. PARKING ASSESSMENT

5.1 As detailed in the previous section, it is proposed to provide 16 car parking spaces associated with the Starbucks unit. The proposals will result in the loss of 40 parking spaces associated with the office development to the south of the site. This is summarised below for clarity:

- Existing parking spaces associated with the office = 143 spaces
- Proposed parking spaces associated with the office = 103 spaces
- Proposed parking spaces associated with the Starbucks = 16 spaces
- Overall loss of parking spaces = 22 spaces

5.2 The parking provision for cars, cycles and powered two wheelers will accord with the standards for contained within the Havant Borough Council Parking SPD document, which was adopted on 27th July 2016 for A1 Food Retail in the absence of standards for A3 use. The relevant standards of which are shown **Table 5.1** below.

Table 5.1 **Havant Borough Council Parking SPD Parking Standards**

	Vehicle	Cycle	PTW	Disabled
	Minimum	Minimum	Minimum	Minimum
A1	Covered - 1 space per $20m^2$ Uncovered – 1 spaces per $30m^2$	Long Stay – 1 space per 6 staff or 1 space per $300m^2$ (whichever is greater)	1 space per 25 car parking spaces	5% of total allocation
		Short Stay – 1 stand per $200m^2$		

Notes - Standard space requirement 2.4m x 4.8m.

5.3 **Table 5.2** overleaf provides a comparison between the proposed parking provision and the parking requirements for a scheme of this size and type.

Table 5.2 **Parking Requirement/Provision Comparison**

	Vehicle	PTW	Disabled
Requirement	Minimum of 9 spaces	No requirement	Minimum of 1 space from the total provision
Proposed	16 spaces	No requirement	1 space from the total provision

Notes – Based on unit size of 167m^2.

Parking Assessment

5.4 As stated above, the proposed Starbucks unit is located on an area of existing parking which is associated with the existing office building. As such, it is important to demonstrate that this proposal will not result in a significantly impact on the capacity of this car park and its existing users, nor result in overspill parking occurring on the local highway network.

5.5 In order to assess the existing usage of the car park, a car parking accumulation survey was undertaken on Thursday 15th September 2016 between 07:00 and 20:00 at 15 minute intervals. The results are summarised in **Table 5.3** below and full details are included at **Appendix A6**.

Table 5.3 **Observed Parking Accumulation**

Time	Used Spaces	Empty Spaces	Capacity
Pre-Survey	16	127	11%
0700 - 0715	14	129	10%
0715 - 0730	18	125	13%
0730 - 0745	20	123	14%
0745 - 0800	21	122	15%
0800 - 0815	34	109	24%
0815 - 0830	45	98	31%
0830 - 0845	49	94	34%
0845 - 0900	61	82	43%
0900 - 0915	65	78	45%
0915 - 0930	69	74	48%
0930 - 0945	71	72	50%
0945 - 1000	73	70	51%
1000 - 1015	77	66	54%

1015 - 1030	74	89	52%
1030 - 1045	77	86	54%
1045 - 1100	77	86	54%
1100 - 1115	78	85	55%
1115 - 1130	78	84	55%
1130 - 1145	81	82	57%
1145 - 1200	80	83	58%
1200 - 1215	77	86	54%
1215 - 1230	78	84	55%
1230 - 1245	75	88	52%
1245 - 1300	73	70	51%
1300 - 1315	78	85	55%
1315 - 1330	76	87	53%
1330 - 1345	77	86	54%
1345 - 1400	77	86	54%
1400 - 1415	77	86	54%
1415 - 1430	74	89	52%
1430 - 1445	74	89	52%
1445 - 1500	78	85	55%
1500 - 1515	77	86	54%
1515 - 1530	73	70	51%
1530 - 1545	69	74	48%
1545 - 1600	63	80	44%
1600 - 1615	62	81	43%
1615 - 1630	62	81	43%
1630 - 1645	58	84	41%
1645 - 1700	58	84	41%
1700 - 1715	42	101	29%
1715 - 1730	37	106	26%
1730 - 1745	35	108	24%
1745 - 1800	25	118	17%
1800 - 1815	28	117	19%
1815 - 1830	27	118	19%
1830 - 1845	24	119	17%
1845 - 1900	23	120	16%
1900 - 1915	20	123	14%
1915 - 1930	20	123	14%
1930 - 1945	19	124	13%
1945 - 2000	18	125	13%

5.6 It can be seen from the table above that the car park is less than 60% full during the typical working hours of 09:00-17:00 with this dropping 30% outside of these hours.

5.7 In order to assess the impact of the loss of car parking spaces as previously outlined, the results of the parking accumulation survey have been adjusted to reflect the proposed number of parking spaces associated with the office development. The results of this assessment are show in **Table 5.4** below.

Table 5.4 **Adjusted Parking Accumulation**

Time	Used Spaces	Empty Spaces	Capacity
Pre-Survey	18	87	17%
0700 - 0715	14	89	14%
0715 - 0730	18	85	17%
0730 - 0745	20	83	19%
0745 - 0800	21	82	20%
0800 - 0815	34	69	33%
0815 - 0830	45	58	44%
0830 - 0845	48	54	47%
0845 - 0900	61	42	59%
0900 - 0915	65	38	63%
0915 - 0930	69	34	67%
0930 - 0945	71	32	69%
0945 - 1000	73	30	71%
1000 - 1015	77	26	75%
1015 - 1030	74	29	72%
1030 - 1045	77	26	75%
1045 - 1100	77	26	75%
1100 - 1115	78	25	76%
1115 - 1130	79	24	77%
1130 - 1145	81	22	79%
1145 - 1200	80	23	78%
1200 - 1215	77	26	75%
1215 - 1230	79	24	77%
1230 - 1245	75	28	73%
1245 - 1300	73	30	71%
1300 - 1315	78	25	76%
1315 - 1330	78	27	74%
1330 - 1345	77	26	75%
1345 - 1400	77	26	75%
1400 - 1415	77	26	75%
1415 - 1430	74	29	72%

1430 - 1445	74	29	72%
1445 - 1500	78	25	76%
1500 - 1515	77	26	75%
1515 - 1530	73	30	71%
1530 - 1545	69	34	67%
1545 - 1600	63	40	61%
1600 - 1615	62	41	60%
1615 - 1630	62	41	60%
1630 - 1645	59	44	57%
1645 - 1700	59	44	57%
1700 - 1715	42	61	41%
1715 - 1730	37	66	36%
1730 - 1745	35	68	34%
1745 - 1800	25	78	24%
1800 - 1815	26	77	25%
1815 - 1830	27	76	26%
1830 - 1845	24	79	23%
1845 - 1900	23	80	22%
1900 - 1915	20	83	19%
1915 - 1930	20	83	19%
1930 - 1945	19	84	18%
1945 - 2000	18	85	17%

Notes: - Based on 103 spaces

5.8 The table above demonstrates that during the typical office hours of 09:00-17:00, the car parking would be expected to at a maximum capacity level of 79% (81 spaces in use). At its busiest time, this would leave 25 spaces vacant which is more than a suitable amount to accommodate daily fluctuations. As such, it is deemed that the loss of loss of 40 parking spaces associated with the office development will not have a substantial impact on the existing car park capacity and car parking will no overflow onto the local highway network.

6. TRAFFIC GENERATION AND DISTRIBUTION

Introduction

6.1 This section of the TA provides an overview of the projected traffic generation associated with the proposed development, which has been calculated using information provided by Starbucks and is based on a combination of experience of existing stores and expected operational requirements at the site at Langstone Gate.

6.2 This is considered to represent the most appropriate methodology for estimating the level of trip generation for the proposed Starbucks store as it more closely reflects the specific type of operation proposed, given the absence of comparable surveys available on the TRICS database.

Trip Generation

Overall Trip Generation

6.3 Starbucks operate a number of drive-thru and drive-to restaurants throughout the UK and they have provided their trip generation expectations of the proposed drive-thru unit, which is summarised below:

- Maximum of 30-40 vehicle arrivals in the busiest hour;
- The busiest period is the AM peak period, between 6:30 and 9:30 when around 70 vehicles are expected during this 3-hour period;
- This represents one vehicle entering and exiting the site every 6-7 minutes;
- Of the 40 vehicle trips, a maximum of 60% (24 vehicles) would use the drive-thru lane; and,
- This represents a maximum of 4 vehicles every 10 minutes entering the drive-thru lane.

6.4 The information detailed above is considered to represent a 'worst case' scenario in terms of trip generation. Furthermore, we have applied the maximum expected level of trip generation for the AM peak hour (40 vehicles) to both the PM and Saturday peaks (even though a lower level of actual trip generation would be expected) and as such the assessment is considered to be very robust.

Breakdown of Trips

6.5 The nature of the coffee outlet operation is such that it is considered unlikely that travel to and from Starbucks will represent the sole journey purpose of potential users. This is further reinforced by the location of the site in an area surrounded by predominately commercial uses, and key links within the local and wider route network.

6.6 It is expected that the majority of trips will be made by users already on the local highway network i.e. by those stopping for a coffee on the way to or from another journey purpose. In light of this, the majority of trips are therefore considered to be either diverted from their existing journey (primarily from Park Road South, and therefore through the junction with Solent Road), pass-by trips by those people travelling along Solent Road, or linked trips with other retail and/or commercial units within the vicinity of the site.

6.7 Although it is expected that vast majority of trips would be made up of diverted, pass by and linked trips, for the purpose of this assessment, it has been assumed that 50% of trips would be diverted, and 50% would be represented as new trips onto the network. Furthermore, the diverted trips have been assumed as being from northbound and southbound trips on Park Road South which would be diverted through the Park Road South / Solent Road Signal Junction.

6.8 The trips represented as new trips within the modelling assessment are considered to be predominantly comprised of pass by and linked trips (not discounted from existing movements on the network) and diverted trips from outside of the study area. As a result of this, the modelling assessment detailed within section 6 of this report is considered to be very robust.

6.9 The details of the breakdown of trips as represented within the traffic modelling assessment are shown in **Table 6.1** below:

Table 6.1 **Vehicle Trip Arrivals Summary (by type)**

	Peak Hour		
	Assumed Proportion	Arrive	Depart
Diverted Trips (Park Road South)	50%	20	20
New Trips	50%	20	20
Total Trips	**100%**	**40**	**40**

Traffic Distribution

6.10 Given the nature of the trip generation as predominately assumed not to form the primary journey purpose, it is considered appropriate to distribute traffic broadly in accordance with the recorded turning movements at existing junctions on the network. Traffic exiting and entering the site has also been distributed in accordance with the existing turning proportions currently using the site access.

6.11 New trips have therefore been distributed according to the turning proportions at the existing site access, Park Road South / Solent Road and the Solent Road / Brockhampton Road roundabout junctions. To further ensure a robust assessment, trips from the site to/from the west on Solent Road have been assumed to pass through Solent Road / Selbourne Road, Solent Road / Tecso Access and Solent Road Brockhampton Lane junctions.

6.12 As outlined above, all diverted trips have been assumed to pass through the Park Road South / Solent Road junction and this is reflected in the traffic distribution.

6.13 Full details of the traffic generation and distribution are shown on the traffic flow diagrams attached at **Appended A7**.

Traffic Growth

6.14 In order to assess the effect of the development the impact has been assessed for 5 years after application (2021). Committed developments have also been represented and are discussed in section 7 of this report.

6.15 In order to calculate the future background traffic flows the following growth factors for Havant have been obtained from TEMPRO and used to calculate base flows for 2021, which have been broken down into road types (urban minor and urban principle) ensure accuracy:

- 2016-2021 AM Peak - 1.081 urban principle, 1.081 urban minor
- 2016-2021 PM Peak - 1.078 urban principle, 1.078 urban minor
- 2016-2021 Sat Peak - 1.080 urban principle, 1.081 urban minor

6.16 It should be noted that Park Road South is designated as urban principle; all other roads within the study area are designated as urban minor.

7. JUNCTION CAPACITY ANALYSIS

Introduction

7.1 This section details the result of the traffic impact assessment of the proposed development on the local highway network.

Study area

7.2 This modelling assessment assess the impact of development traffic on the following study area junctions. This study area was discussed and agreed with officers at HBC.

- Solent Road/Site Access (priority junction);
- Park Road/Solent Road (signal junction);
- Solent Road/Selbourne Road (priority junction);
- Solent Road/Tesco Access (signal junction);
- Solent Road/Brockhampton Lane (cross-road junction); and
- Brockampton Road/Solent Road/Marples Way (roundabout).

Modelling Methodology

7.3 The Transport Research Laboratory's (TRL) modelling software LINSIG, PICADY 5.1 and ARCADY 9 have been used to model the operation of the junctions within the study area.

7.4 In order to model the arrival pattern more effectively the time periods assessed are divided into a number of 15-minute time segments. The models return results in Ratio of Flow to Capacity (RFC) and mean maximum queue (Q) in each time segment, measured in number of vehicles.

7.5 RFC values between 0.00 and 0.85 indicate good operating conditions, values between 0.85 and 1.00 represent a variable operation (i.e. queues building at the junction resulting in increased vehicle delay moving through the junction). RFC values in excess of 1.00 represent overloaded conditions.

7.6 The operation of the junctions have been assessed based on the following scenarios and flow diagrams are included at **Appendix A7**:

- 2016 Observed – Existing network counts;

- 2021 Base – Existing Network counts Plus TEMPRO future year
- 2021 Base + Committed – 2021 Base scenario plus relevant committed development trips
- 2021 Base + Committed + Proposed - 2021 Base + Committed scenario plus proposed development trips.

7.7 2016 observed flows and queue length surveys have been used to validate each junction model where appropriate.

Committed Developments

7.8 In addition to the developments contained within the TEMPRO growth factors, further trips have been added to the assessment for known approved planning applications in the local area. The following approved applications have been considered, as agreed with HBC:

- Former ICTS Site, Solent Road, Havant (APP/16/00161);
- Ranlagh Road, Havant (APP /12/0077); and
- Havant Borough Council Depot, Harts Farm Way, Havant (02/52646/016).

7.9 At the time of writing, no proposed traffic information was available for application 02/52646/016 and as such; an assessment was undertaken using TRICS to find a suitable trip rate for a development of this size. The calculated trips where then distributed throughout the network using existing turning proportions.

Junction Capacity Analysis

Solent Road/Site Access – Priority Junction

7.10 The results in **Table 7.1** demonstrate that the junction will operate within capacity in all peak periods with both the local committed developments and proposed development fully occupied. A maximum RFC of 0.31 occurs on arm B (Site Access) in the SAT peak based on the 2021 Base + committed + proposed scenario; this is comfortably below the recommended RFC threshold of 0.85. Full PICADY results are provided at **Appendix A8**.

Table 7.1 **Solent Road/Site Access – Priority Junction**

Test Scenario	Arm	AM Peak		PM Peak		SAT Peak	
		RFC	Max Q	RFC	Max Q	RFC	Max Q
2016 Base	B-AC	0.04	0	0.10	0	0.07	0
	C-B	0.01	0	0.04	0	0.00	0
2021 Base	B-AC	0.04	0	0.11	0	0.09	0
	C-B	0.01	0	0.01	0	0.00	0
2021 Base + Committed	B-AC	0.04	0	0.11	0	0.09	0
	C-B	0.01	0	0.01	0	0.00	0
2021 Base + Committed + Proposed	B-AC	0.22	0	0.29	0	0.31	0
	C-B	0.04	0	0.04	0	0.03	0

Solent Road/Selbourne – Priority Junction

7.11 The results in **Table 7.2** demonstrate that the junction will operate over capacity in the Saturday peak period within the 2021 base plus committed scenario, both with and without development traffic. Further assessment of the results shows the impact created by the development traffic would be minimal in terms RFC capacity increase of 0.06 and as such is not considered to be significant. The junction will continue to work within capacity during the weekday peaks. Full PICADY results are provided at **Appendix A8**.

Table 7.2 **Solent Road/Selbourne Road– Priority Junction**

Test Scenario	Arm	AM Peak		PM Peak		SAT Peak	
		RFC	Max Q	RFC	Max Q	RFC	Max Q
2016 Base	B-AC	0.11	0	0.49	1	1.13	13
	C-B	0.16	0	0.36	1	1.11	7
	C-AB	0.34	1	0.47	1	0.83	5
2021 Base	B-AC	0.12	0	0.58	1	1.47	52
	C-B	0.19	0	0.46	1	1.44	23
	C-AB	0.37	1	0.52	1	0.92	12
2021 Base + Committed	B-AC	0.12	0	0.59	1	1.53	56
	C-B	0.19	0	0.47	1	1.50	25
	C-AB	0.38	1	0.52	1	0.93	13
2021 Base + Committed + Proposed	B-AC	0.12	0	0.60	1	1.58	59
	C-B	0.19	0	0.49	1	1.55	27
	C-AB	0.38	1	0.53	1	0.93	13

Solent Road/Brockhampton Lane – Crossroad Priority Junction

7.12 In accordance with the PICADY user guide, this junction has been modelled as a cross road junction due to its urban location and stagger distance of less than 20m. The results in **Table 7.3** demonstrate that the junction will operate within capacity in all peak periods with both the local committed developments and proposed development fully occupied. A maximum RFC of 0.23 occurs on arm D (Brockhampton Lane (N)) in the SAT peak based on the 2021 base plus committed plus proposed scenario; this is comfortably below the recommended RFC threshold of 0.85. Full PICADY results are provided at **Appendix A8**.

Table 7.3 **Solent Road/Brockhampton Lane – Priority Junction**

Test Scenario	Arm	AM Peak		PM Peak		SAT Peak	
		RFC	Max Q	RFC	Max Q	RFC	Max Q
2016 Base	B-CD	0.00	0	0.01	0	0.00	0
	B-AD	0.00	0	0.01	0	0.01	0
	A-BCD	0.01	0	0.01	0	0.03	0
	D-AB	0.03	0	0.07	0	0.14	0
	D-BC	0.05	0	0.10	0	0.20	0
	C-ABD	0.00	0	0.00	0	0.00	0
2021 Base	B-CD	0.00	0	0.01	0	0.00	0
	B-AD	0.00	0	0.01	0	0.01	0
	A-BCD	0.01	0	0.02	0	0.03	0
	D-AB	0.03	0	0.07	0	0.15	0
	D-BC	0.05	0	0.12	0	0.23	0
	C-ABD	0.04	0	0.00	0	0.00	0
2021 Base + Committed	B-CD	0.00	0	0.01	0	0.00	0
	B-AD	0.00	0	0.01	0	0.01	0
	A-BCD	0.01	0	0.02	0	0.03	0
	D-AB	0.03	0	0.07	0	0.15	0
	D-BC	0.05	0	0.12	0	0.23	0
	C-ABD	0.00	0	0.00	0	0.00	0
2021 Base + Committed + Proposed	B-CD	0.00	0	0.01	0	0.00	0
	B-AD	0.00	0	0.01	0	0.01	0
	A-BCD	0.01	0	0.02	0	0.03	0
	D-AB	0.03	0	0.07	0	0.15	0
	D-BC	0.05	0	0.12	0	0.23	0
	C-ABD	0.00	0	0.00	0	0.00	0

Brockampton Road/Solent Road/Marples Way – Roundabout Junction

7.13 The results in **Table 7.4** demonstrate that within the weekday AM peak scenario the junction will operate at or below the capacity threshold 1.00 with both the local committed developments and proposed development fully occupied. The junction will continue to work comfortably below the capacity threshold of 1.00 in the PM and Saturday peak scenarios. Further inspection of the results shows the impact of the development to be negligible. Full ARCADY results are provided at **Appendix A8**.

Table 7.4 **Brockampton Road/Solent Road/Marples Way – Roundabout Junction**

Test Scenario	Arm	AM Peak		PM Peak		SAT Peak	
		RFC	Max Q	RFC	Max Q	RFC	Max Q
2016 Base	Brockhampton Road (N)	0.81	4	0.68	2	0.64	2
	Solent Road	0.46	1	0.48	1	0.51	1
	Brockhampton Road (S)	0.32	1	0.51	1	0.36	1
	Marples Way	0.14	0	0.52	1	0.01	0
2021 Base	Brockhampton Road (N)	0.90	6	0.79	3	0.71	2
	Solent Road	0.50	1	0.53	1	0.55	1
	Brockhampton Road (S)	0.35	1	0.56	1	0.39	1
	Marples Way	0.15	0	0.70	2	0.01	0
2021 Base + Committed	Brockhampton Road (N)	0.95	9	0.84	4	0.73	3
	Solent Road	0.52	1	0.55	1	0.56	1
	Brockhampton Road (S)	0.36	1	0.58	1	0.41	1
	Marples Way	0.11	0	0.82	3	0.01	0
2021 Base + Committed + Proposed	Brockhampton Road (N)	1.00	12	0.87	5	0.76	3
	Solent Road	0.09	0	0.56	1	0.57	1
	Brockhampton Road (S)	0.35	1	0.59	1	0.42	1
	Marples Way	0.16	0	0.89	4	0.01	0

Park Road/Solent Road – Signal Junction

7.14 The traffic modelling for the Park Road/Solent Road junction has been undertaken using the traffic signal timing data and associated information obtained from Hampshire County Council. The modelling also assumes that the pedestrian phase is called during each cycle to ensure a robust assessment.

7.15 The results in **Tables 7.5-7.8** demonstrate that for the Saturday peak scenario the junction will operate around the capacity threshold 1.00 with both the local committed developments and inclusion of proposed development traffic. The junction will continue to work comfortably below the capacity threshold of 1.00 in the AM and PM peak scenarios. Full LINSIG results are provided at **Appendix A8**.

Table 7.5 **Park Road/Solent Road Signal Junction – Observed 2016**

Link Number	Lane Description	AM Peak		PM Peak		SAT Peak	
		Deg Sat %	Mean Max Q	Deg Sat (%)	Mean Max Q	Deg Sat (%)	Mean Max Q
Network	**-**	**74.8%**	**-**	**71.3%**	**-**	**87.2%**	**-**
Junction	**-**	**74.8%**	**-**	**71.3%**	**-**	**87.2%**	**-**
1/1	Park Road South left	74.8%	12.9	70.5%	10.6	85.4%	16.2
1/3+1/2	Park Road South Ahead	65.7%	9.9	45.8%	6.3	40.8%	5.3
2/1+2/2	Solent Road Right Left	69.2%	6.1	71.3%	10.7	87.2%	12.3
3/1	Park Road North Ahead	27.8%	4.0	48.2%	7.5	31.0%	4.4
3/2	Park Road North Ahead	27.7%	4.0	48.1%	7.5	31.0%	4.4
3/3	Park Road North Right	73.6%	9.1	69.4%	7.2	85.8%	10.5

Cycle Time = 88s in AM peak, 93s in PM/SAT Peak / Mean Max Queue in PCUs

Table 7.6 **Park Road/Solent Road Signal Junction – 2021 Base + Committed**

Link Number	Lane Description	AM Peak		PM Peak		SAT Peak	
		Deg Sat %	Mean Max Q	Deg Sat (%)	Mean Max Q	Deg Sat (%)	Mean Max Q
Network	**-**	**81.7%**	**-**	**77.9%**	**-**	**94.0%**	**-**
Junction	**-**	**81.7%**	**-**	**77.9%**	**-**	**94.0%**	**-**
1/1	Park Road South left	81.7%	15.2	77.3%	12.3	93.6%	22.1
1/3+1/2	Park Road South Ahead	71.1%	11.2	49.4%	6.9	45.2%	6.2
2/1+2/2	Solent Road Right Left	76.1%	7.1	77.9%	12.3	92.4%	15.9
3/1	Park Road North Ahead	30.1%	4.4	51.9%	8.2	32.9%	5.0
3/2	Park Road North Ahead	30.0%	4.4	51.8%	8.2	32.8%	5.0
3/3	Park Road North Right	80.2%	10.6	76.5%	8.4	94.0%	14.5

Cycle Time = 88s in AM peak, 93s in PM/SAT Peak / Mean Max Queue in PCUs

Table 7.7 **Park Road/Solent Road Signal Junction – 2021 Base + Committed + Proposed**

Link Number	Lane Description	AM Peak		PM Peak		SAT Peak	
		Deg Sat %	Mean Max Q	Deg Sat (%)	Mean Max Q	Deg Sat (%)	Mean Max Q
Network	**-**	**84.1%**	**-**	**80.9%**	**-**	**97.6%**	**-**
Junction	**-**	**84.1%**	**-**	**80.9%**	**-**	**97.6%**	**-**
1/1	Park Road South left	84.1%	16.3	79.3%	12.9	95.7%	24.5
1/3+1/2	Park Road South Ahead	70.2%	11.0	48.6%	6.8	44.5%	6.1
2/1+2/2	Solent Road Right Left	80.9%	8.0	80.4%	13.1	95.7%	19.0
3/1	Park Road North Ahead	29.7%	4.3	51.1%	8.1	32.3%	4.9
3/2	Park Road North Ahead	29.6%	4.3	51.1%	8.1	32.2%	4.9
3/3	Park Road North Right	82.5%	11.2	80.9%	9.2	97.6%	17.3

Cycle Time = 88s in AM peak, 93s in PM/SAT Peak / Mean Max Queue in PCUs

7.16 The traffic modelling results contained within **Tables 7.5-7.7** above detail the operation of the junction within the addition of traffic flows associated with the local committed developments and the proposed development. Given that the Saturday peak hour shows the highest levels of DoS, it is important to consider the impact of the proposed development on individual arms of the junction in greater detail.

7.17 The highest predicted queuing is shown on the Park Road South left arm of the junction (22.1 vehicles) and Park Road North right arms of the junction (14.5). The predicted levels of queuing as a result of the development is shown to be 24.5 vehicles and 17.3 vehicles on each arm respectively. This increase of less than 3 vehicles on each arm is not considered to represent a significant impact.

7.18 For consideration of the overall operation of the junction one should consider the impact of the development on the most constrained arm in terms of Degree of Saturation (DoS) and on the Practical Reserve Capacity (PRC). These are shown in **Table 7.8** overleaf:

Table 7.8 **Park Road/Solent Road Signal Junction – Max Results**

Scenario	AM Peak		PM Peak		SAT Peak	
	Max DoS	PRC	Max DoS	PRC	Max DoS	PRC
2016 Observed	74.8%	20.4	71.3%	26.3	87.2%	3.2
2021 Base + Committed	81.7%	10.2	77.9%	15.6	94.0%	-4.4
2021 Base + Committed + Proposed	84.1%	7.1	80.9%	11.3	97.6%	-8.4

7.19 From the table above, it is considered that the increases in DoS and PRC shown would not represent a significant impact on the operation of the junction, and as such the impact of the proposed development should not be considered as severe.

Solent Road/Tesco Access – Signal Junction

7.20 The traffic modelling for the Park Road/Solent Road junction has been undertaken using the traffic signal timing data and associated information obtained from Hampshire County Council. The modelling also assumes that the pedestrian phase is called during each cycle to ensure a robust assessment.

7.21 The results in **Tables 7.9-7.11** demonstrate that within the weekday AM peak scenario the junction will operate slightly below the capacity threshold 1.00 with both the local committed developments and proposed development fully occupied. The junction will continue to work comfortably below the capacity threshold of 1.00 in the PM and Saturday peak scenarios. Full LINSIG results are provided at **Appendix A8**.

Table 7.9 **Solent Road/Tesco Access Signal Junction – Observed 2016**

Link Number	Lane Description	AM Peak		PM Peak		SAT Peak	
		Deg Sat %	Mean Max Q	Deg Sat (%)	Mean Max Q	Deg Sat (%)	Mean Max Q
Network	**-**	**57.7%**	**-**	**71.1%**	**-**	**78.2%**	**-**
Junction	**-**	**57.7%**	**-**	**71.1%**	**-**	**78.2%**	**-**
1/2+1/1	Solent Rd East Left Ahead	57.0%	7.7	62.7%	8.0	78.2%	13.3
2/2+2/1	Tesco Store Left Right	57.7%	5.6	71.1%	9.7	77.2%	10.9
3/1+3/2	Solent Rd West Right Ahead	43.9%	4.5	70.7%	9.9	58.8%	6.3

Cycle Time = 104s / Mean Max Queue in PCUs

Table 7.10 **Park Road/Solent Road Signal Junction – 2021 Base + Committed**

Link Number	Lane Description	AM Peak		PM Peak		SAT Peak	
		Deg Sat %	Mean Max Q	Deg Sat (%)	Mean Max Q	Deg Sat (%)	Mean Max Q
Network	**-**	**62.4%**	**-**	**78.2%**	**-**	**94.0%**	**-**
Junction	**-**	**62.4%**	**-**	**78.2%**	**-**	**94.0%**	**-**
1/2+1/1	Solent Rd East Left Ahead	62.4%	8.8	67.7%	8.9	84.8%	15.6
2/2+2/1	Tesco Store Left Right	62.2%	6.2	76.7%	11.0	84.8%	13.4
3/1+3/2	Solent Rd West Right Ahead	45.5%	5.2	78.2%	11.9	83.3%	7.3

Cycle Time = 104s / Mean Max Queue in PCUs

Table 7.11 **Solent Road/Tesco Access Signal Junction – 2021 Base + Committed + Proposed**

Link Number	Lane Description	AM Peak		PM Peak		SAT Peak	
		Deg Sat %	Mean Max Q	Deg Sat (%)	Mean Max Q	Deg Sat (%)	Mean Max Q
Network	**-**	**63.6%**	**-**	**78.4%**	**-**	**84.9%**	**-**
Junction	**-**	**63.6%**	**-**	**78.4%**	**-**	**84.9%**	**-**
1/2+1/1	Solent Rd East Left Ahead	63.6%	9.1	66.6%	8.8	84.9%	16.6
2/2+2/1	Tesco Store Left Right	62.2%	6.2	78.3%	11.3	84.8%	13.4
3/1+3/2	Solent Rd West Right Ahead	45.7%	5.4	78.4%	12.1	65.9%	7.8

Cycle Time = 104s / Mean Max Queue in PCUs

7.22 The traffic modelling results contained within **Tables 7.9-7.11** above detail the operation of the junction within the addition of traffic flows associated with the local committed developments and the proposed development.

7.23 For consideration of the overall operation of the junction one should consider the impact of the development on the most constrained arm in terms of Degree of Saturation (DoS) and on the Practical Reserve Capacity (PRC). These are shown in the **Table 7.12** below:

Table 7.12 **Park Road/Solent Road Signal Junction – Max Results**

Scenario	AM Peak		PM Peak		SAT Peak	
	Max DoS	PRC	Max DoS	PRC	Max DoS	PRC
2016 Observed	57.7%	56.0	71.7%	26.6	78.2%	15.0
2021 Base + Committed	62.4%	44.3	78.2%	15.1	84.8%	6.1
2021 Base + Committed + Proposed	63.6%	41.5	78.4%	14.8	84.9%	6.1

7.24 It is generally accepted that the theoretical capacity of a signal controlled junction is represented by all links operating below 90%, with a positive PRC value. From inspection of the modelling results in **Table 7.12**, it is clear that the junction is predicted to operate within this theoretical capacity

during the assessment peaks with the inclusion of development traffic in the 2021 future assessment year.

Summary

7.25 The modelling clearly shows that the proposed development will generally have a negligible impact on the surrounding highway network compared to the future year plus committed development traffic and any impact would not be discernible from daily fluctuations on the network. Whilst it is acknowledged that some of the junctions within the study area are predicted to operate at or close to their theoretical capacity, the impact of the proposed development traffic will be negligible in terms of overall operation and as such should not be considered as being severe. Full outputs of the assessments are included at **Appendix A8**.

8. CONCLUSION

8.1 This Transport Assessment has been produced to support the proposed development of a Starbucks unit on the existing Langstone Park office campus.

8.2 The Site is located to the south of Havant with excellent connections to the local and wider highway network. It is located immediately to the south of Solent Road, which serves a range of retail and commercial uses.

8.3 The Site is considered to be in a sustainable location and can be access by foot, cycle and public transport.

8.4 The proposed development will be located in the north east corner of the existing Langstone Gate office campus and will replace a section of the existing office car park. In conjunction with the proposed development, the existing Solent Road / Site Access junction will be modified to improve access, and ensure that safe and appropriate access to the proposed Starbuck outlet can be provided.

8.5 The proposed development will provide 16 car parking spaces and a drive-thru lane to serve the Starbucks operation. Swept path analysis has been undertaken to ensure and demonstrate that the proposed internal layout will be fit for purpose.

8.6 A parking accumulation assessment of the existing office car parking has been undertaken to demonstrate that the loss of car parking spaces (40) as part of the development proposals could be accommodated within the context of the existing office use of the site.

8.7 A trip generation and traffic distribution assessment has been undertaken which considers the type of operation proposed, and the existing travel patterns within the local highway network. This has accounted for both new and diverted trips and is considered to be robust.

8.8 The highway impact assessment contained within this report has clearly demonstrated that whilst some of the junctions within the study area are operating at or close to their theoretical capacity, the impact of the additional traffic associated with the proposed development would be negligible.

8.9 In conclusion, based on the content of this report, the impact of the proposed development should not be considered as severe in the context of the criteria outlined within NPPF and as such there should be no highways or transport reason not to grant planning permission for the proposed development.

A1. SITE LOCATION PLAN

ocation Plan



A2. SCOPING DISCUSSIONS

Mitchell Gregory

From: Paul Cranley
Sent: 05 October 2016 11:37
To: Mitchell Gregory
Subject: Fwd: Langstone Gate, Solent Road, PO9 1TR

Follow Up Flag: Follow up
Flag Status: Flagged

Paul Cranley
Director - Transport
Iceni Projects

[redacted]

Begin forwarded message:

From: Peter Marshall <Peter.Marshall@havant.gov.uk>
Date: 5 October 2016 11:34:20 BST
To: 'Paul Cranley' [redacted]
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Paul it up to justify the figures in your TA and I would expect provided a breakdown for pass by, diversion.
In general terms I think there would be an element of shared trips at the weekend but I am not sure this will be the case in the morning peak hour.

I copy some of my I thoughts

General

The concerns of the Highway Authority and Havant Borough is the effect on the operation of the Park Road North/Solent road traffic controlled junction (PRN/SR)
The concern has two parts
1. The increase traffic through the PRN/SR
2. The effect on the PRN/SR because of the increased traffic movements associated with the uncontrolled Solent Road/Langstone Gate junction (SR/LG)

Increased Trips through PRN/SR

There will be new trips on the network and existing diverted trips. The developers consultant has suggested 60 % new trips and 40% existing/diverted trips. The majority of these 60% and 40% trips will be from the Park Road North but a smaller number will be from the west end of Solent Road.

Increased Trips through SR/LG

From the East

The new trips and existing trips from the east will turn left into Langstone Gate (LG). Vehicles leaving LG wanting to go east will prefer turn right and try to join the queue at the lights or they could more easily turn left into Solent Road (SR) and then u -turn using the retail junctions or the roundabout at Solent Road/Marples Way (SR/MW). Some of the existing trips may decide not to turn into LG but carry on and use one of the retail car parks for shopping and then walk to LG but this seems unlikely as Tesco Next and Mand S have there own coffee shops. However if they decide to drive from the car park they will have to have to join the queue waiting at the PRN/SR lights in order to make a right into LG. On exiting they will again have to decide whether to turn left or right to carry on east

From the west.

New and existing traffic from the west wanting to use LG will have to join the queue at the PRN/SR lights to turn right and then decide weather to turn left or right to carry on east..
Existing traffic from the west could decide to park in on of the existing retail car parks for shopping and then walk to LG but this seems unlikely as Tesco Next and Mand S have there own coffee shops. However if they decide to drive from the car parks they will have to have to join the queue waiting at the PRN/SR lights in order to make a right into LG. On exiting they will again have to decide whether to turn left or right to carry on east.

Regards

Peter J Marshall BSc MCIHT
Development Engineer

(My work days are Tuesday,Wednesday and Thursday)

Havant Borough Council, Public Service Plaza, Civic Centre Road, Havant , PO9 2AX
Direct Dial (023) 925446457
Email: peter.marshall@havant.gov.uk

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From: Paul Cranley [redacted]
Sent: 04 October 2016 15:59
To: Peter Marshall
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Thanks for this Peter, we will locate these and incorporate the associated traffic as appropriate.

Further to the previous discussions with Andrew Hughes in respect of Pass-by/Diverted trips, we have considered these in greater detail. The nature of the proposed Starbucks use of the site, is such that the majority of trips are expected to be pass-by or diverted – it is unlikely, particularly given the location of the site, that a visit to Starbuck will be the sole purposed of the trip.

It is acknowledged though, given the location of the site, that diverted trips from Park Road are likely to turn left out of the site (as you advised previously) and as such these would be considered for modelling purposes as 'new trips'. In light of this it is suggested that the traffic generation for the Starbucks should be broken down into 60% new (diverted) trips and 40% pass-by trips (already on Solent Road). As detailed previously, given that the nature of Starbucks operation is such that the proportion of new trips generated by the development will be minimal, this is considered to be a robust representation of the potential impact of the scheme.

I would be grateful if you could confirm that this is acceptable?

Paul Cranley BA(Hons) MCILT
Director, Transportation

[redacted]

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From: Peter Marshall [mailto:Peter.Marshall@havant.gov.uk]
Sent: 04 October 2016 10:31

To: Paul Cranley [redacted]
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Pau, Further to my recent email the old ICTS site on Solent Road has been built but is empty. Its location is on the north side of Solent Road directly to the west of the Tesco garage.
Regards Peter

Peter J Marshall BSc MCIHT
Development Engineer

(My work days are Tuesday,Wednesday and Thursday)

Havant Borough Council, Public Service Plaza, Civic Centre Road, Havant , PO9 2AX
Direct Dial (023) 925446457
Email: peter.marshall@havant.gov.uk

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From: Paul Cranley [redacted]
Sent: 29 September 2016 14:51
To: Peter Marshall
Cc: Mitchell Gregory
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Peter

I understand you previously has correspondence with my colleague Andrew Hughes in respect of the above site.

We are progressing with the junction modelling as agreed in the emails below. In regard to traffic growth, we are proposing to apply traffic growth to 2021 (5 years from application) using figures obtained from TEMPRO.

I trust this is considered appropriate?

Paul Cranley BA(Hons) MCILT
Director, Transportation

[redacted]

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From: Peter Marshall [mailto:Peter.Marshall@havant.gov.uk]
Sent: 06 September 2016 10:11
To: Andrew Hughes [redacted]
Cc: Paul Cranley [redacted]
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Good morning Andrew you are quite right that Brockhampton Road is closed by bollards. However the new Marks and Spencer's store has an out into Brockhampton Lane from the Solent Retail Park shared car park. My own experience that vehicles are now using this exit to turn left and right at the Brockhampton Lane Solent road junction too avoid the congestion at the Selbourne road Solent Road Junction. Although not a requirement it would be of help to the Highway Authority and Havant Borough Council. if this junction could be added to your survey so that the public and elected members can get an full understanding of the traffic patterns in Solent Road.
Regards Peter

Peter J Marshall BSc MCIHT
Development Engineer

(My work days are Tuesday,Wednesday and Thursday)

Havant Borough Council, Public Service Plaza, Civic Centre Road, Havant , PO9 2AX
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From: Andrew Hughes [mailto:[redacted]
Sent: 05 September 2016 11:08
To: Peter Marshall
Cc: Paul Cranley
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Dear Peter,

Thanks for providing us with this information.

The effects of the development on Solent Road / Park Road signal junction will be quantified, using LinSig junction modelling software. The assessment will be informed by a detailed analysis of any linked, diverted, or pass-by trips and a sensible distribution will be used, taking into consideration what you mention below in regards to turning right-out.

Based on your advice below, we have reviewed the local highway network and we intend to undertake an analysis of the following junctions:

- Tesco signalised junction;
- Selbourne Road/Solent Road junction; and,
- Brockhampton Road roundabout.

A further look at Brockhampton Lane has shown that there are bollards towards the north which prevent any through movement. As such it is not considered that development traffic would use this route. Furthermore given the expected low movement on the minor arm it is not considered that any modelling of the Brockhampton Lane / Solent Road junction should be required. Shown below:



Please let me know if you have any further comment otherwise I would be grateful if you could confirm that the above represents an agreed scope of modelling, and we will proceed with commissioning traffic surveys at the junctions listed this month.

Thanks,
Andrew

Andrew Hughes
Senior Engineer, Transport

[redacted]

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From: Peter Marshall [mailto:Peter.Marshall@havant.gov.uk]
Sent: 25 August 2016 10:26
To: Andrew Hughes <AHughes@iceniprojects.com>
Cc: Paul Cranley <pcranley@iceniprojects.com>
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Dear Andrew,

The Highway Authority concerns related to the impact of the development on the operation of the Solent road/Park Road signal junction.

The modelling should truly reflect the interaction between this junction and the proposed access taking into consideration that right turn movements from the proposed access are likely to be restricted by blocking back on Solent Road and the staging of the signals meaning vehicles turning from Park Road North/South also prevent them from pulling out.

The risk is that either no vehicle can get out of the proposed access unless they turn left which I imagine they do now (I suggest the need for a turning count when the

existing priority access is surveyed) or they will get stuck turning across Solent Road to go right if drivers do not let them out and therefore completely block anyone turning in to Solent Road causing even more congestion and potentially blocking the junction.

If vehicles are going to be assumed to turn left out of the access only then modelling of the Tesco signal junction, Brockhampton Road Roundabout, Brockampton Lane/Solent Road Junction, Selbourne Road/Solent Road junction needs to be modelled.

In my general comments on the proposal I was also concerned that the design did not take into other modes of travel other than the use of the private motor vehicle

Regards

Peter J Marshall BSc MCIHT
Development Engineer

(My work days are Tuesday,Wednesday and Thursday)

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From: Andrew Hughes [redacted]
Sent: 24 August 2016 14:59
To: Peter Marshall
Cc: Drury, Holly; Paul Cranley
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Dear Peter,

A pre-application response (ref: GEN/16/00377) from Havant Borough Council, in relation to the site, has identified the following concerns in relation to the development proposals:

- The impact of the development on the Solent Road / Park Road South signalised junction;
- Level of queueing on Solent Road / internally within the site; and,
- Loss of employment parking.

In order to address these comments, it is proposed that the following are undertaken:

1. Traffic Surveys

- *Park Road South / Solent Road (MCC)*

Weekday 07:00-10:00 and 16:00-19:00
Saturday 10:00-16:00
Queue Length
Saturation Flows

- *Site Access / Solent Road (MCC)*
  Weekday 07:00-10:00 and 16:00-19:00
  Saturday 10:00-16:00
  Queue Length

- *Site Access Car Park Counts (video) to determine car park demand*
  Weekday 07:00-20:00
  Saturday 07:00-20:00

2. Junction Modelling

- LINSIG junction model of the Solent Road / Park Road South junction;
- PICADY junction model of the Site access / Solent Road

I would be grateful if you could confirm that this is acceptable, and if you could also confirm if a Travel Plan is required?

Many Thanks,

Andrew Hughes
Senior Engineer, Transport

[redacted]

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From: Peter Marshall [mailto:Peter.Marshall@havant.gov.uk]
Sent: 20 July 2016 08:09

To: Andrew Hughes [redacted]
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Dear Andrew,
Havant Borough along with HCC are very aware of the local public and political concerns regarding transport/traffic issues in the Solent Road and Park Road North/South corridor and therefore we need robust in the assessment of any additional development on this corridor. This includes modelling the Solent road/Park road signal junction and ensuring that a true reflection of additional trips going through the site is taken into account. Many diverted trips or pass by will still involve them negotiating this junction twice therefore a blanket reduction is probably not applicable here.
Regards Peter Marshall

Peter J Marshall BSc MCIHT

Development Engineer
Havant Borough Council
Penner Road
Havant
Hants
PO9 1QH

Tel No. 02392446457
Email peter.marshall@havant.gov.uk
(My work days are Tuesday,Wednesday and Thursday)

From: Andrew Hughes [mailto[redacted]
Sent: 19 July 2016 14:26
To: Peter Marshall
Cc: Drury, Holly; Mike England; Paul Cranley
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Dear Peter,

Holly at HCC has directed me to you in regards to agreeing the scope of the Transport Assessment associated with the installation of a stand-alone coffee drive-thru unit (class A3) with sit-in and take-away facilities within the curtilage of the car park (circa 167sqm floor area). A ground floor plan of the proposals is attached for reference.

In terms of the access (shown in the attached drawing), this will go through the pre-app design check process with HCC which I have discussed with Holly in the e-mail below. This will ensure that the design of the junction is acceptable before submission. Obviously, it would be good to have agreed the trip generation, distribution and % of any linked, pass-by and diverted trips, with yourself to feed into the discussions with Holly. Can I do this with yourself in further discussions / e-mails?

Holly has confirmed that the signalised junction will need to be modelled as part of the assessment. There may already be an existing LinSig model which can be updated to include more recent traffic flows (obtained from a new survey).

In addition to modelling this junction, it is proposed that the site access junction is also modelled, using up to date traffic survey data for the morning, evening and Saturday peak periods.

A parking beat survey within the car park will also be undertaken for the same periods.

In addition, can you confirm if a Travel Plan is required for a development of this scale / nature?

If you have any questions then please feel free to contact me on the number below.

Many Thanks,

Andrew Hughes
Senior Engineer, Transport

[redacted]

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From: Drury, Holly [redacted]
Sent: 19 July 2016 10:37
To: Andrew Hughes <[redacted]>
Cc: Kester, Michael <[redacted]>
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Hi Andrew

Mike Kester (cc'd to this email) may be able to provide a copy of the model that we have but as discussed this would need updating with the current traffic flows which we currently do not have.

Regarding the pre app design check process please find below our guidance on this.

http://www3.hants.gov.uk/section-278-guidancefordevelopers.pdf

Peter Marshall is our agent and I have cc'd him in to this email so you have his contact details.

Kind Regards
Holly
Holly Drury BSc (Hons) MSc MCIHT MSoRSA
Senior Engineer – Highways Development Planning

Strategic Transport
01962 826996 (HPSN 826996)

From: Andrew Hughes [mailto:[redacted]
Sent: 19 July 2016 09:48
To: Drury, Holly
Cc: Peter.Marshall@havant.gov.uk; Paul Cranley; Mike England
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Hi Holly,

From the documentation submitted so far, the proposal is for 1,800sqft (167sqm).

Yes, it may be easier to discuss on the phone, when is a good time?

Thanks,
Andrew

Andrew Hughes
Senior Engineer, Transport

[redacted]

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From: Drury, Holly [redacted]
Sent: 19 July 2016 09:31
To: Andrew Hughes <[redacted]
Cc: Peter.Marshall@havant.gov.uk
Subject: RE: Langstone Gate, Solent Road, PO9 1TR

Dear Andrew

Mark has forwarded me your email as I cover the development planning function in the Havant Area at the County Council. Could you please confirm the size of the development. I believe the application is of the size and scale that our agent at Havant Borough Council would primarily be dealing with all Highway matters.

The pre-app response you have received outlines our agents concerns and suggests that the access is reviewed through our pre-application design check process. Gaining agreement from HCC on the form and location of the access at an early stage will allow any formal application to be responded to quicker.

Maybe if you give me a call on my direct number below we can discuss. If as I believe the application is of a size to be dealt with by our agent then the scope of the transport assessment will need to be agreed with him.

Kind Regards
Holly

Holly Drury BSc (Hons) MSc MCIHT MSoRSA
Senior Engineer – Highways Development Planning
Strategic Transport
01962 826996 (HPSN 826996)

From: Andrew Hughes [mailto[redacted]
Sent: 19 July 2016 09:00
To: Philcox, Mark
Cc: Mike England; Paul Cranley
Subject: Langstone Gate, Solent Road, PO9 1TR

Dear Mark,

I hope you are well.

By way of introduction, Iceni are the Transport Consultants working on a scheme at Langstone Gate, Solent Road. The application is for the installation of a stand-alone coffee drive-thru unit (class A3) with sit-in and take-away facilities within the curtilage of the car park. I have attached a ground floor plan of the proposals for completeness.

A pre-application response (ref: GEN/16/00377 - attached) from Havant Borough Council has identified that the County has raised the following concerns in relation to the development proposals:

- The impact of the development on the Solent Park / Park Road signalised junction;
- Level of queueing on Solent Road / internally within the site;
- Lack of convenient pedestrian, cycle and disabled access to and from the site from the surrounding residential and commercial area; and,
- Loss of employment parking. The Starbucks will provide 18 spaces.

To support the application Iceni will prepare a Transport Assessment.

As part of the Transport Assessment a number of surveys will be undertaken which will include:

- MCC survey of the site access / Solent Road junction during the weekday morning, evening and Saturday peak periods; and,

- Parking Beat surveys during the same weekday morning, evening and Saturday peak periods.

Do you agree with the scope of these surveys?

In terms of understanding the effect of the proposals on the Solent Road / Park Road signalised junction, can you confirm if the County do indeed require this junction to be modelled using LinSig modelling software. If so, do you have an existing model or traffic flows that could be used in the assessment? In addition, what other modelling do you deem necessary?

The Transport Assessment will quantify the vehicle trip generation in terms of any linked / pass-by / diverted trips. In terms of the vehicle distribution and vehicle trips by type, can I establish these with you in a subsequent e-mail?

In addition, can you confirm if a Travel Plan is required for a development of this scale / nature?

If you have any questions then please feel free to contact me on the number below.

Many Thanks,
Andrew

Andrew Hughes
Senior Engineer, Transport

[redacted]

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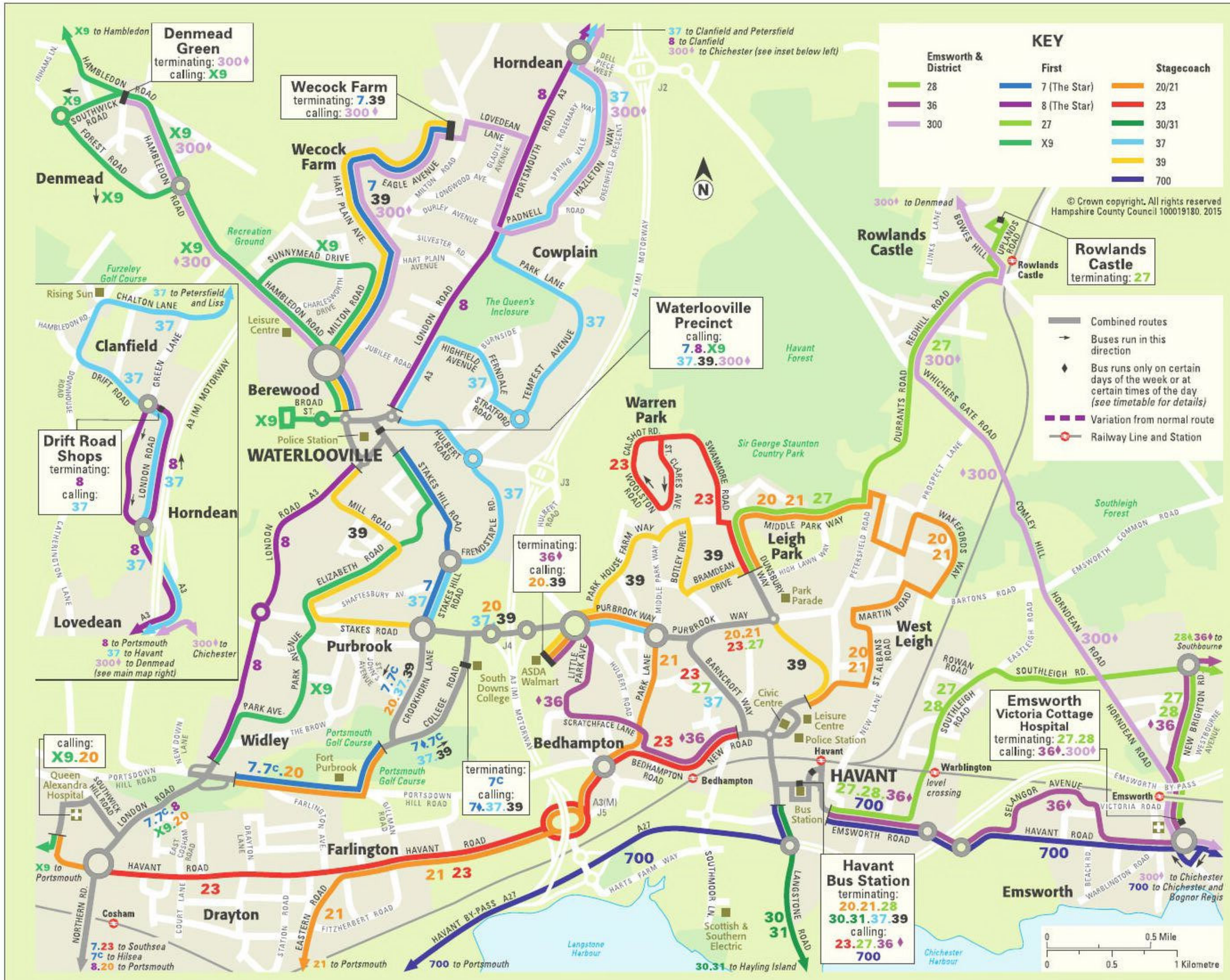
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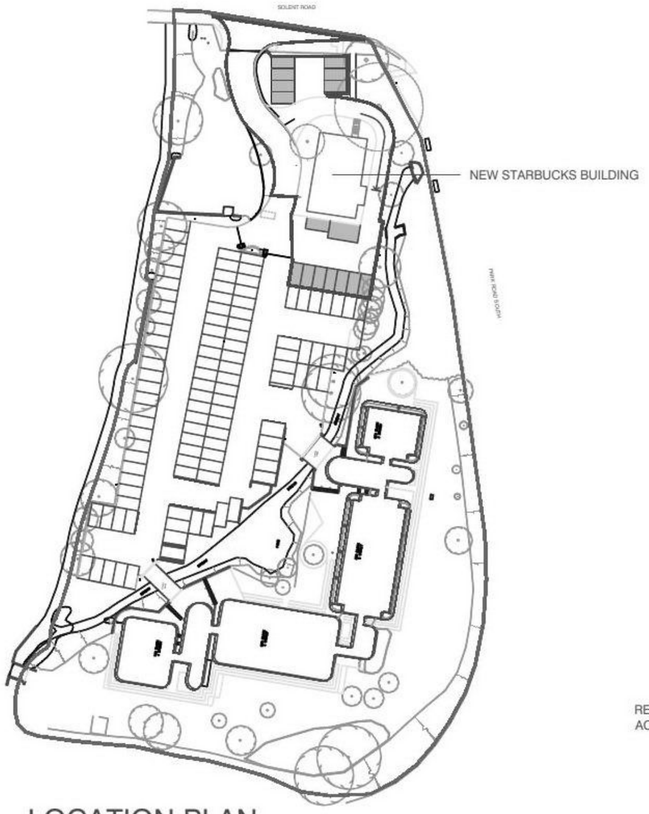
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A3. BUS ROUTE MAP

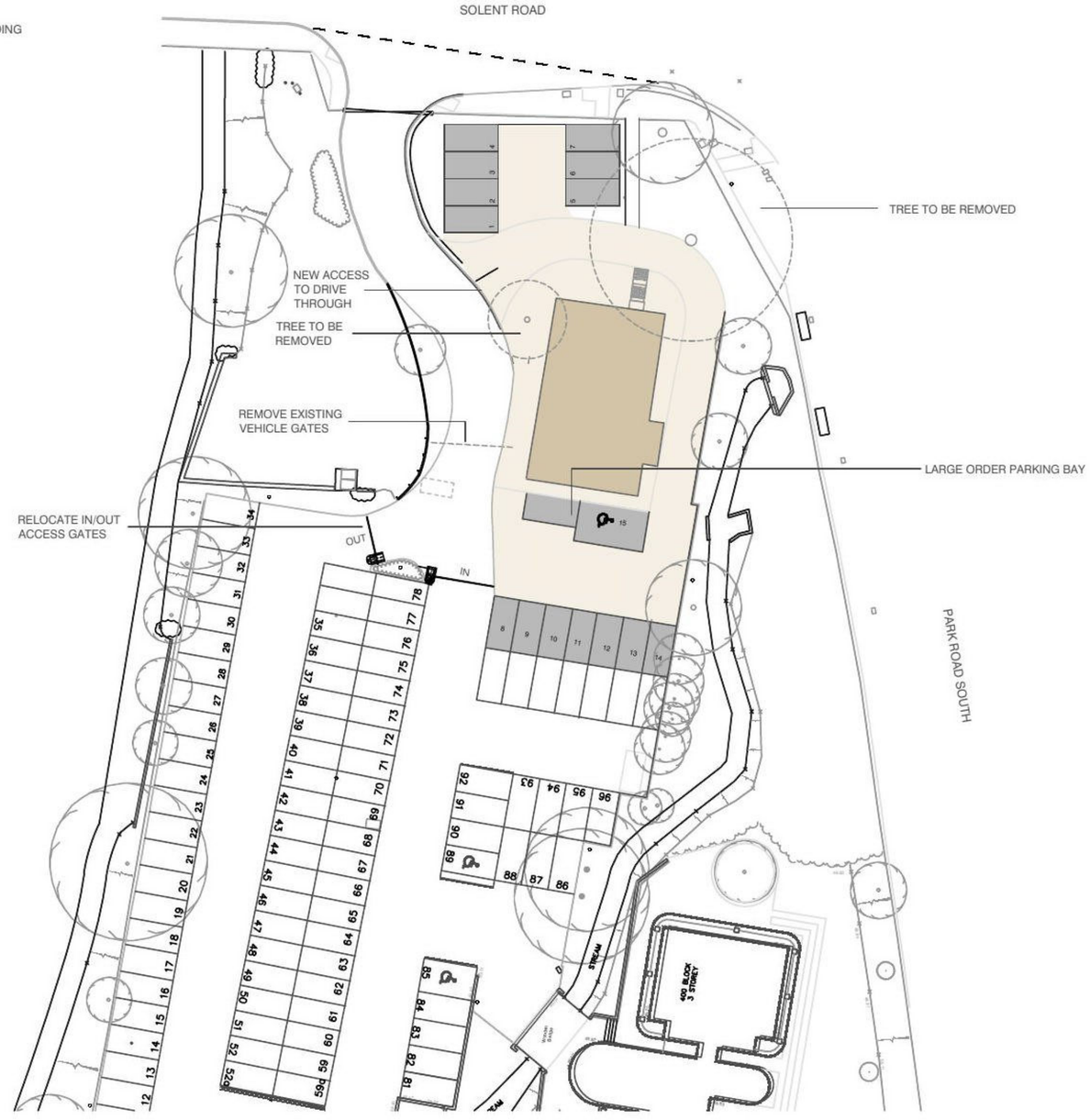

KEY
Emsworth & District
28
36
300
First
7 (The Star)
8 (The Star)
27
X9
Stagecoach
20/21
23
30/31
37
39
700
Combined routes
Buses run in this direction
Bus runs only on certain days of the week or at certain times of the day (see timetable for details)
Variation from normal route
Railway Line and Station
© Crown copyright. All rights reserved Hampshire County Council 100019180. 2015
Denmead Green terminating: 300 calling: X9
Wecock Farm terminating: 7.39 calling: 300
Waterlooville Precinct calling: 7.8.X9 37.39.300
Drift Road Shops terminating: 8 calling: 37
Rowlands Castle terminating: 27
terminating: 36 calling: 20.39
terminating: 7c calling: 7.37.39
calling: X9.20
Havant Bus Station terminating: 20.21.28 30.31.37.39 calling: 23.27.36 700
Emsworth Victoria Cottage Hospital terminating: 27.28 calling: 36.300
Denmead
Wecock Farm
Horndean
Cowplain
Waterlooville
Berewood
Clanfield
Lovedean
Rowlands Castle
Warren Park
Leigh Park
West Leigh
Purbrook
Widley
Bedhampton
Havant
Farlington
Drayton
Cosham
Emsworth
Sir George Staunton Country Park
Havant Forest
Southleigh Forest
Langstone Harbour
Chichester Harbour
Scottish & Southern Electric
Police Station
Leisure Centre
Civic Centre
Bus Station
Park Parade
ASDA Walmart
South Downs College
Queen Alexandra Hospital
Fort Purbrook
Portsmouth Golf Course
Furzeley Golf Course
Recreation Ground
The Queen's Inclosure
Rising Sun
Warblington level crossing
Rowlands Castle
X9 to Hambledon
37 to Clanfield and Petersfield
8 to Clanfield
300 to Chichester (see inset below left)
300 to Denmead
8 to Portsmouth
37 to Havant
300 to Denmead
(see main map right)
37 to Petersfield and Liss
300 to Chichester
X9 to Portsmouth
7.23 to Southsea
7c to Hilsea
8.20 to Portsmouth
21 to Portsmouth
700 to Portsmouth
30.31 to Hayling Island
700 to Chichester and Bognor Regis
28.36 to Southbourne
A3 (M) MOTORWAY
A27
A3
J2
J3
J4
J5
0 0.5 Mile
0 0.5 1 Kilometre

A4. SITE LAYOUT PLAN



LOCATION PLAN
1:1250 @ A3

0m 10m 25m 100m



BLOCK PLAN
1:500 @ A3

0m 10m 25m 50m

NOTES:

Dimensions to be checked on site before commencing work. Any discrepancies shall be reported to the architect immediately.

Do not scale from these drawings except for planning purposes. Use figured dimensions only.

Where applicable this drawing is to be read in conjunction with other consultants' drawings.

This drawing is the copyright of Harrington Design Architects Ltd.

15 SPACES FOR STARBUCKS

STARBUCKS BUILDING

STARBUCKS DEMISE

Rev	Date	Amendment

Harrington Design Architects
Broadbridge Business Centre
Delling Lane
Bosham
West Sussex
PO18 8NF

Tel: 01243 574600
Fax: 0870 7060193
info@harringtondesign.co.uk

For
SEAWARD PROPERTIES

Project
NEW STARBUCKS
LANGSTONE GATE
HAVANT

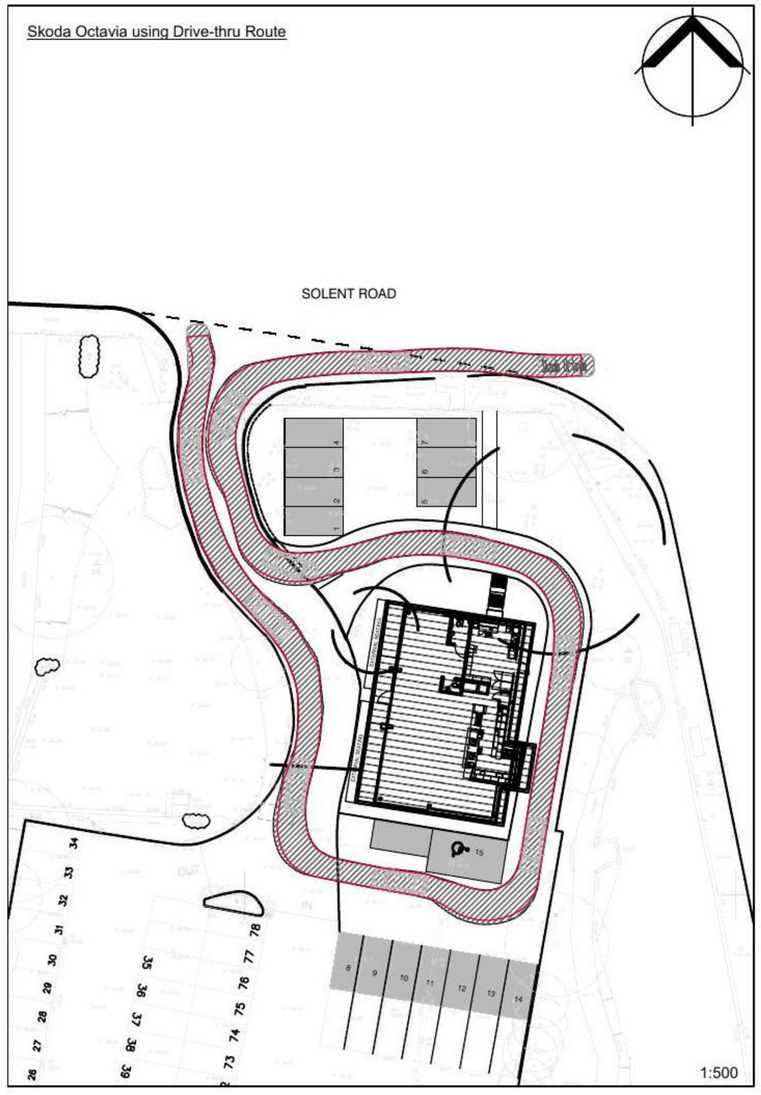
Title
LOCATION AND BLOCK PLANS

Date	Drawn	Scale	Checked
Feb 16	FM	1:1250&1:500@A3	MW

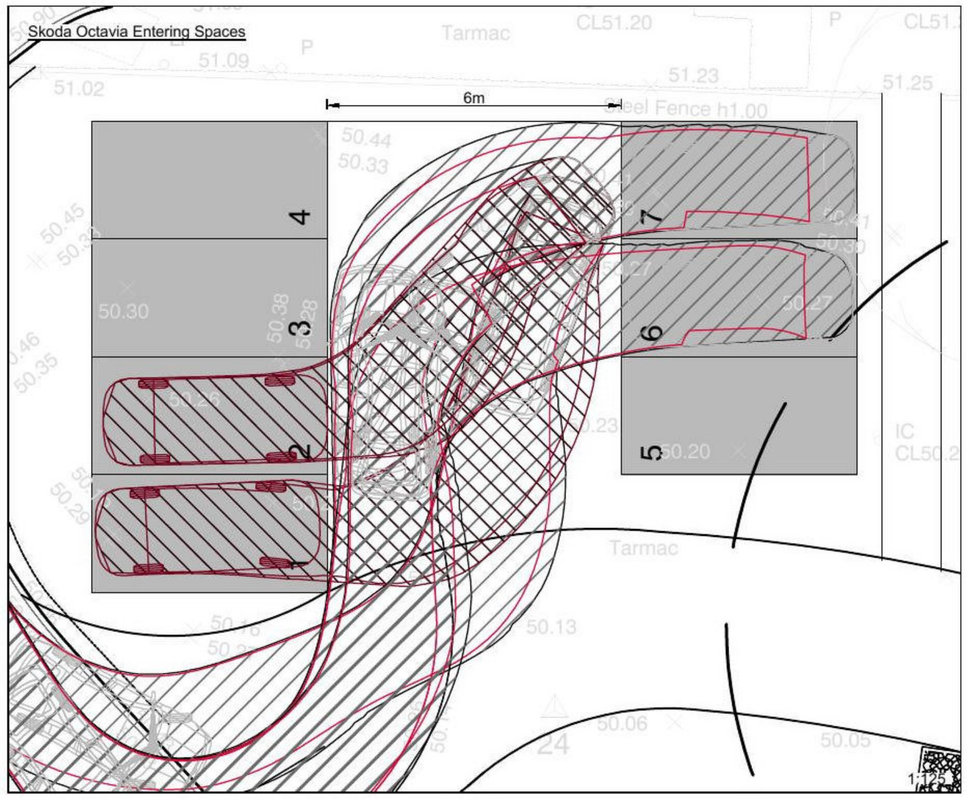
Job Number	Prefix	Drawing Number	Revision
16011		100	

A5. SWEPT PATH ANALYSIS

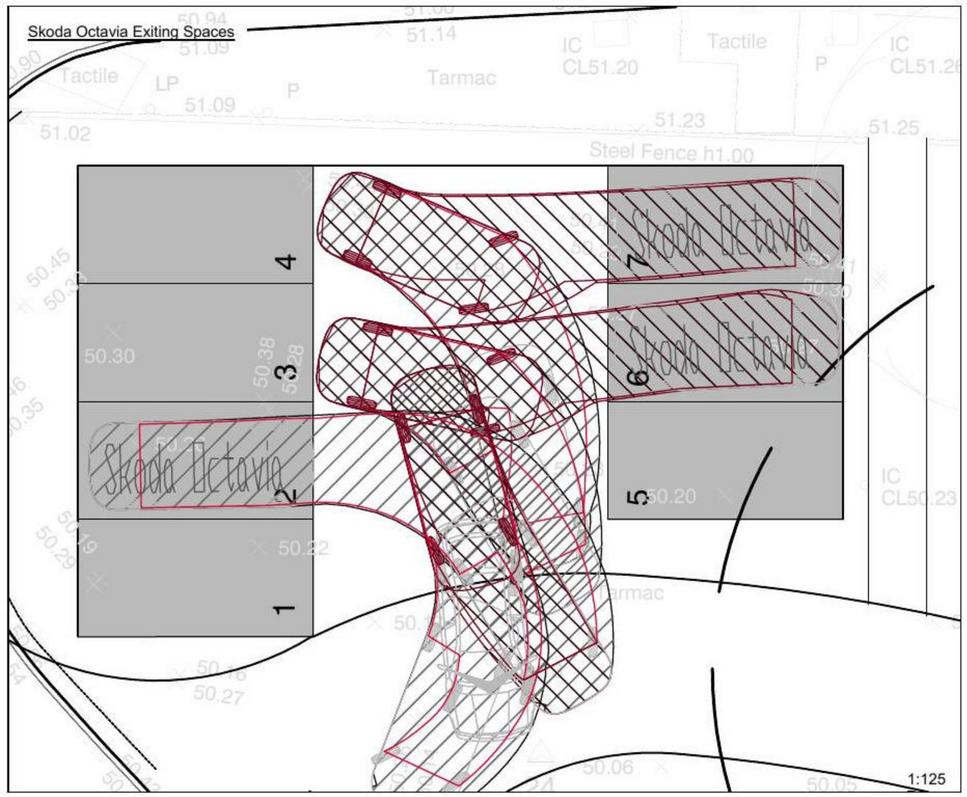
Skoda Octavia using Drive-thru Route

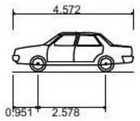


Skoda Octavia Entering Spaces



Skoda Octavia Exiting Spaces





Skoda Octavia	
Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.100m

Notes;
1.This drawing is based upon drawing number 16/011/100 supplied by Harrington Design Architects and Iceni Projects Ltd. shall not be liable for any inaccuracies or deficiencies.

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Client

Seaword Properties

Project

Proposed Starbucks, Langstone Gate, Havant

Title

Swept Path Analysis

Drawn By	Checked By	Approved By
MG	PC 17/10/2016	PC 17/10/2016

Scale @ A3	Date	
As Shown	17/10/2016	
Project No.	**Drawing No.**	**Rev.**
16-T084	01	-

Iceni Projects accept no responsibility for any unauthorised amendments to this drawing. Only figured dimensions are to be worked to.

A6. PARKING SURVEY DATA

Havant, Hampshire
Car Park Accumulation Study

Site 1 of 1
Private Car Park

Capacity

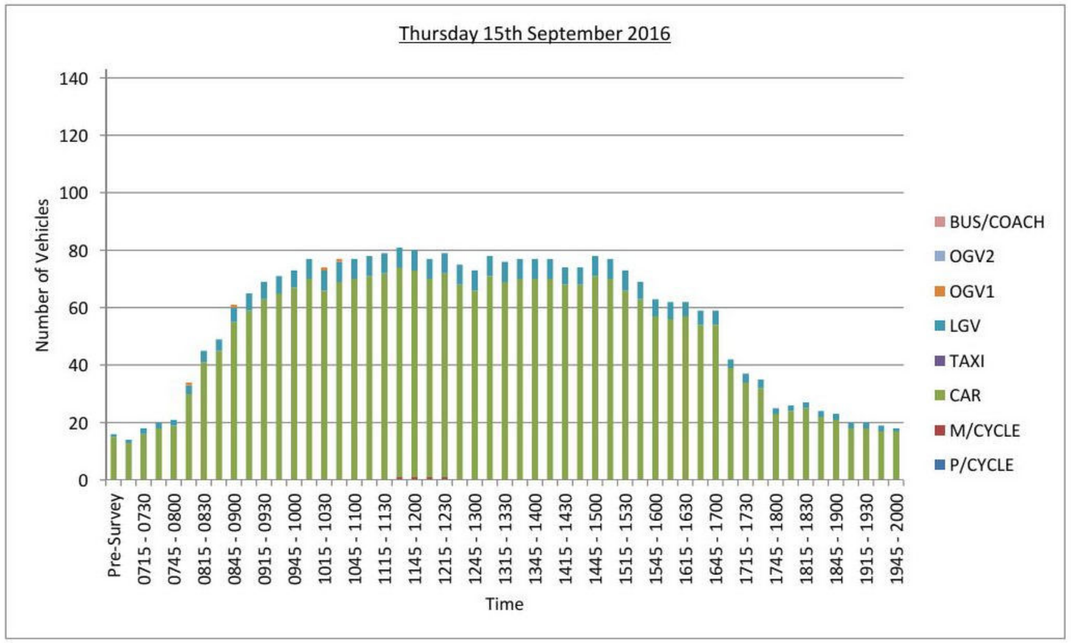
Ordinary	140
Disabled	3
Total	**143**

Date
Thursday 15th September 2016

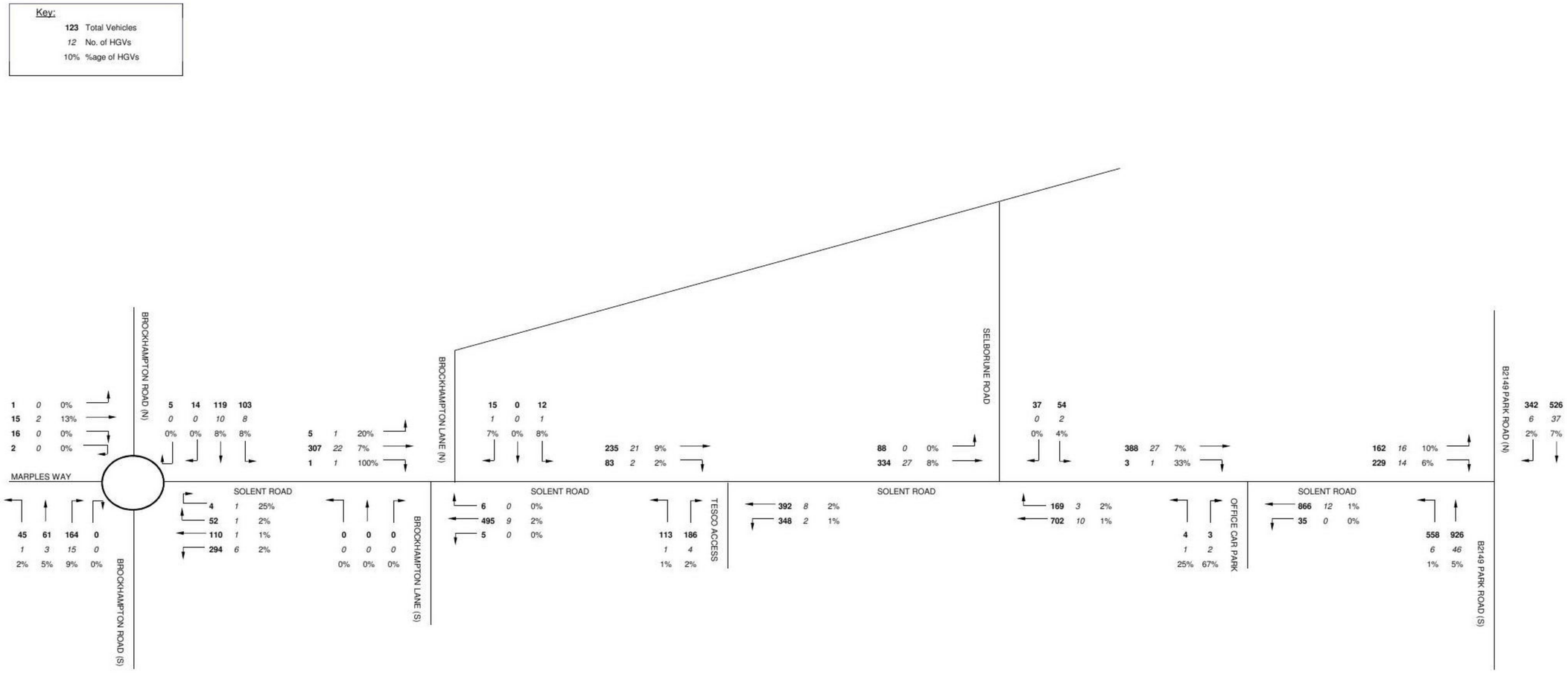
Weather
Sunny Intervals
Temp: 22°C

0700 - 2000 (Weekday 13h Session)

TIME	P/CYCLE	M/CYCLE	CAR	TAXI	LGV	OGV1	OGV2	BUS/COACH	TOTAL	PCU TOTAL	Capacity %
Pre-Survey	0	0	15	0	1	0	0	0	16	16.00	11.19
0700 - 0715	0	0	13	0	1	0	0	0	14	14.00	9.79
0715 - 0730	0	0	16	0	2	0	0	0	18	18.00	12.59
0730 - 0745	0	0	18	0	2	0	0	0	20	20.00	13.99
0745 - 0800	0	0	19	0	2	0	0	0	21	21.00	14.69
0800 - 0815	0	0	30	0	3	1	0	0	34	34.50	23.78
0815 - 0830	0	0	41	0	4	0	0	0	45	45.00	31.47
0830 - 0845	0	0	45	0	4	0	0	0	49	49.00	34.27
0845 - 0900	0	0	55	0	5	1	0	0	61	61.50	42.66
0900 - 0915	0	0	59	0	6	0	0	0	65	65.00	45.45
0915 - 0930	0	0	63	0	6	0	0	0	69	69.00	48.25
0930 - 0945	0	0	65	0	6	0	0	0	71	71.00	49.65
0945 - 1000	0	0	67	0	6	0	0	0	73	73.00	51.05
1000 - 1015	0	0	70	0	7	0	0	0	77	77.00	53.85
1015 - 1030	0	0	66	0	7	1	0	0	74	74.50	51.75
1030 - 1045	0	0	69	0	7	1	0	0	77	77.50	53.85
1045 - 1100	0	0	70	0	7	0	0	0	77	77.00	53.85
1100 - 1115	0	0	71	0	7	0	0	0	78	78.00	54.55
1115 - 1130	0	0	72	0	7	0	0	0	79	79.00	55.24
1130 - 1145	0	1	73	0	7	0	0	0	81	80.40	56.64
1145 - 1200	0	1	72	0	7	0	0	0	80	79.40	55.94
1200 - 1215	0	1	69	0	7	0	0	0	77	76.40	53.85
1215 - 1230	0	1	71	0	7	0	0	0	79	78.40	55.24
1230 - 1245	0	0	68	0	7	0	0	0	75	75.00	52.45
1245 - 1300	0	0	66	0	7	0	0	0	73	73.00	51.05
1300 - 1315	0	0	71	0	7	0	0	0	78	78.00	54.55
1315 - 1330	0	0	69	0	7	0	0	0	76	76.00	53.15
1330 - 1345	0	0	70	0	7	0	0	0	77	77.00	53.85
1345 - 1400	0	0	70	0	7	0	0	0	77	77.00	53.85
1400 - 1415	0	0	70	0	7	0	0	0	77	77.00	53.85
1415 - 1430	0	0	68	0	6	0	0	0	74	74.00	51.75
1430 - 1445	0	0	68	0	6	0	0	0	74	74.00	51.75
1445 - 1500	0	0	71	0	7	0	0	0	78	78.00	54.55
1500 - 1515	0	0	70	0	7	0	0	0	77	77.00	53.85
1515 - 1530	0	0	66	0	7	0	0	0	73	73.00	51.05
1530 - 1545	0	0	63	0	6	0	0	0	69	69.00	48.25
1545 - 1600	0	0	57	0	6	0	0	0	63	63.00	44.06
1600 - 1615	0	0	56	0	6	0	0	0	62	62.00	43.36
1615 - 1630	0	0	57	0	5	0	0	0	62	62.00	43.36
1630 - 1645	0	0	54	0	5	0	0	0	59	59.00	41.26
1645 - 1700	0	0	54	0	5	0	0	0	59	59.00	41.26
1700 - 1715	0	0	39	0	3	0	0	0	42	42.00	29.37
1715 - 1730	0	0	34	0	3	0	0	0	37	37.00	25.87
1730 - 1745	0	0	32	0	3	0	0	0	35	35.00	24.48
1745 - 1800	0	0	23	0	2	0	0	0	25	25.00	17.48
1800 - 1815	0	0	24	0	2	0	0	0	26	26.00	18.18
1815 - 1830	0	0	25	0	2	0	0	0	27	27.00	18.88
1830 - 1845	0	0	22	0	2	0	0	0	24	24.00	16.78
1845 - 1900	0	0	21	0	2	0	0	0	23	23.00	16.08
1900 - 1915	0	0	18	0	2	0	0	0	20	20.00	13.99
1915 - 1930	0	0	18	0	2	0	0	0	20	20.00	13.99
1930 - 1945	0	0	17	0	2	0	0	0	19	19.00	13.29
1945 - 2000	0	0	17	0	1	0	0	0	18	18.00	12.59



A7. TRAFFIC FLOW DIAGRAMS



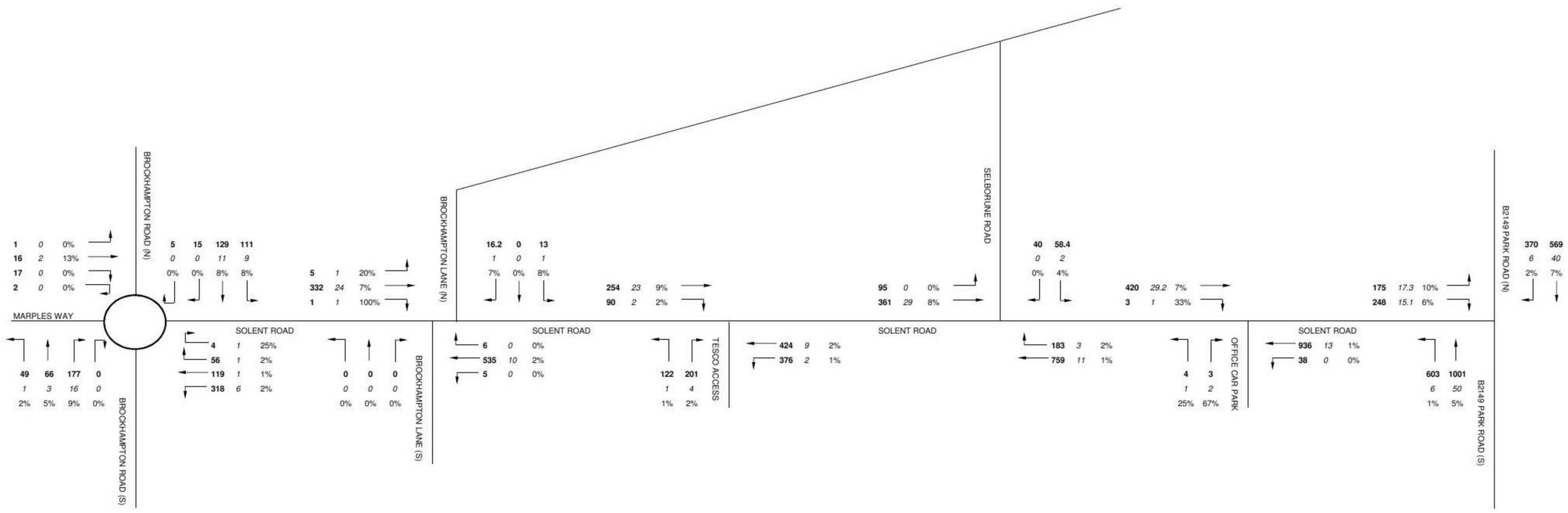
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Seaword Properties Ltd.	2016 Observed AM				
Project	**Date**	**Firgure Number**	**Revision**	**Drawn by**	**Approved by**
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles
12 No. of HGVs
10% %age of HGVs



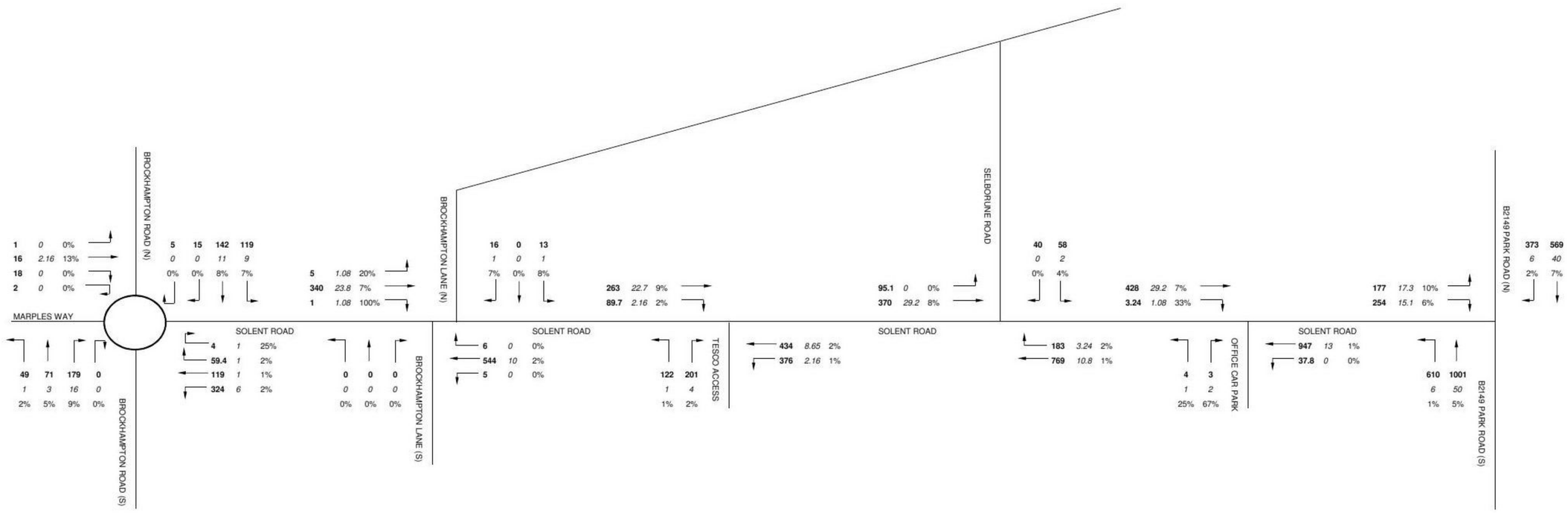
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Key:

123 Total Vehicles
12 No. of HGVs
10% %age of HGVs



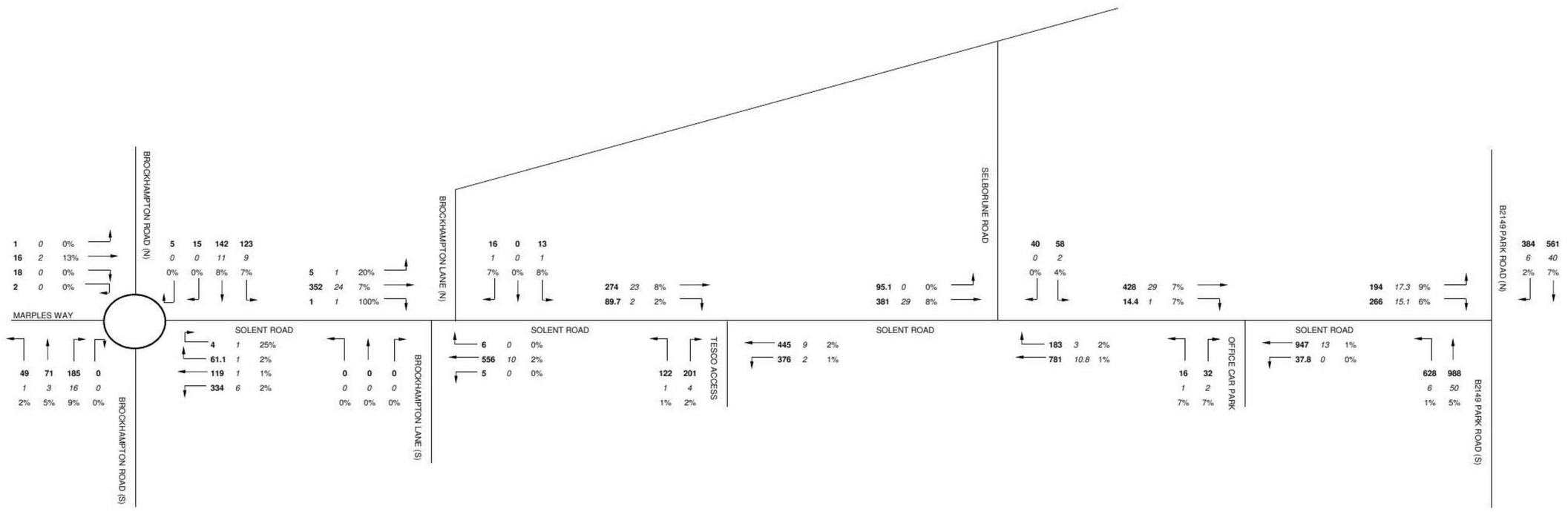
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Key:

123 Total Vehicles
12 No. of HGVs
10% %age of HGVs



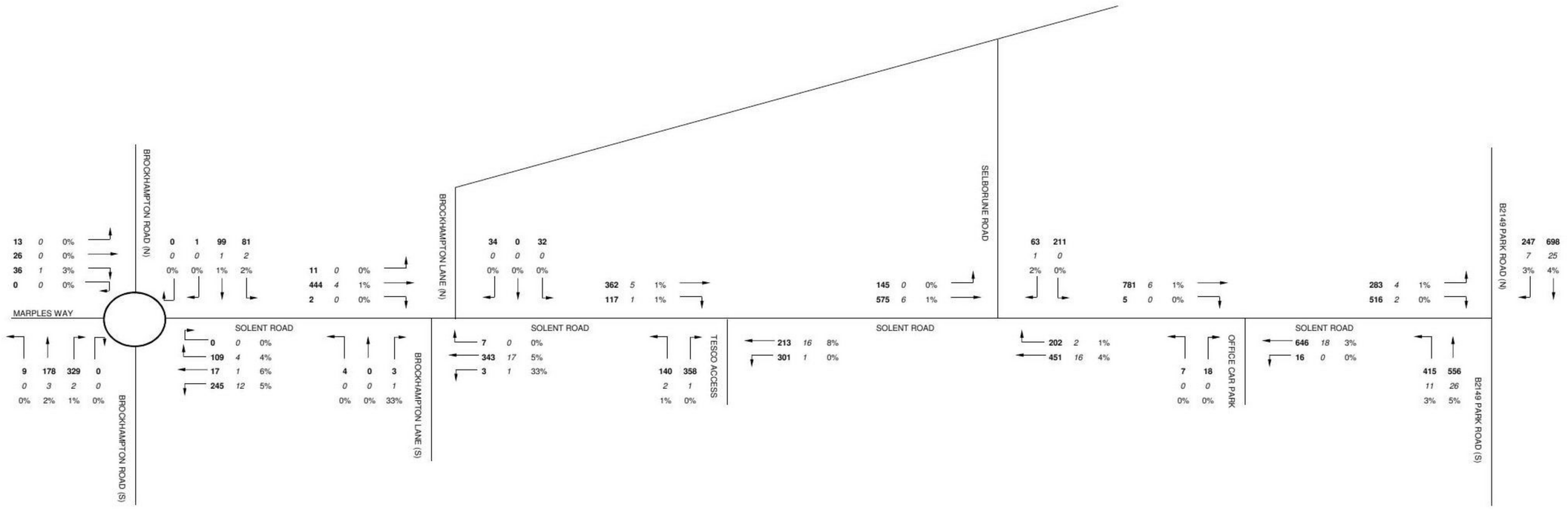
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Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

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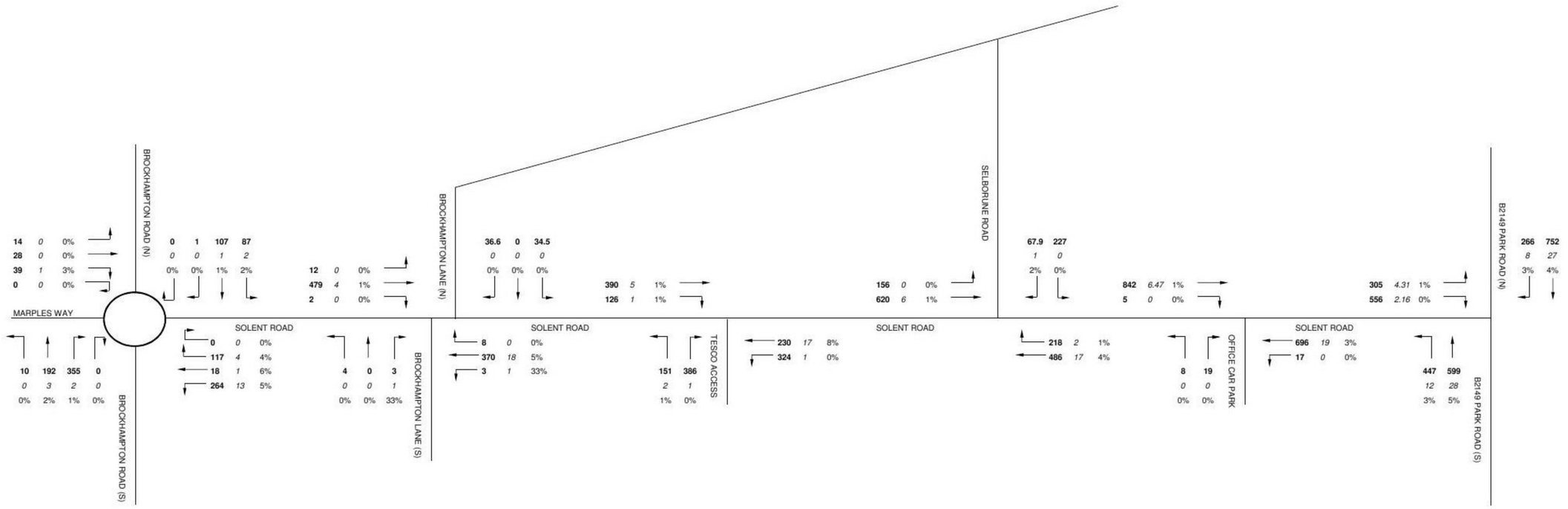
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Key:

123 Total Vehicles
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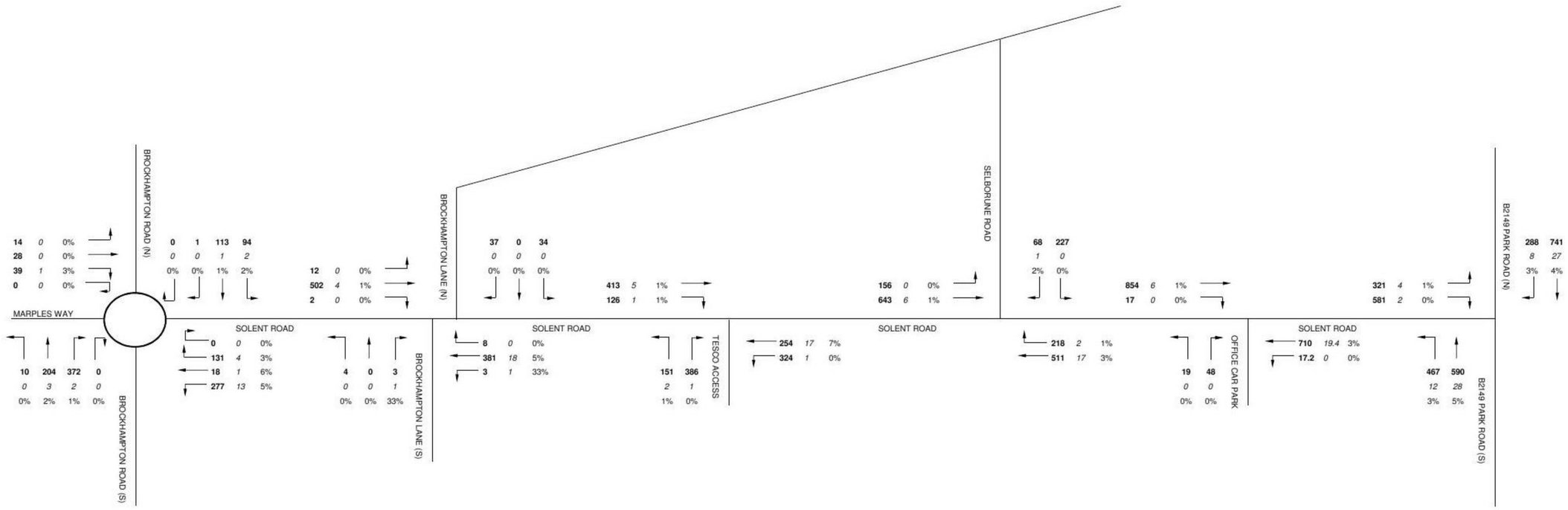
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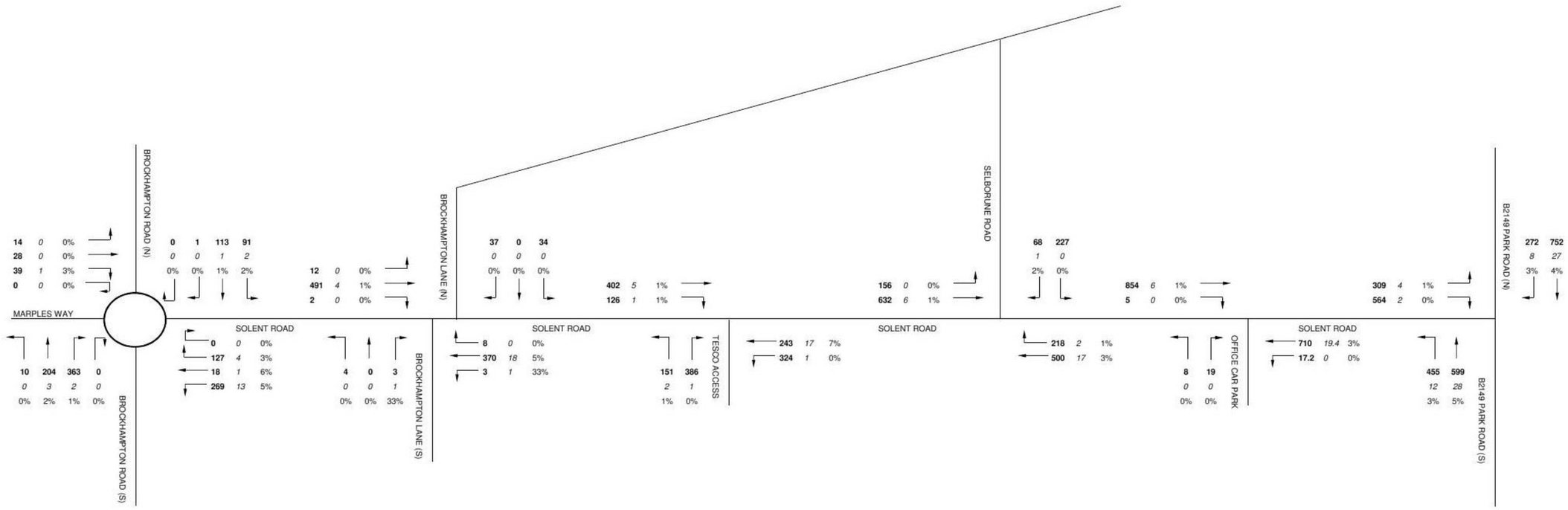
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Project	Date	Firgure Number	Revision	Drawn by	Approved by
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Key:

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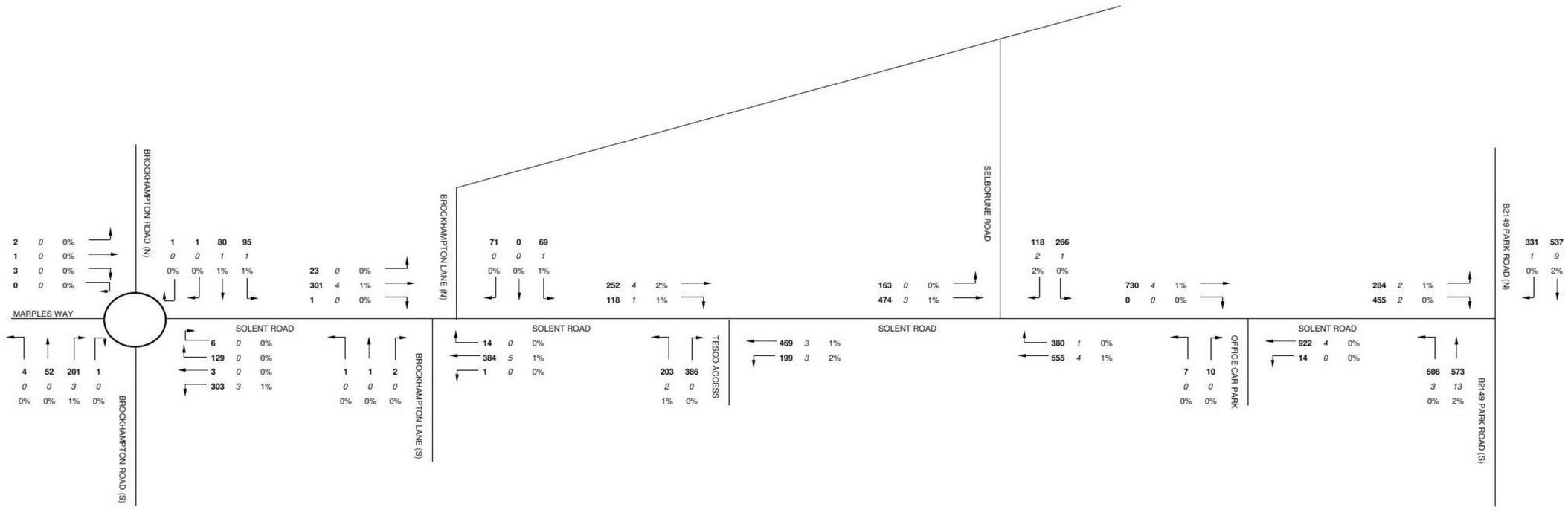
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Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles
12 No. of HGVs
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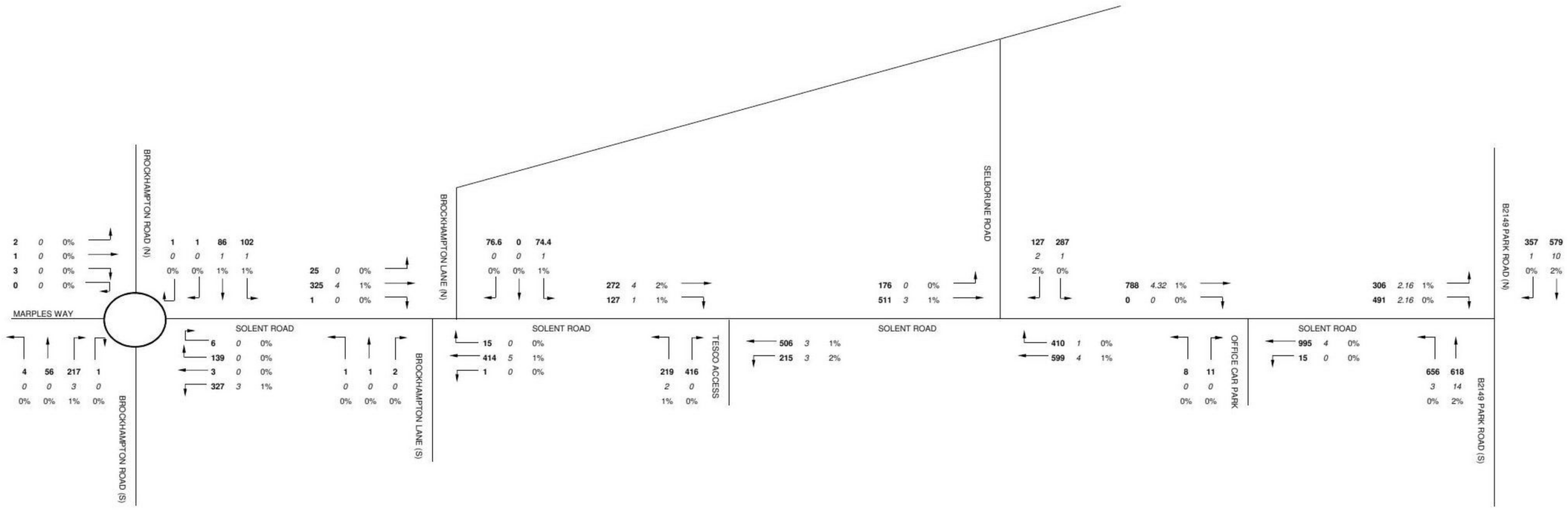
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Project	Date	Firgure Number	Revision	Drawn by	Approved by
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Key:

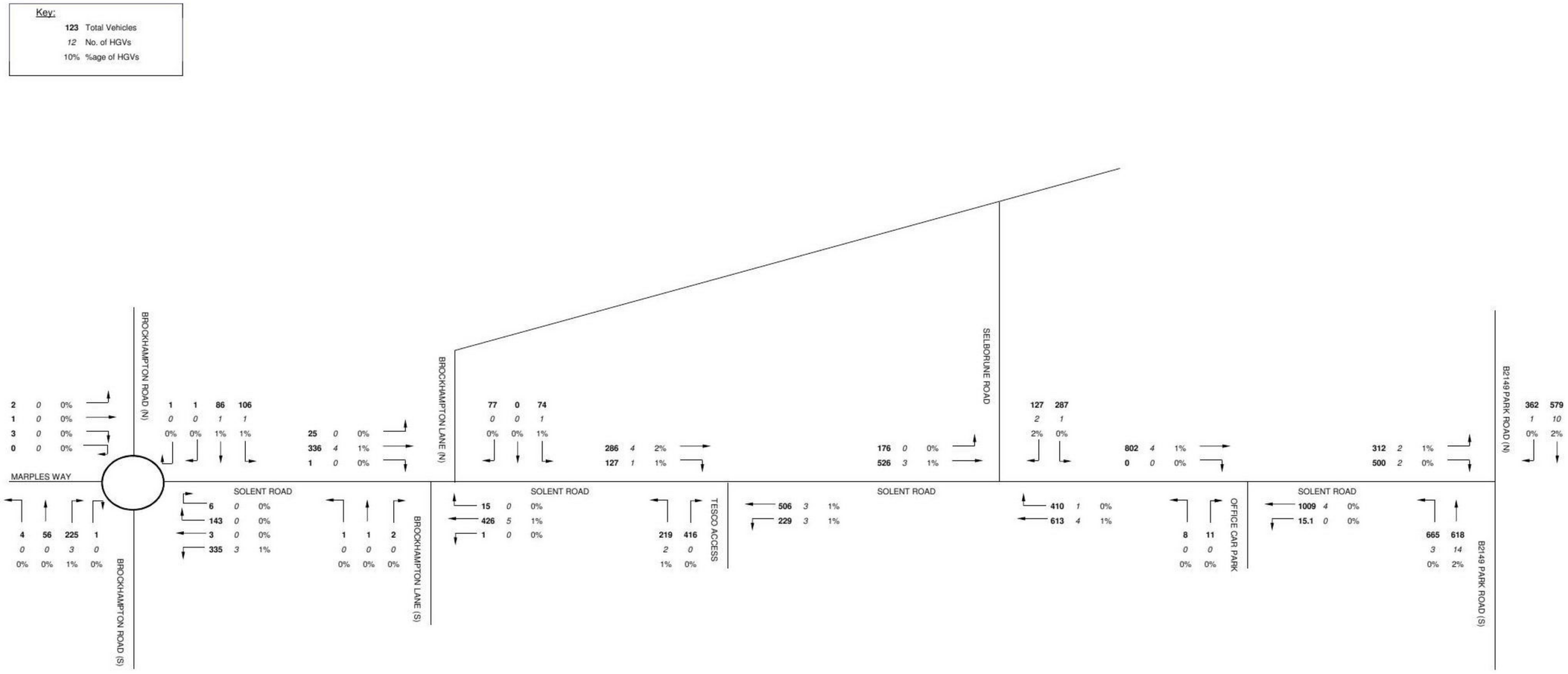
123 Total Vehicles
12 No. of HGVs
10% %age of HGVs



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Project	**Date**	**Firgure Number**	**Revision**	**Drawn by**	**Approved by**
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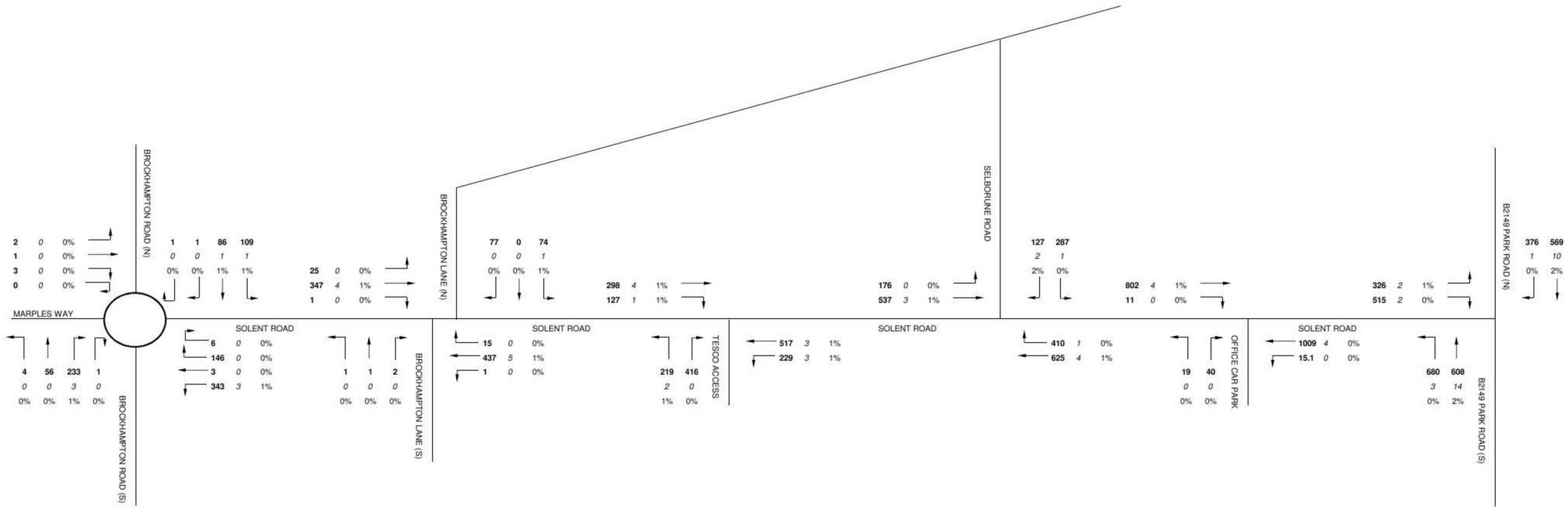
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Seaword Properties Ltd.	2021 Base + Committed SAT				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles
12 No. of HGVs
10% %age of HGVs



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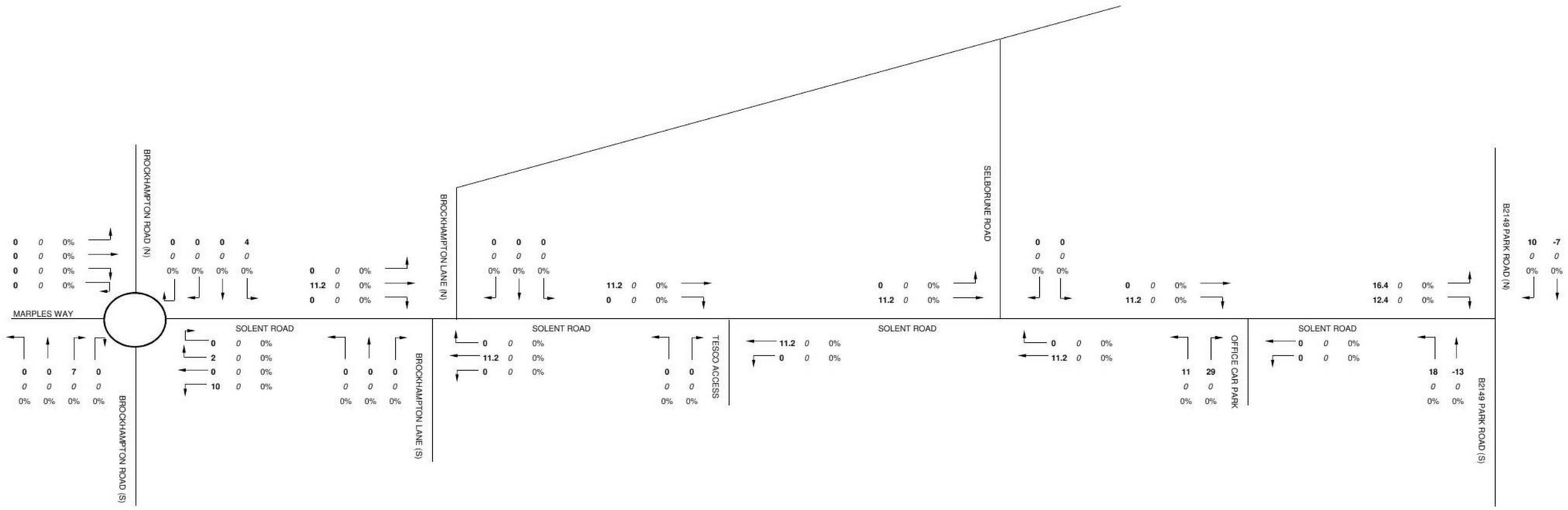
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Seaword Properties Ltd.	2021 Base + Committed + Proposed SAT				
Project	**Date**	**Firgure Number**	**Revision**	**Drawn by**	**Approved by**
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles

12 No. of HGVs

10% %age of HGVs



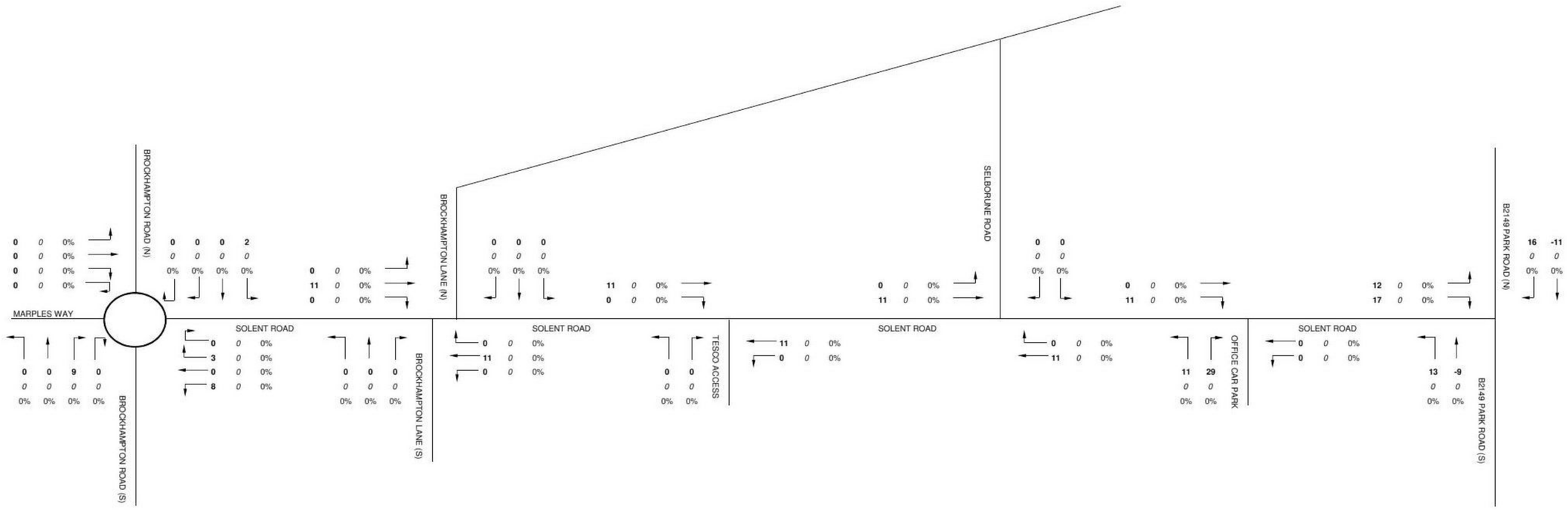
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Client:	Title				
Seaword Properties Ltd.	Total Trips AM				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles
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10% %age of HGVs



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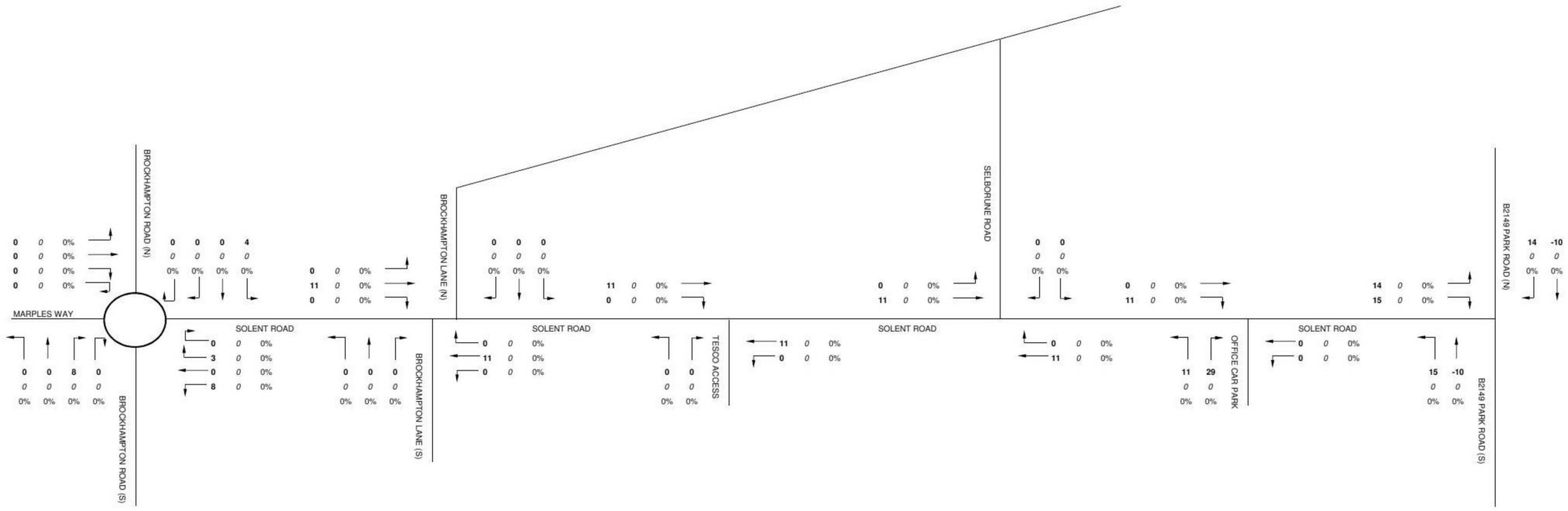
Client:	Title				
Seaword Properties Ltd.	Total Trips PM				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

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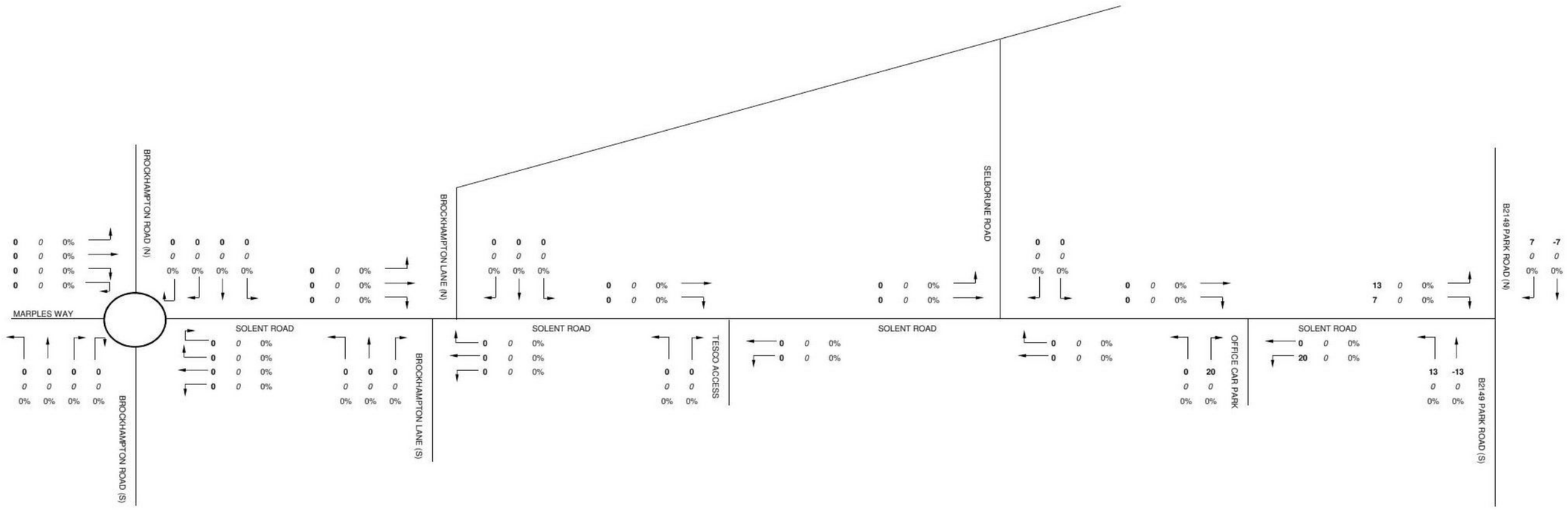
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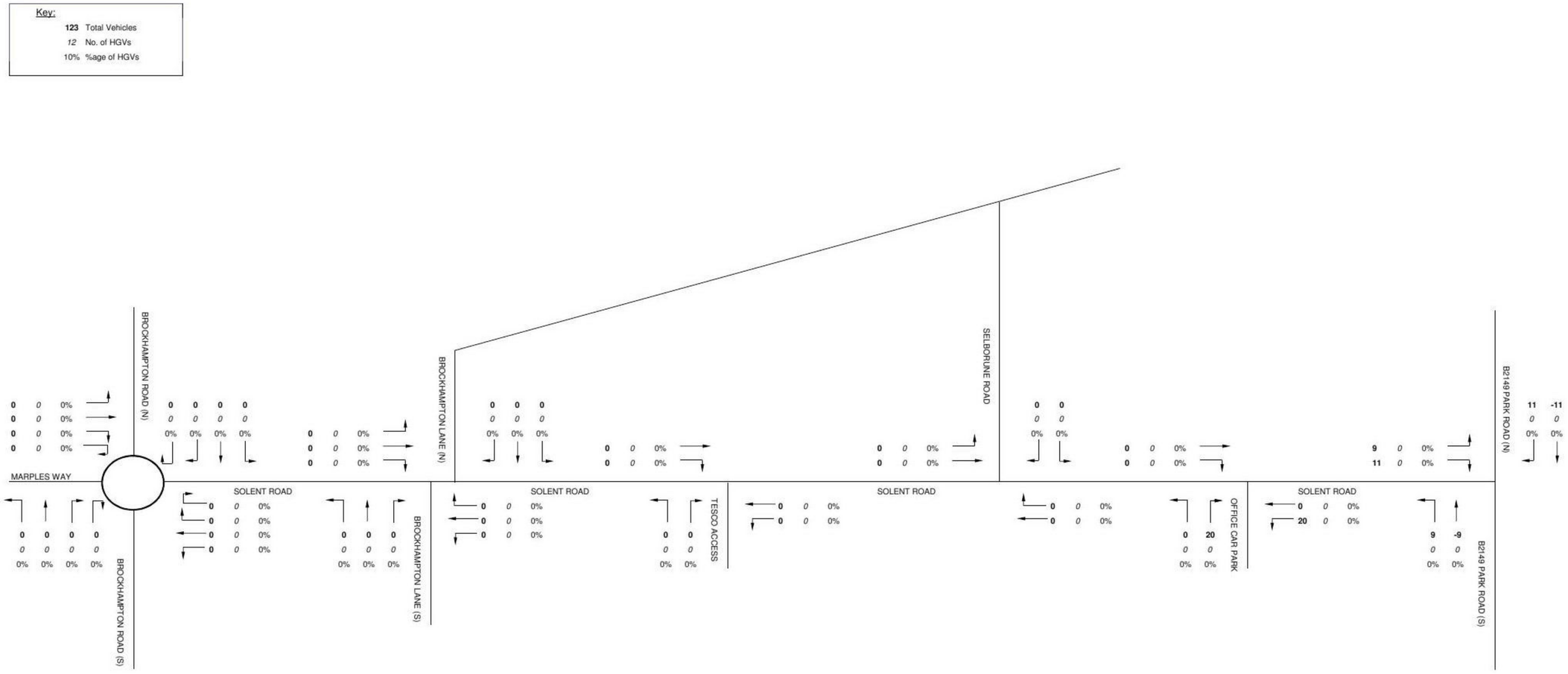
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Client:	Title				
Seaword Properties Ltd.	Diverted Trip AM				
Project	**Date**	**Firgure Number**	**Revision**	**Drawn by**	**Approved by**
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA



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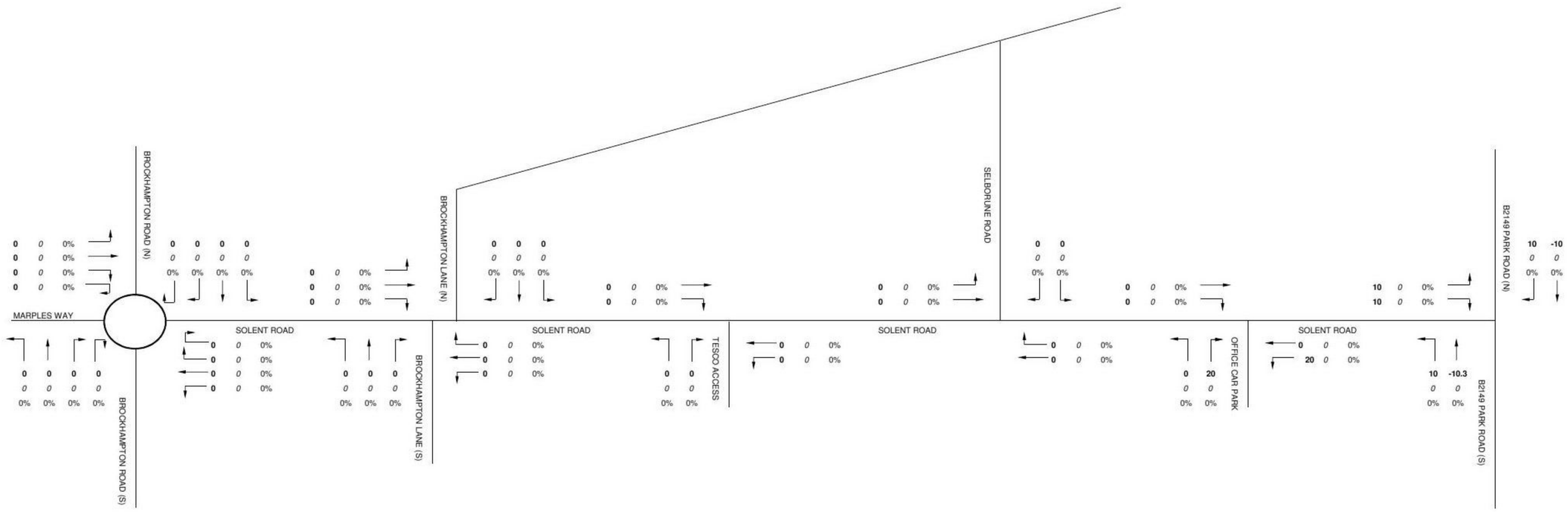
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Seaword Properties Ltd.	Diverted Trip PM				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles

12 No. of HGVs

10% %age of HGVs



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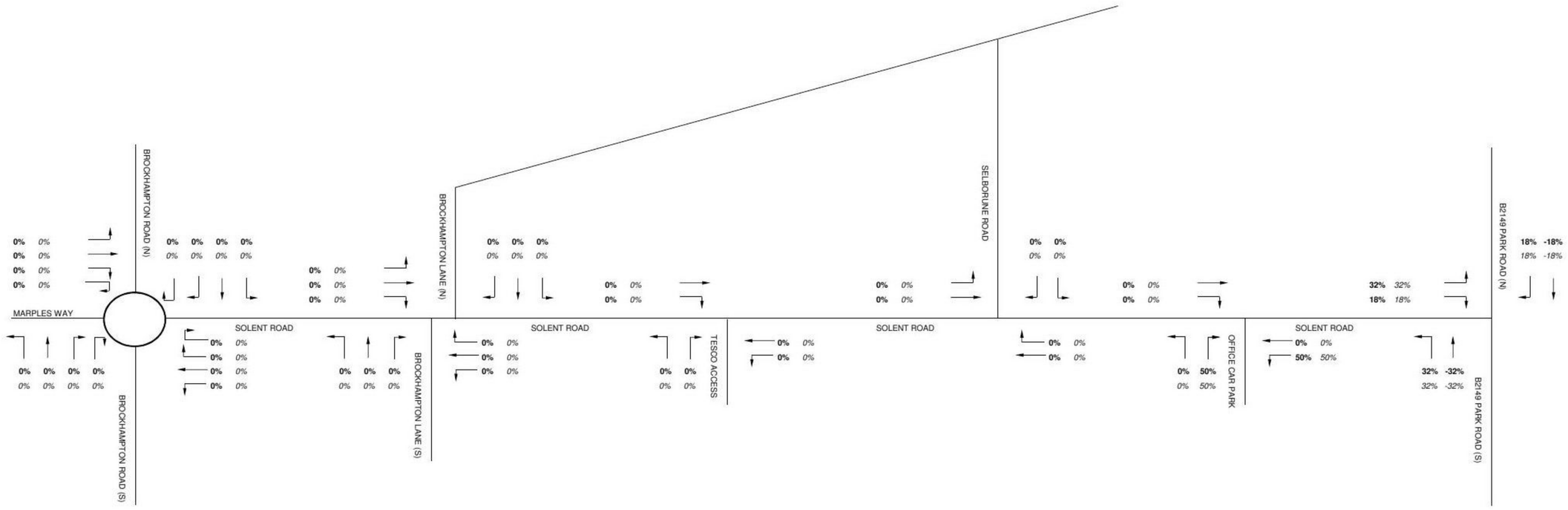
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Seaword Properties Ltd.	Diverted Trips SAT				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles

12 No. of HGVs

10% %age of HGVs



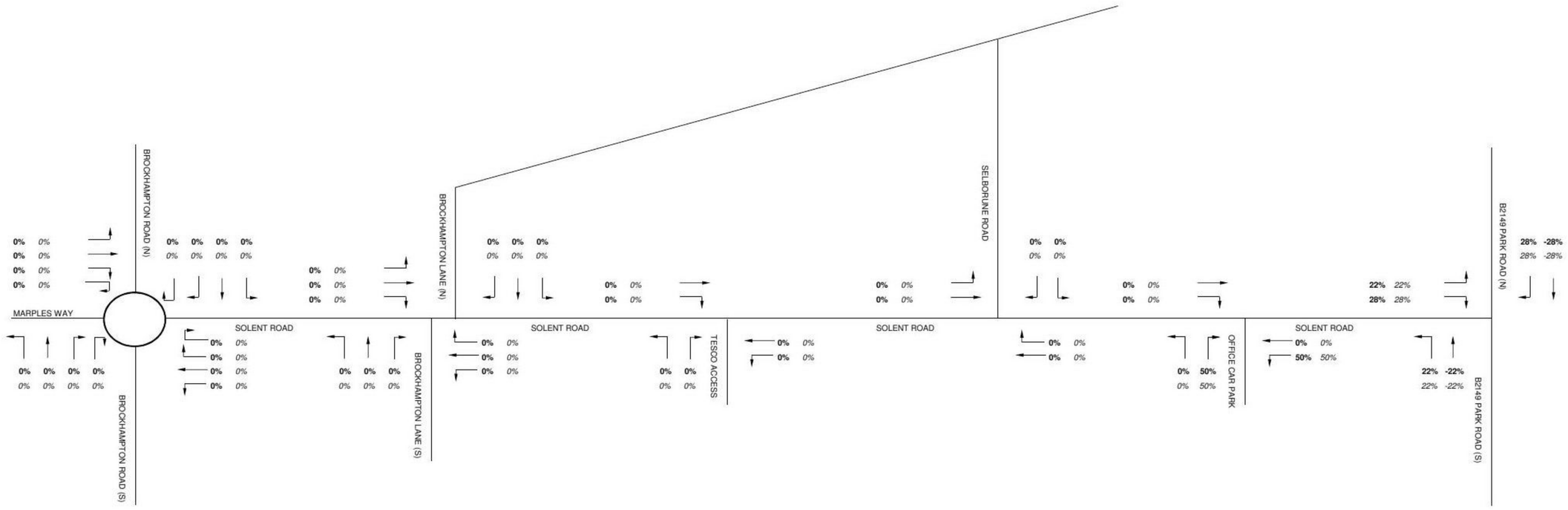
Iceni Projects Ltd. Flitcroft House 114116 Charing Cross Road London WC2H 0R **T:** 020 3640 8508 **F:** 020 3435 4228 **E:** mail@iceniprojects.com	Client: Seaword Properties Ltd.	Title Diverted Dist. AM			
	Project Drive-Thru Coffee Unit, Langstone Gate, Havant	Date Sep-16	Firgure Number 0.0	Revision -	Drawn by MG	Approved by RA

Key:

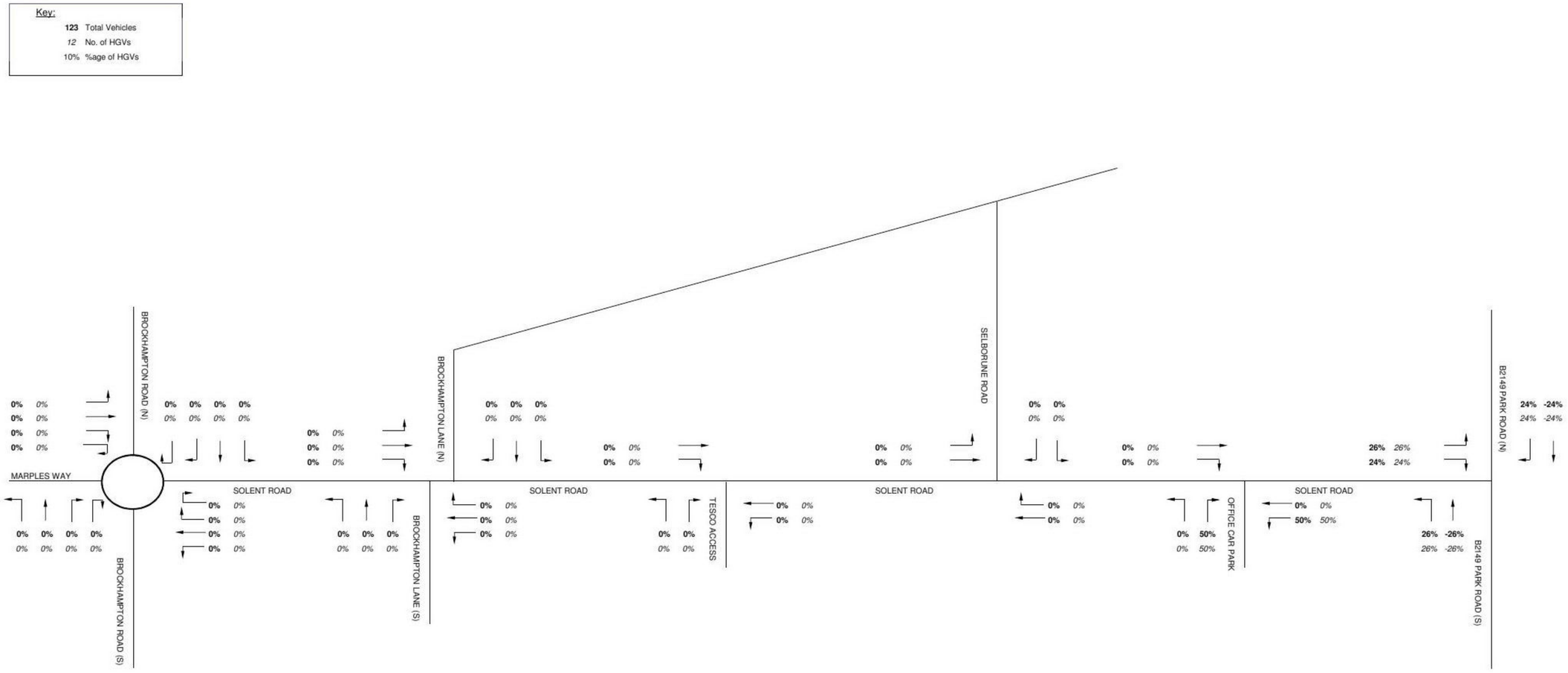
123 Total Vehicles

12 No. of HGVs

10% %age of HGVs



Iceni Projects Ltd. Flitcroft House 114116 Charing Cross Road London WC2H 0R **T:** 020 3640 8508 **F:** 020 3435 4228 **E:** mail@iceniprojects.com	Client: Seaword Properties Ltd.	Title Diverted Dist. PM			
	Project Drive-Thru Coffee Unit, Langstone Gate, Havant	Date Sep-16	Firgure Number 0.0	Revision -	Drawn by MG	Approved by RA



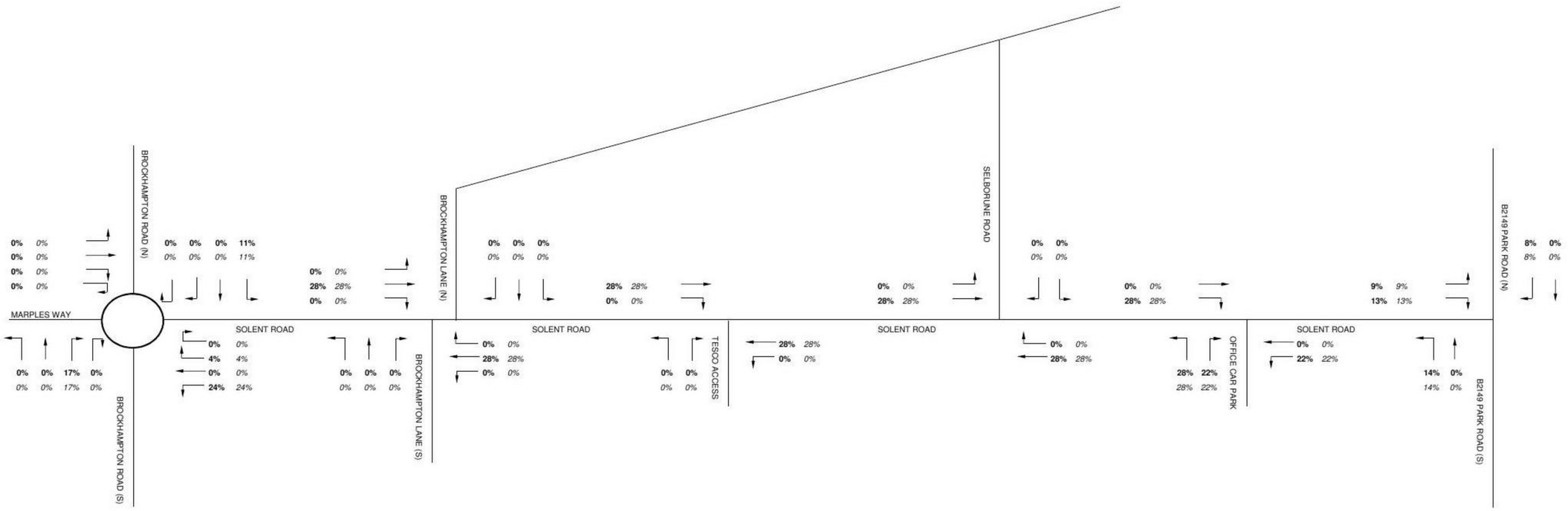
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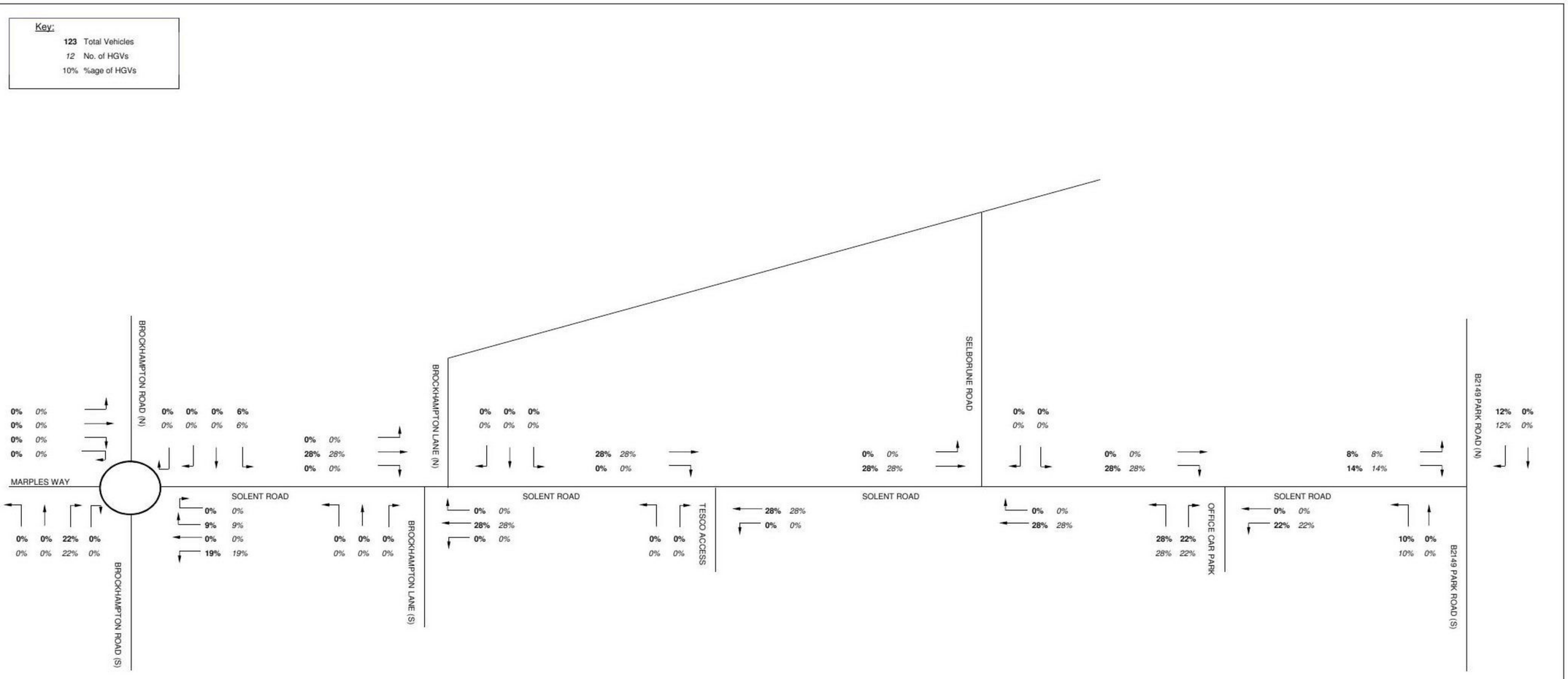
Client:	Title				
Seaword Properties Ltd.	Diverted Dist. SAT				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles
12 No. of HGVs
10% %age of HGVs



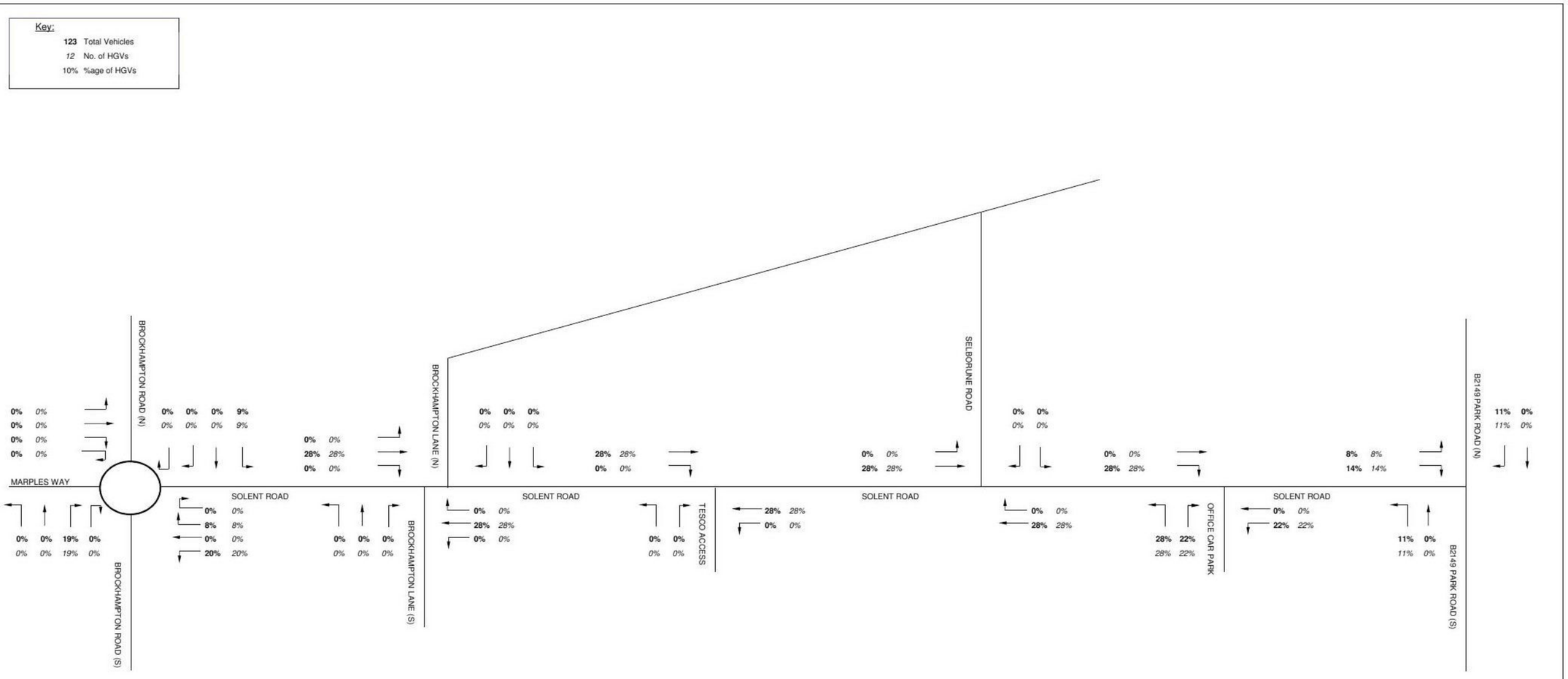
Iceni Projects Ltd. Flitcroft House 114116 Charing Cross Road London WC2H 0R **T:** 020 3640 8508 **F:** 020 3435 4228 **E:** mail@iceniprojects.com	Client: Seaword Properties Ltd.	Title New Trip Dist. AM			
	Project Drive-Thru Coffee Unit, Langstone Gate, Havant	Date Sep-16	Firgure Number 0.0	Revision -	Drawn by MG	Approved by RA



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Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA



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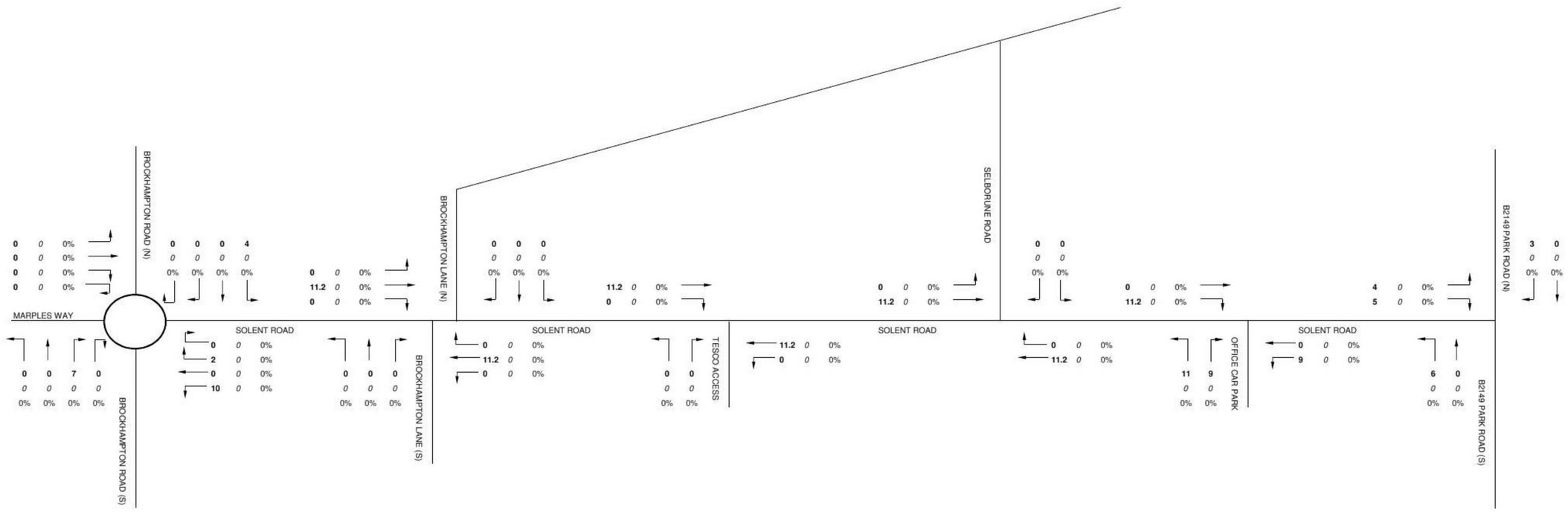
Client:	Title				
Seaword Properties Ltd.	New Trip Dist. PM				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles

12 No. of HGVs

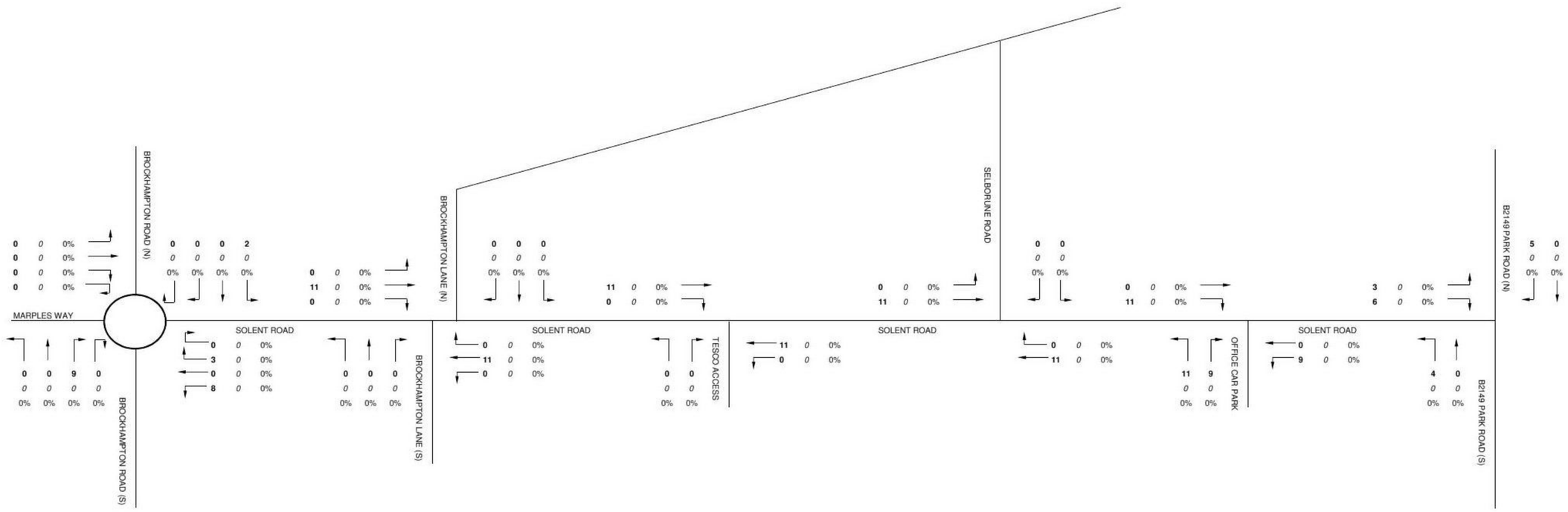
10% %age of HGVs



Iceni Projects Ltd. Flitcroft House 114116 Charing Cross Road London WC2H 0R **T:** 020 3640 8508 **F:** 020 3435 4228 **E:** mail@iceniprojects.com	Client: Seaword Properties Ltd.	Title New Trips AM			
	Project Drive-Thru Coffee Unit, Langstone Gate, Havant	Date Sep-16	Firgure Number 0.0	Revision -	Drawn by MG	Approved by RA

Key:

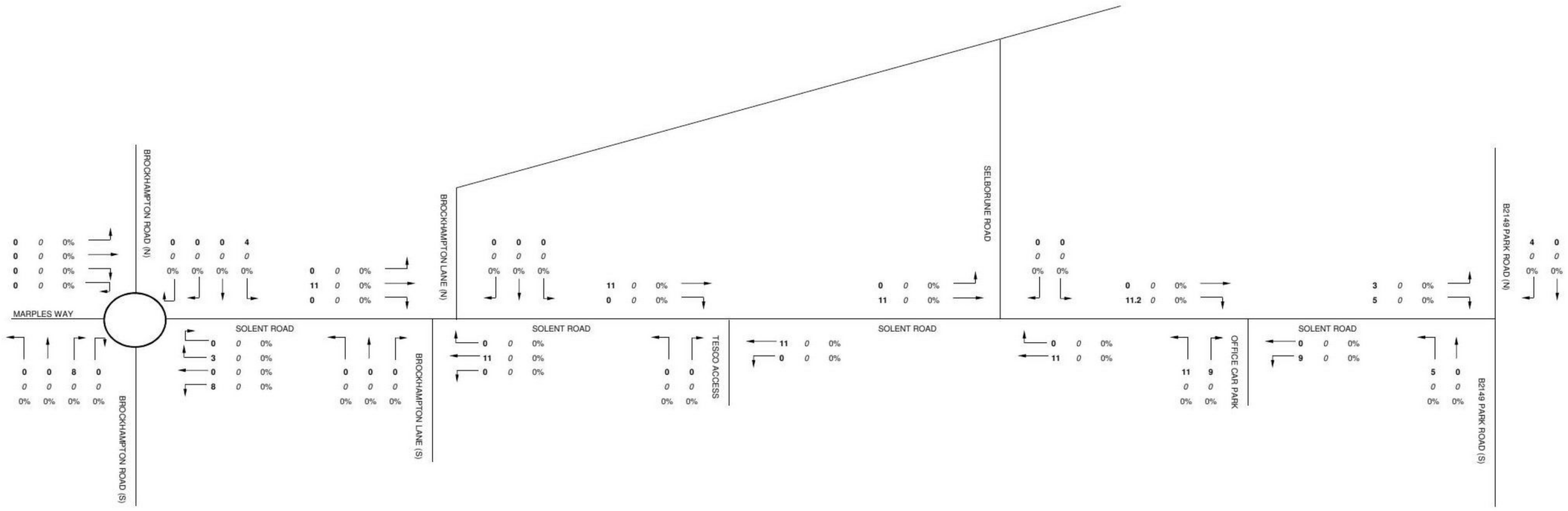
123 Total Vehicles
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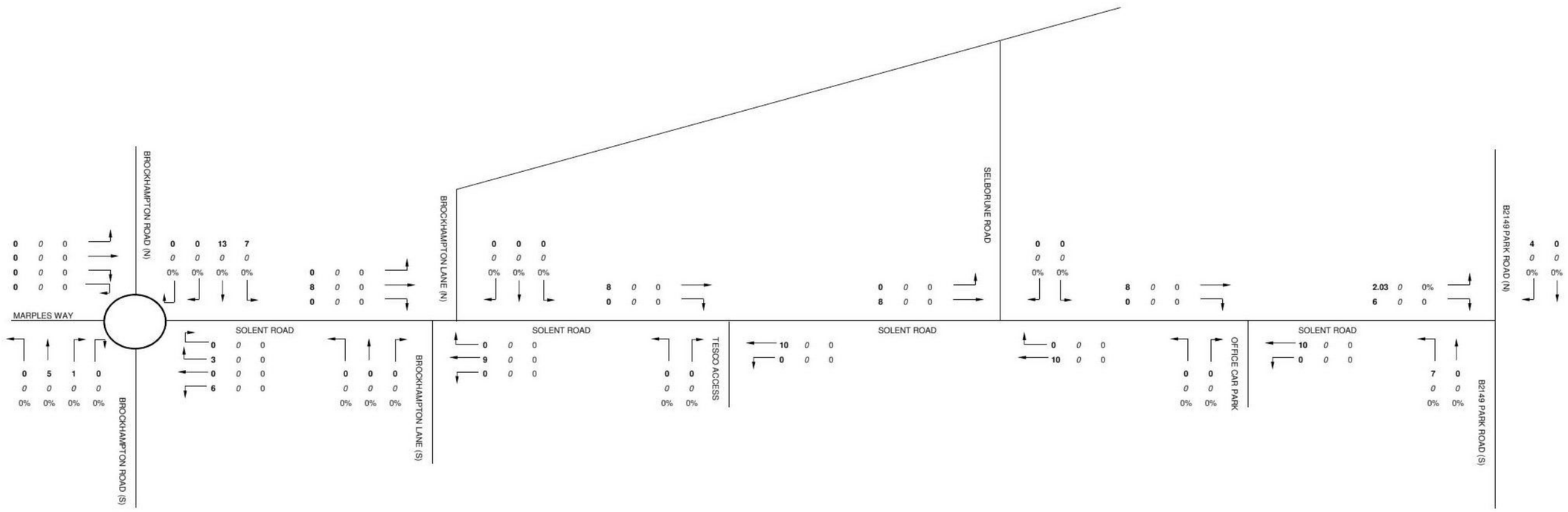
Client:	Title				
Seaword Properties Ltd.	New Trips SAT				
Project	**Date**	**Firgure Number**	**Revision**	**Drawn by**	**Approved by**
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

123 Total Vehicles

12 No. of HGVs

10% %age of HGVs



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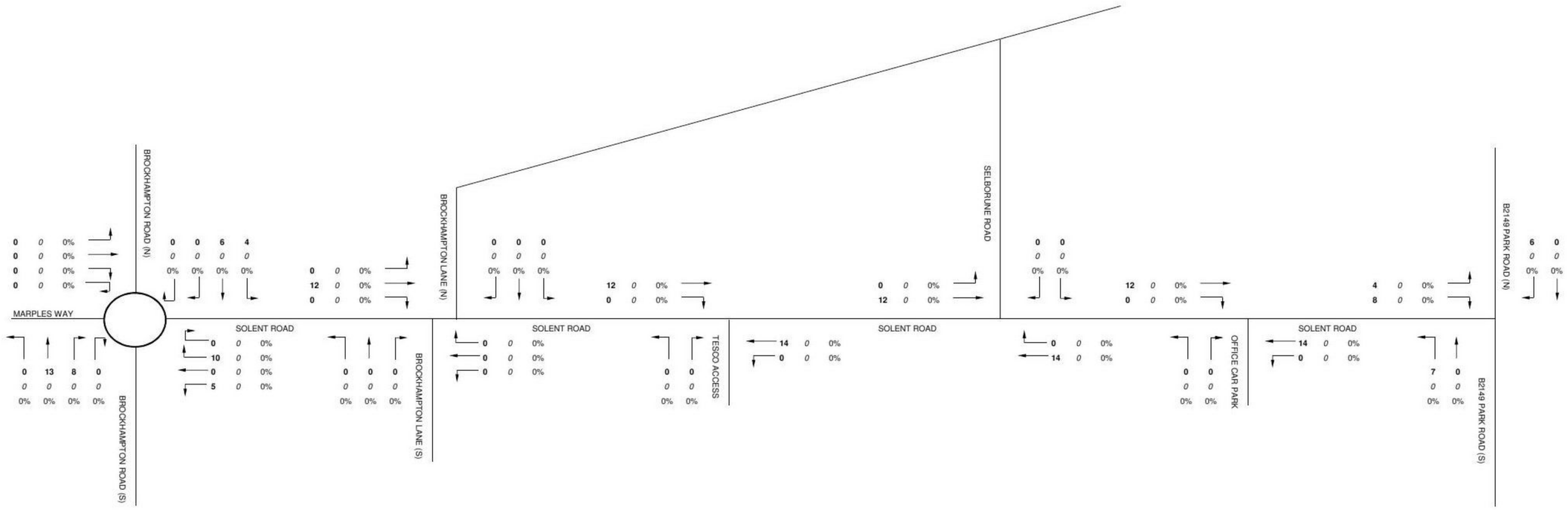
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Seaword Properties Ltd.	Total Committed AM				
Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

Key:

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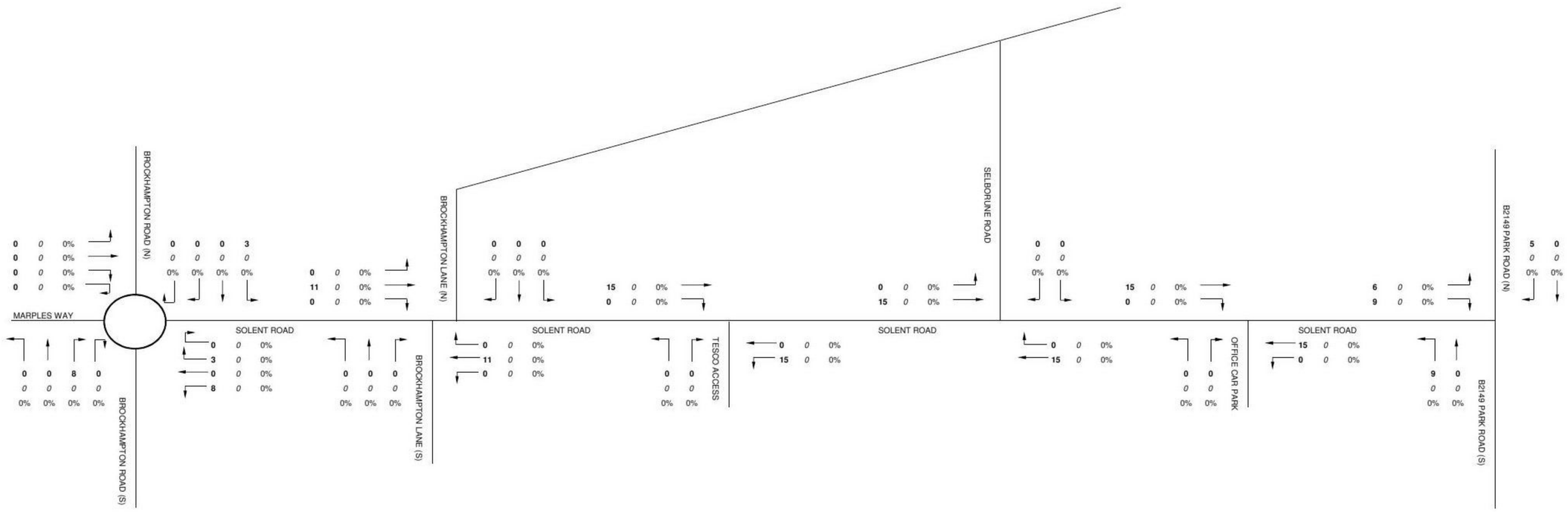
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Project	Date	Firgure Number	Revision	Drawn by	Approved by
Drive-Thru Coffee Unit, Langstone Gate, Havant	Sep-16	0.0	-	MG	RA

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	Project Drive-Thru Coffee Unit, Langstone Gate, Havant	Date Sep-16	Firgure Number 0.0	Revision -	Drawn by MG	Approved by RA

A8. JUNCTION RESULTS

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
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Filename: 4. Brockhampton Road - Solent Road - Marples Way SAT.j9
Path: P:\Transport\Projects\16-T084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\Traffic Models\Arcady\4. Brockhampton Road - Solent Road - Marples Way
Report generation date: 17/10/2016 14:36:31

»2016 Observed, SAT
»2021 Base, SAT
»2021 Base + Committed, SAT
»2021 Base + Committed + Proposed, SAT

Summary of junction performance

	SAT	
	Queue (Veh)	RFC
	2016 Observed	
A - Brockhampton Road (N)	1.7	0.64
B - Solent Road	1.0	0.51
C - Brockhampton Road (S)	0.6	0.36
D - Marples Way	0.0	0.01
	2021 Base	
A - Brockhampton Road (N)	2.2	0.71
B - Solent Road	1.2	0.55
C - Brockhampton Road (S)	0.6	0.39
D - Marples Way	0.0	0.01
	2021 Base + Committed	
A - Brockhampton Road (N)	2.5	0.73
B - Solent Road	1.3	0.56
C - Brockhampton Road (S)	0.7	0.41
D - Marples Way	0.0	0.01
	2021 Base + Committed + Proposed	
A - Brockhampton Road (N)	2.8	0.76
B - Solent Road	1.3	0.57
C - Brockhampton Road (S)	0.7	0.42
D - Marples Way	0.0	0.01

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

File summary

File Description

Title	Brockhampton Road (N) - Solent Road - Brockhampton Road (S) - Marples Way
Location	Havant
Site number	
Date	05/10/2016
Version	
Status	(new file)
Identifier	TG
Client	Seaward Properties Limited
Jobnumber	16-T084
Enumerator	ICENIPROJECTS\tgood
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2016 Observed	SAT	ONE HOUR	11:15	12:45	15	✓
D6	2021 Base	SAT	ONE HOUR	11:15	12:45	15	✓
D7	2021 Base + Committed	SAT	ONE HOUR	11:15	12:45	15	✓
D8	2021 Base + Committed + Proposed	SAT	ONE HOUR	11:15	12:45	15	✓

Analysis Set Details

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

2016 Observed, SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	12.38	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Brockhampton Road (N)	
B	Solent Road	
C	Brockhampton Road (S)	
D	Marples Way	

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
A - Brockhampton Road (N)	3.72	4.73	13.8	9.8	29.0	28.5	
B - Solent Road	3.77	4.64	8.9	13.5	29.0	16.5	
C - Brockhampton Road (S)	3.42	3.42	0.0	25.2	29.0	14.0	
D - Marples Way	3.67	3.76	5.4	39.3	29.0	11.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - Brockhampton Road (N)	Direct	Validation	-870
B - Solent Road	Direct	Validation	-350
C - Brockhampton Road (S)	Direct	Validation	-230
D - Marples Way	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Brockhampton Road (N)	0.565	442
B - Solent Road	0.599	1024
C - Brockhampton Road (S)	0.557	874
D - Marples Way	0.593	1240

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2016 Observed	SAT	ONE HOUR	11:15	12:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	177	100.000
B - Solent Road		ONE HOUR	✓	441	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	258	100.000
D - Marples Way		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	1	95	80	1
	B - Solent Road	129	6	303	3
	C - Brockhampton Road (S)	52	201	1	4
	D - Marples Way	2	1	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	1	1	0
	B - Solent Road	0	0	1	0
	C - Brockhampton Road (S)	0	1	0	0
	D - Marples Way	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.64	32.09	1.7	D	162	244
B - Solent Road	0.51	7.58	1.0	A	405	607
C - Brockhampton Road (S)	0.36	7.22	0.6	A	237	355
D - Marples Way	0.01	3.68	0.0	A	6	8

Main Results for each time segment

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	133	33	159	348	0.383	131	138	0.0	0.6	16.378	C
B - Solent Road	332	83	64	979	0.339	330	226	0.0	0.5	5.530	A
C - Brockhampton Road (S)	194	49	105	810	0.240	193	289	0.0	0.3	5.826	A
D - Marples Way	5	1	292	1066	0.004	5	6	0.0	0.0	3.389	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	159	40	190	330	0.482	158	165	0.6	0.9	20.722	C
B - Solent Road	396	99	77	971	0.408	396	271	0.5	0.7	6.248	A
C - Brockhampton Road (S)	232	58	126	798	0.291	232	347	0.3	0.4	6.351	A
D - Marples Way	5	1	350	1032	0.005	5	7	0.0	0.0	3.506	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	195	49	233	306	0.636	192	202	0.9	1.6	30.702	D
B - Solent Road	486	121	93	961	0.505	484	332	0.7	1.0	7.526	A
C - Brockhampton Road (S)	284	71	154	783	0.363	283	424	0.4	0.6	7.204	A
D - Marples Way	7	2	428	985	0.007	7	9	0.0	0.0	3.678	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	195	49	233	306	0.637	195	203	1.6	1.7	32.094	D
B - Solent Road	486	121	95	960	0.506	486	333	1.0	1.0	7.579	A
C - Brockhampton Road (S)	284	71	154	782	0.363	284	426	0.6	0.6	7.224	A
D - Marples Way	7	2	429	985	0.007	7	9	0.0	0.0	3.680	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	159	40	191	330	0.482	162	166	1.7	1.0	21.760	C
B - Solent Road	396	99	79	970	0.409	398	274	1.0	0.7	6.305	A
C - Brockhampton Road (S)	232	58	126	798	0.291	233	350	0.6	0.4	6.378	A
D - Marples Way	5	1	352	1031	0.005	5	7	0.0	0.0	3.512	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	133	33	160	348	0.383	135	139	1.0	0.6	17.003	C
B - Solent Road	332	83	65	978	0.339	333	229	0.7	0.5	5.586	A
C - Brockhampton Road (S)	194	49	106	809	0.240	195	292	0.4	0.3	5.864	A
D - Marples Way	5	1	294	1065	0.004	5	6	0.0	0.0	3.393	A

2021 Base, SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	14.56	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2021 Base	SAT	ONE HOUR	11:15	12:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	190	100.000
B - Solent Road		ONE HOUR	✓	475	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	278	100.000
D - Marples Way		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	1	102	86	1
	B - Solent Road	139	6	327	3
	C - Brockhampton Road (S)	56	217	1	4
	D - Marples Way	2	1	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	1	1	0
	B - Solent Road	0	0	1	0
	C - Brockhampton Road (S)	0	1	0	0
	D - Marples Way	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.71	40.58	2.2	E	174	262
B - Solent Road	0.55	8.30	1.2	A	436	654
C - Brockhampton Road (S)	0.39	7.66	0.6	A	255	383
D - Marples Way	0.01	3.76	0.0	A	6	8

Main Results for each time segment

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	143	36	171	342	0.419	140	148	0.0	0.7	17.649	C
B - Solent Road	358	89	68	976	0.366	355	243	0.0	0.6	5.775	A
C - Brockhampton Road (S)	209	52	112	805	0.260	208	311	0.0	0.3	6.011	A
D - Marples Way	5	1	314	1053	0.004	4	6	0.0	0.0	3.432	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	171	43	205	322	0.530	169	178	0.7	1.1	23.280	C
B - Solent Road	427	107	82	968	0.441	426	292	0.6	0.8	6.644	A
C - Brockhampton Road (S)	250	62	135	793	0.315	249	374	0.3	0.5	6.616	A
D - Marples Way	5	1	377	1016	0.005	5	7	0.0	0.0	3.562	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	209	52	250	296	0.706	205	217	1.1	2.1	37.690	E
B - Solent Road	523	131	99	958	0.546	521	356	0.8	1.2	8.222	A
C - Brockhampton Road (S)	306	77	165	776	0.394	305	456	0.5	0.6	7.628	A
D - Marples Way	7	2	461	966	0.007	7	9	0.0	0.0	3.753	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	209	52	251	296	0.706	209	218	2.1	2.2	40.583	E
B - Solent Road	523	131	101	957	0.547	523	359	1.2	1.2	8.299	A
C - Brockhampton Road (S)	306	77	165	776	0.394	306	459	0.6	0.6	7.656	A
D - Marples Way	7	2	462	965	0.007	7	9	0.0	0.0	3.755	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	171	43	206	322	0.531	175	179	2.2	1.2	25.166	D
B - Solent Road	427	107	85	966	0.442	429	296	1.2	0.8	6.712	A
C - Brockhampton Road (S)	250	62	135	793	0.315	251	378	0.6	0.5	6.652	A
D - Marples Way	5	1	379	1015	0.005	5	7	0.0	0.0	3.568	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	143	36	172	341	0.420	145	149	1.2	0.7	18.535	C
B - Solent Road	358	89	70	975	0.367	358	247	0.8	0.6	5.845	A
C - Brockhampton Road (S)	209	52	113	805	0.260	210	315	0.5	0.4	6.055	A
D - Marples Way	5	1	317	1052	0.004	5	6	0.0	0.0	3.440	A

2021 Base + Committed, SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	15.62	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2021 Base + Committed	SAT	ONE HOUR	11:15	12:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	194	100.000
B - Solent Road		ONE HOUR	✓	487	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	286	100.000
D - Marples Way		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	1	106	86	1
	B - Solent Road	143	6	335	3
	C - Brockhampton Road (S)	56	225	1	4
	D - Marples Way	2	1	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	1	1	0
	B - Solent Road	0	0	1	0
	C - Brockhampton Road (S)	0	1	0	0
	D - Marples Way	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.73	45.10	2.5	E	178	267
B - Solent Road	0.56	8.56	1.3	A	447	670
C - Brockhampton Road (S)	0.41	7.85	0.7	A	262	394
D - Marples Way	0.01	3.79	0.0	A	6	8

Main Results for each time segment

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	146	37	176	338	0.432	143	151	0.0	0.7	18.195	C
B - Solent Road	367	92	68	976	0.375	364	252	0.0	0.6	5.858	A
C - Brockhampton Road (S)	215	54	115	804	0.268	214	317	0.0	0.4	6.088	A
D - Marples Way	5	1	323	1048	0.004	4	6	0.0	0.0	3.449	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	174	44	212	318	0.548	173	181	0.7	1.1	24.439	C
B - Solent Road	438	109	82	968	0.452	437	303	0.6	0.8	6.767	A
C - Brockhampton Road (S)	257	64	138	791	0.325	257	381	0.4	0.5	6.730	A
D - Marples Way	5	1	388	1009	0.005	5	7	0.0	0.0	3.584	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	214	53	259	292	0.733	209	222	1.1	2.4	41.187	E
B - Solent Road	536	134	99	958	0.560	534	369	0.8	1.2	8.469	A
C - Brockhampton Road (S)	315	79	169	774	0.407	314	465	0.5	0.7	7.813	A
D - Marples Way	7	2	474	958	0.007	7	9	0.0	0.0	3.783	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	214	53	260	291	0.734	213	222	2.4	2.5	45.101	E
B - Solent Road	536	134	101	957	0.561	536	372	1.2	1.3	8.559	A
C - Brockhampton Road (S)	315	79	170	774	0.407	315	468	0.7	0.7	7.845	A
D - Marples Way	7	2	476	957	0.007	7	9	0.0	0.0	3.787	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	174	44	213	318	0.549	179	182	2.5	1.3	26.859	D
B - Solent Road	438	109	85	966	0.453	439	307	1.3	0.8	6.855	A
C - Brockhampton Road (S)	257	64	139	791	0.325	258	385	0.7	0.5	6.767	A
D - Marples Way	5	1	390	1008	0.005	5	7	0.0	0.0	3.589	A

12:30 - 12:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	146	37	178	337	0.433	148	152	1.3	0.8	19.209	C
B - Solent Road	367	92	70	975	0.376	368	256	0.8	0.6	5.933	A
C - Brockhampton Road (S)	215	54	116	803	0.268	216	321	0.5	0.4	6.133	A
D - Marples Way	5	1	326	1046	0.004	5	6	0.0	0.0	3.455	A

2021 Base + Committed + Proposed, SAT

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	16.71	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2021 Base + Committed + Proposed	SAT	ONE HOUR	11:15	12:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	197	100.000
B - Solent Road		ONE HOUR	✓	498	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	294	100.000
D - Marples Way		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	1	109	86	1
	B - Solent Road	146	6	343	3
	C - Brockhampton Road (S)	56	233	1	4
	D - Marples Way	2	1	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	1	1	0
	B - Solent Road	0	0	1	0
	C - Brockhampton Road (S)	0	1	0	0
	D - Marples Way	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.76	49.92	2.8	E	181	271
B - Solent Road	0.57	8.81	1.3	A	457	685
C - Brockhampton Road (S)	0.42	8.03	0.7	A	270	405
D - Marples Way	0.01	3.82	0.0	A	6	8

Main Results for each time segment

11:15 - 11:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	148	37	182	335	0.443	145	153	0.0	0.8	18.705	C
B - Solent Road	375	94	68	976	0.384	372	260	0.0	0.6	5.937	A
C - Brockhampton Road (S)	221	55	117	802	0.276	220	323	0.0	0.4	6.162	A
D - Marples Way	5	1	331	1043	0.004	4	6	0.0	0.0	3.465	A

11:30 - 11:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	177	44	219	314	0.564	175	184	0.8	1.2	25.557	D
B - Solent Road	448	112	82	968	0.462	447	312	0.6	0.8	6.893	A
C - Brockhampton Road (S)	264	66	141	790	0.335	264	388	0.4	0.5	6.842	A
D - Marples Way	5	1	397	1003	0.005	5	7	0.0	0.0	3.605	A

11:45 - 12:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	217	54	268	287	0.757	211	225	1.2	2.6	44.766	E
B - Solent Road	548	137	99	958	0.572	546	380	0.8	1.3	8.709	A
C - Brockhampton Road (S)	324	81	172	772	0.419	323	473	0.5	0.7	7.997	A
D - Marples Way	7	2	486	951	0.007	7	9	0.0	0.0	3.812	A

12:00 - 12:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	217	54	269	286	0.758	216	226	2.6	2.8	49.923	E
B - Solent Road	548	137	101	957	0.573	548	384	1.3	1.3	8.811	A
C - Brockhampton Road (S)	324	81	173	772	0.419	324	476	0.7	0.7	8.032	A
D - Marples Way	7	2	488	950	0.007	7	9	0.0	0.0	3.816	A

12:15 - 12:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	177	44	220	314	0.565	183	185	2.8	1.4	28.604	D
B - Solent Road	448	112	85	966	0.463	449	318	1.3	0.9	6.993	A
C - Brockhampton Road (S)	264	66	142	789	0.335	265	393	0.7	0.5	6.881	A
D - Marples Way	5	1	400	1002	0.005	5	7	0.0	0.0	3.613	A

12:30 - 12:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	148	37	184	334	0.444	151	155	1.4	0.8	19.855	C
B - Solent Road	375	94	70	975	0.385	376	264	0.9	0.6	6.020	A
C - Brockhampton Road (S)	221	55	119	802	0.276	222	328	0.5	0.4	6.211	A
D - Marples Way	5	1	334	1041	0.004	5	6	0.0	0.0	3.474	A

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2016)

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Run with file:-
"P:\Transport\Projects\16-1084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\
Traffic Models\Picady\3. Solent Road - Brockhampton Lane\3. Solent Road - Brockhampton Lane AM_PM.vpi"
(drive-on-the-left) at 14:00:06 on Monday, 17 October 2016

RUN INFORMATION
****

RUN TITLE : Solent Road - Brockmapton Lane
LOCATION : Havant
DATE : 03/10/16
CLIENT : Seaward Properties Limited
ENUMERATOR : tgood [LCEN1-DT23]
JOB NUMBER : 16-1084
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MINOR ROAD (ARM D)
-
-
-
-
-
-
MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
-
-
-
-
-
-
MINOR ROAD (ARM B)

ARM A IS Solent Road (East)
ARM B IS Brockhampton Lane (S)
ARM C IS Solent Road (W)
ARM D IS Brockhampton Lane (N)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.21 M.	(W) 7.21 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B)198.00 M.	(VA-D)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 36.0 M.	(VD-A) 25.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.	(VD-C) 88.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) -
- LANE 2 WIDTH	(WB-A) -	(WD-C) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.11 M.	6.71 M.
WIDTH AT 10 M FROM JUNCTION	3.81 M.	5.41 M.
WIDTH AT 15 M FROM JUNCTION	2.96 M.	4.91 M.
WIDTH AT 20 M FROM JUNCTION	2.60 M.	4.52 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU	DERIVED: 3 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D
688.63	0.25	0.25	0.36

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2016 Observed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.32	9.49	6.32
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	3.91	5.87	3.91
ARM D	15.00	45.00	75.00	0.34	0.51	0.34

Demand set: 2016 Observed AM

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
08.00 - 09.30					
	ARM A	0.000	0.010	0.978	0.012
		0.0	5.0	495.0	6.0
		(0.0)	(0.0)	(2.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.981	0.003	0.000	0.016
		307.0	1.0	0.0	5.0
		(7.0)	(100.0)	(0.0)	(20.0)
	ARM D	0.444	0.000	0.556	0.000
		12.0	0.0	15.0	0.0
		(8.0)	(0.0)	(7.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-CD	0.00	5.78	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	6.19	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.86	0.007		0.00	0.01	0.1		0.09
D-AB	0.15	9.38	0.016		0.00	0.02	0.2		0.11
D-BC	0.19	6.71	0.028		0.00	0.03	0.4		0.15
C-ABD	0.01	4.92	0.003		0.00	0.00	0.0		0.20

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-CD	0.00	5.60	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.80	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.65	0.008		0.01	0.01	0.1		0.09
D-AB	0.18	9.18	0.020		0.02	0.02	0.3		0.11
D-BC	0.22	6.35	0.035		0.03	0.04	0.5		0.16
C-ABD	0.01	4.76	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-CD	0.00	5.34	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.27	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.35	0.011		0.01	0.01	0.2		0.10
D-AB	0.22	8.90	0.025		0.02	0.03	0.4		0.12
D-BC	0.28	5.85	0.047		0.04	0.05	0.7		0.18
C-ABD	0.02	4.54	0.004		0.00	0.00	0.1		0.22

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-CD	0.00	5.34	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.27	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.35	0.011		0.01	0.01	0.2		0.10
D-AB	0.22	8.90	0.025		0.03	0.03	0.4		0.12
D-BC	0.28	5.85	0.047		0.05	0.05	0.7		0.18
C-ABD	0.02	4.54	0.004		0.00	0.00	0.1		0.22

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-CD	0.00	5.60	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.80	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.65	0.008		0.01	0.01	0.1		0.09
D-AB	0.18	9.18	0.020		0.03	0.02	0.3		0.11
D-BC	0.22	6.35	0.035		0.05	0.04	0.6		0.16
C-ABD	0.01	4.76	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-CD	0.00	5.78	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	6.19	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.86	0.007		0.01	0.01	0.1		0.09
D-AB	0.15	9.38	0.016		0.02	0.02	0.3		0.11
D-BC	0.19	6.71	0.028		0.04	0.03	0.4		0.15
C-ABD	0.01	4.92	0.003		0.00	0.00	0.0		0.20

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	0.0	0.0	0.0	0.00	0.0	0.00
B-AD	0.0	0.0	0.0	0.00	0.0	0.00
A-BCD	8.3	5.5	0.8	0.10	0.8	0.10
D-AB	16.5	11.0	1.8	0.11	1.8	0.11
D-BC	20.6	13.8	3.4	0.17	3.4	0.17
C-ABD	1.4	0.9	0.3	0.21	0.3	0.21
ALL	1164.5	776.3	6.3	0.01	6.3	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.82	10.24	6.82
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	4.22	6.34	4.22
ARM D	15.00	45.00	75.00	0.37	0.55	0.37

Demand set: 2021 Base AM

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
08.00 - 09.30	ARM A	0.000	0.009	0.980	0.011
		0.0	5.0	535.0	6.0
		(0.0)	(0.0)	(2.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.982	0.003	0.000	0.015
		332.0	1.0	0.0	5.0
		(7.0)	(100.0)	(0.0)	(20.0)
	ARM D	0.445	0.000	0.555	0.000
		13.0	0.0	16.2	0.0
		(8.0)	(0.0)	(7.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-CD	0.00	5.70	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	6.03	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.77	0.007		0.00	0.01	0.1		0.09
D-AB	0.16	9.30	0.018		0.00	0.02	0.3		0.11
D-BC	0.20	6.56	0.031		0.00	0.03	0.5		0.16
C-ABD	0.01	4.85	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-CD	0.00	5.51	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.61	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.54	0.009		0.01	0.01	0.1		0.10
D-AB	0.19	9.08	0.021		0.02	0.02	0.3		0.11
D-BC	0.24	6.17	0.039		0.03	0.04	0.6		0.17
C-ABD	0.01	4.68	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-CD	0.00	5.23	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.03	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.22	0.011		0.01	0.01	0.2		0.10
D-AB	0.24	8.78	0.027		0.02	0.03	0.4		0.12
D-BC	0.30	5.64	0.053		0.04	0.05	0.8		0.19
C-ABD	0.02	4.44	0.004		0.00	0.00	0.1		0.23

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-CD	0.00	5.23	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.03	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.22	0.011		0.01	0.01	0.2		0.10
D-AB	0.24	8.78	0.027		0.03	0.03	0.4		0.12
D-BC	0.30	5.64	0.053		0.05	0.06	0.8		0.19
C-ABD	0.02	4.44	0.004		0.00	0.00	0.1		0.23

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-CD	0.00	5.51	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.61	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.54	0.009		0.01	0.01	0.1		0.10
D-AB	0.19	9.08	0.021		0.03	0.02	0.3		0.11
D-BC	0.24	6.17	0.039		0.06	0.04	0.6		0.17
C-ABD	0.01	4.68	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-CD	0.00	5.70	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	6.03	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.77	0.007		0.01	0.01	0.1		0.09
D-AB	0.16	9.30	0.018		0.02	0.02	0.3		0.11
D-BC	0.20	6.56	0.031		0.04	0.03	0.5		0.16
C-ABD	0.01	4.85	0.003		0.00	0.00	0.0		0.21

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.1
09.00	0.1
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	0.0	0.0	0.0	0.00	0.0	0.00
B-AD	0.0	0.0	0.0	0.00	0.0	0.00
A-BCD	8.3	5.5	0.8	0.10	0.8	0.10
D-AB	17.9	11.9	2.0	0.11	2.0	0.11
D-BC	22.3	14.9	3.8	0.17	3.8	0.17
C-ABD	1.4	0.9	0.3	0.22	0.3	0.22
ALL	1257.0	838.0	6.9	0.01	6.9	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2016 Observed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.41	6.62	4.41
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	5.71	8.57	5.71
ARM D	15.00	45.00	75.00	0.82	1.24	0.82

Demand set: 2016 Observed PM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) TURNING COUNTS ARM A	ARM B	ARM C	ARM D
15.45 - 17.15	ARM A	0.000	0.008	0.972	0.020
		0.0	3.0	343.0	7.0
		(0.0)	(33.0)	(5.0)	(0.0)
	ARM B	0.429	0.000	0.571	0.000
		3.0	0.0	4.0	0.0
		(33.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.972	0.004	0.000	0.024
		444.0	2.0	0.0	11.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.485	0.000	0.515	0.000
		32.0	0.0	34.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-CD	0.05	10.41	0.005		0.00	0.00	0.1		0.10
B-AD	0.04	5.08	0.007		0.00	0.01	0.1		0.20
A-BCD	0.09	10.45	0.008		0.00	0.01	0.1		0.10
D-AB	0.40	9.84	0.041		0.00	0.04	0.6		0.11
D-BC	0.43	6.95	0.061		0.00	0.06	0.9		0.15
C-ABD	0.03	10.29	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-CD	0.06	10.18	0.006		0.00	0.01	0.1		0.10
B-AD	0.04	4.78	0.009		0.01	0.01	0.1		0.21
A-BCD	0.10	10.15	0.010		0.01	0.01	0.2		0.10
D-AB	0.48	9.53	0.050		0.04	0.05	0.8		0.11
D-BC	0.51	6.55	0.078		0.06	0.08	1.2		0.17
C-ABD	0.03	10.06	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-CD	0.07	9.86	0.007		0.01	0.01	0.1		0.10
B-AD	0.06	4.37	0.013		0.01	0.01	0.2		0.23
A-BCD	0.13	9.74	0.013		0.01	0.01	0.2		0.10
D-AB	0.59	9.09	0.065		0.05	0.07	1.0		0.12
D-BC	0.62	5.99	0.104		0.08	0.11	1.7		0.19
C-ABD	0.04	9.74	0.004		0.00	0.00	0.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-CD	0.07	9.86	0.007		0.01	0.01	0.1		0.10
B-AD	0.06	4.37	0.013		0.01	0.01	0.2		0.23
A-BCD	0.13	9.74	0.013		0.01	0.01	0.2		0.10
D-AB	0.59	9.09	0.065		0.07	0.07	1.0		0.12
D-BC	0.62	5.99	0.104		0.11	0.12	1.7		0.19
C-ABD	0.04	9.74	0.004		0.00	0.00	0.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-CD	0.06	10.18	0.006		0.01	0.01	0.1		0.10
B-AD	0.04	4.78	0.009		0.01	0.01	0.1		0.21
A-BCD	0.10	10.15	0.010		0.01	0.01	0.2		0.10
D-AB	0.48	9.53	0.050		0.07	0.05	0.8		0.11
D-BC	0.51	6.54	0.078		0.12	0.09	1.3		0.17
C-ABD	0.03	10.06	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-CD	0.05	10.40	0.005		0.01	0.00	0.1		0.10
B-AD	0.04	5.08	0.007		0.01	0.01	0.1		0.20
A-BCD	0.09	10.45	0.008		0.01	0.01	0.1		0.10
D-AB	0.40	9.84	0.041		0.05	0.04	0.7		0.11
D-BC	0.43	6.95	0.061		0.09	0.07	1.0		0.15
C-ABD	0.03	10.29	0.002		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	5.5	3.7	0.5	0.10	0.5	0.10
B-AD	4.1	2.8	0.9	0.21	0.9	0.21
A-BCD	9.6	6.4	1.0	0.10	1.0	0.10
D-AB	44.0	29.4	4.9	0.11	4.9	0.11
D-BC	46.8	31.2	7.9	0.17	7.9	0.17
C-ABD	2.8	1.8	0.3	0.10	0.3	0.10
ALL	1215.4	810.3	15.5	0.01	15.5	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.76	7.14	4.76
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	6.16	9.24	6.16
ARM D	15.00	45.00	75.00	0.89	1.33	0.89

Demand set: 2021 Base PM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
15.45 - 17.15	ARM A	0.000	0.008	0.971	0.021
		0.0	3.0	370.0	8.0
		(0.0)	(33.0)	(5.0)	(0.0)
	ARM B	0.429	0.000	0.571	0.000
		3.0	0.0	4.0	0.0
		(33.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.972	0.004	0.000	0.024
		479.0	2.0	0.0	12.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.479	0.000	0.521	0.000
		34.0	0.0	37.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-CD	0.05	10.31	0.005		0.00	0.00	0.1		0.10
B-AD	0.04	4.96	0.008		0.00	0.01	0.1		0.20
A-BCD	0.10	10.33	0.010		0.00	0.01	0.1		0.10
D-AB	0.43	9.69	0.044		0.00	0.05	0.7		0.11
D-BC	0.46	6.80	0.068		0.00	0.07	1.0		0.16
C-ABD	0.03	10.20	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-CD	0.06	10.07	0.006		0.00	0.01	0.1		0.10
B-AD	0.04	4.64	0.010		0.01	0.01	0.1		0.22
A-BCD	0.12	10.01	0.012		0.01	0.01	0.2		0.10
D-AB	0.51	9.35	0.054		0.05	0.06	0.8		0.11
D-BC	0.55	6.37	0.087		0.07	0.09	1.4		0.17
C-ABD	0.03	9.95	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-CD	0.07	9.72	0.008		0.01	0.01	0.1		0.10
B-AD	0.06	4.20	0.013		0.01	0.01	0.2		0.24
A-BCD	0.15	9.56	0.015		0.01	0.02	0.2		0.11
D-AB	0.62	8.87	0.070		0.06	0.07	1.1		0.12
D-BC	0.68	5.77	0.118		0.09	0.13	1.9		0.20
C-ABD	0.04	9.60	0.004		0.00	0.00	0.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-CD	0.07	9.72	0.008		0.01	0.01	0.1		0.10
B-AD	0.06	4.20	0.013		0.01	0.01	0.2		0.24
A-BCD	0.15	9.56	0.015		0.02	0.02	0.2		0.11
D-AB	0.62	8.87	0.070		0.07	0.08	1.1		0.12
D-BC	0.68	5.77	0.118		0.13	0.13	2.0		0.20
C-ABD	0.04	9.60	0.004		0.00	0.00	0.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-CD	0.06	10.07	0.006		0.01	0.01	0.1		0.10
B-AD	0.04	4.64	0.010		0.01	0.01	0.2		0.22
A-BCD	0.12	10.01	0.012		0.02	0.01	0.2		0.10
D-AB	0.51	9.35	0.055		0.08	0.06	0.9		0.11
D-BC	0.55	6.37	0.087		0.13	0.10	1.5		0.17
C-ABD	0.03	9.95	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-CD	0.05	10.31	0.005		0.01	0.00	0.1		0.10
B-AD	0.04	4.96	0.008		0.01	0.01	0.1		0.20
A-BCD	0.10	10.33	0.010		0.01	0.01	0.1		0.10
D-AB	0.43	9.69	0.044		0.06	0.05	0.7		0.11
D-BC	0.46	6.80	0.068		0.10	0.07	1.1		0.16
C-ABD	0.03	10.20	0.002		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	5.5	3.7	0.6	0.10	0.6	0.10
B-AD	4.1	2.8	0.9	0.22	0.9	0.22
A-BCD	11.0	7.3	1.1	0.10	1.1	0.10
D-AB	46.8	31.2	5.3	0.11	5.3	0.11
D-BC	50.9	34.0	8.9	0.18	8.9	0.18
C-ABD	2.8	1.8	0.3	0.10	0.3	0.10
ALL	1310.4	873.6	17.2	0.01	17.2	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base - Committed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.06	10.59	7.06
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	4.32	6.49	4.32
ARM D	15.00	45.00	75.00	0.36	0.54	0.36

Demand set: 2021 Base - Committed AM

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
08.00 - 09.30					
	ARM A	0.000	0.009	0.981	0.011
		0.0	5.0	554.0	6.0
		(0.0)	(0.0)	(2.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.983	0.003	0.000	0.014
		340.0	1.0	0.0	5.0
		(7.0)	(100.0)	(0.0)	(20.0)
	ARM D	0.448	0.000	0.552	0.000
		13.0	0.0	16.0	0.0
		(8.0)	(0.0)	(7.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-CD	0.00	5.67	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.97	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.75	0.007		0.00	0.01	0.1		0.09
D-AB	0.16	9.29	0.018		0.00	0.02	0.3		0.11
D-BC	0.20	6.49	0.031		0.00	0.03	0.5		0.16
C-ABD	0.01	4.82	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-CD	0.00	5.46	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.53	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.51	0.009		0.01	0.01	0.1		0.10
D-AB	0.19	9.06	0.021		0.02	0.02	0.3		0.11
D-BC	0.24	6.09	0.039		0.03	0.04	0.6		0.17
C-ABD	0.01	4.64	0.003		0.00	0.00	0.0		0.22

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-CD	0.00	5.18	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	4.94	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.17	0.011		0.01	0.01	0.2		0.10
D-AB	0.24	8.75	0.027		0.02	0.03	0.4		0.12
D-BC	0.29	5.54	0.053		0.04	0.06	0.8		0.19
C-ABD	0.02	4.40	0.004		0.00	0.00	0.1		0.23

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-CD	0.00	5.18	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	4.94	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.17	0.011		0.01	0.01	0.2		0.10
D-AB	0.24	8.75	0.027		0.03	0.03	0.4		0.12
D-BC	0.29	5.54	0.053		0.06	0.06	0.8		0.19
C-ABD	0.02	4.40	0.004		0.00	0.00	0.1		0.23

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-CD	0.00	5.46	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.53	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.51	0.009		0.01	0.01	0.1		0.10
D-AB	0.19	9.06	0.021		0.03	0.02	0.3		0.11
D-BC	0.24	6.09	0.039		0.06	0.04	0.6		0.17
C-ABD	0.01	4.64	0.003		0.00	0.00	0.0		0.22

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-CD	0.00	5.67	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.96	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.75	0.007		0.01	0.01	0.1		0.09
D-AB	0.16	9.29	0.018		0.02	0.02	0.3		0.11
D-BC	0.20	6.49	0.031		0.04	0.03	0.5		0.16
C-ABD	0.01	4.82	0.003		0.00	0.00	0.0		0.21

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.1
09.00	0.1
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	0.0	0.0	0.0	0.00	0.0	0.00
B-AD	0.0	0.0	0.0	0.00	0.0	0.00
A-BCD	8.3	5.5	0.8	0.10	0.8	0.10
D-AB	17.9	11.9	2.0	0.11	2.0	0.11
D-BC	22.0	14.7	3.8	0.17	3.8	0.17
C-ABD	1.4	0.9	0.3	0.22	0.3	0.22
ALL	1293.8	862.6	6.9	0.01	6.9	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base - Committed - Proposed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.09	10.63	7.09
ARM B	15.00	45.00	75.00	0.00	0.00	0.00
ARM C	15.00	45.00	75.00	4.47	6.71	4.47
ARM D	15.00	45.00	75.00	0.36	0.54	0.36

Demand set: 2021 Base - Committed - Proposed AM

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
08.00 - 09.30	ARM A	0.000	0.009	0.981	0.011
		0.0	5.0	556.0	6.0
		(0.0)	(0.0)	(2.0)	(0.0)
	ARM B	0.000	0.000	0.000	0.000
		0.0	0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.983	0.003	0.000	0.014
		352.0	1.0	0.0	5.0
		(7.0)	(100.0)	(0.0)	(20.0)
	ARM D	0.448	0.000	0.552	0.000
		13.0	0.0	16.0	0.0
		(8.0)	(0.0)	(7.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-CD	0.00	5.66	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.94	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.70	0.007		0.00	0.01	0.1		0.09
D-AB	0.16	9.25	0.018		0.00	0.02	0.3		0.11
D-BC	0.20	6.45	0.031		0.00	0.03	0.5		0.16
C-ABD	0.01	4.82	0.003		0.00	0.00	0.0		0.21

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-CD	0.00	5.46	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.50	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.46	0.009		0.01	0.01	0.1		0.10
D-AB	0.19	9.02	0.022		0.02	0.02	0.3		0.11
D-BC	0.24	6.05	0.040		0.03	0.04	0.6		0.17
C-ABD	0.01	4.64	0.003		0.00	0.00	0.0		0.22

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-CD	0.00	5.18	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	4.90	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.11	0.011		0.01	0.01	0.2		0.10
D-AB	0.24	8.70	0.027		0.02	0.03	0.4		0.12
D-BC	0.29	5.48	0.054		0.04	0.06	0.8		0.19
C-ABD	0.02	4.39	0.004		0.00	0.00	0.1		0.23

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-CD	0.00	5.18	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	4.90	0.000		0.00	0.00	0.0		0.00
A-BCD	0.11	10.11	0.011		0.01	0.01	0.2		0.10
D-AB	0.24	8.70	0.027		0.03	0.03	0.4		0.12
D-BC	0.29	5.48	0.054		0.06	0.06	0.8		0.19
C-ABD	0.02	4.39	0.004		0.00	0.00	0.1		0.23

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-CD	0.00	5.46	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.50	0.000		0.00	0.00	0.0		0.00
A-BCD	0.09	10.46	0.009		0.01	0.01	0.1		0.10
D-AB	0.19	9.02	0.022		0.03	0.02	0.3		0.11
D-BC	0.24	6.05	0.040		0.06	0.04	0.6		0.17
C-ABD	0.01	4.64	0.003		0.00	0.00	0.0		0.22

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-CD	0.00	5.66	0.000		0.00	0.00	0.0		0.00
B-AD	0.00	5.94	0.000		0.00	0.00	0.0		0.00
A-BCD	0.08	10.70	0.007		0.01	0.01	0.1		0.09
D-AB	0.16	9.25	0.018		0.02	0.02	0.3		0.11
D-BC	0.20	6.45	0.031		0.04	0.03	0.5		0.16
C-ABD	0.01	4.82	0.003		0.00	0.00	0.0		0.21

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.1
09.00	0.1
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	0.0	0.0	0.0	0.00	0.0	0.00
B-AD	0.0	0.0	0.0	0.00	0.0	0.00
A-BCD	8.3	5.5	0.8	0.10	0.8	0.10
D-AB	17.9	11.9	2.0	0.11	2.0	0.11
D-BC	22.0	14.7	3.9	0.17	3.9	0.17
C-ABD	1.4	0.9	0.3	0.22	0.3	0.22
ALL	1313.1	875.4	7.0	0.01	7.0	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base - Committed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.76	7.14	4.76
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	6.31	9.47	6.31
ARM D	15.00	45.00	75.00	0.89	1.33	0.89

Demand set: 2021 Base - Committed PM

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
15.45 - 17.15	ARM A	0.000	0.008	0.971	0.021
		0.0	3.0	370.0	8.0
		(0.0)	(33.0)	(5.0)	(0.0)
	ARM B	0.429	0.000	0.571	0.000
		3.0	0.0	4.0	0.0
		(33.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.972	0.004	0.000	0.024
		491.0	2.0	0.0	12.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.479	0.000	0.521	0.000
		34.0	0.0	37.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-CD	0.05	10.31	0.005		0.00	0.00	0.1		0.10
B-AD	0.04	4.94	0.008		0.00	0.01	0.1		0.20
A-BCD	0.10	10.29	0.010		0.00	0.01	0.1		0.10
D-AB	0.43	9.65	0.044		0.00	0.05	0.7		0.11
D-BC	0.46	6.76	0.069		0.00	0.07	1.0		0.16
C-ABD	0.03	10.20	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-CD	0.06	10.07	0.006		0.00	0.01	0.1		0.10
B-AD	0.04	4.62	0.010		0.01	0.01	0.1		0.22
A-BCD	0.12	9.96	0.012		0.01	0.01	0.2		0.10
D-AB	0.51	9.30	0.055		0.05	0.06	0.8		0.11
D-BC	0.55	6.32	0.088		0.07	0.09	1.4		0.17
C-ABD	0.03	9.95	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-CD	0.07	9.72	0.008		0.01	0.01	0.1		0.10
B-AD	0.06	4.17	0.013		0.01	0.01	0.2		0.24
A-BCD	0.15	9.51	0.015		0.01	0.02	0.2		0.11
D-AB	0.62	8.82	0.071		0.06	0.08	1.1		0.12
D-BC	0.68	5.72	0.119		0.09	0.13	1.9		0.20
C-ABD	0.04	9.60	0.004		0.00	0.00	0.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-CD	0.07	9.72	0.008		0.01	0.01	0.1		0.10
B-AD	0.06	4.17	0.013		0.01	0.01	0.2		0.24
A-BCD	0.15	9.51	0.015		0.02	0.02	0.2		0.11
D-AB	0.62	8.82	0.071		0.08	0.08	1.1		0.12
D-BC	0.68	5.72	0.119		0.13	0.13	2.0		0.20
C-ABD	0.04	9.60	0.004		0.00	0.00	0.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-CD	0.06	10.07	0.006		0.01	0.01	0.1		0.10
B-AD	0.04	4.62	0.010		0.01	0.01	0.2		0.22
A-BCD	0.12	9.96	0.012		0.02	0.01	0.2		0.10
D-AB	0.51	9.30	0.055		0.08	0.06	0.9		0.11
D-BC	0.55	6.32	0.088		0.13	0.10	1.5		0.17
C-ABD	0.03	9.95	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-CD	0.05	10.31	0.005		0.01	0.00	0.1		0.10
B-AD	0.04	4.94	0.008		0.01	0.01	0.1		0.20
A-BCD	0.10	10.29	0.010		0.01	0.01	0.1		0.10
D-AB	0.43	9.65	0.044		0.06	0.05	0.7		0.11
D-BC	0.46	6.76	0.069		0.10	0.07	1.1		0.16
C-ABD	0.03	10.20	0.002		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

TRL TRL Viewer 3.2 AG P:\.. \3. Solent Road - Brockhampton Lane\3. Solent Road - Brockhampton Lane AM_PM.vpo

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QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	5.5	3.7	0.6	0.10	0.6	0.10
B-AD	4.1	2.8	0.9	0.22	0.9	0.22
A-BCD	11.0	7.3	1.1	0.10	1.1	0.10
D-AB	46.8	31.2	5.4	0.11	5.4	0.11
D-BC	50.9	34.0	9.0	0.18	9.0	0.18
C-ABD	2.8	1.8	0.3	0.10	0.3	0.10
ALL	1326.9	884.6	17.3	0.01	17.3	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base - Committed - Proposed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.90	7.35	4.90
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	6.45	9.67	6.45
ARM D	15.00	45.00	75.00	0.89	1.33	0.89

Demand set: 2021 Base - Committed - Proposed PM

TIME	FROM/TO	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
15.45 - 17.15	ARM A	0.000	0.008	0.972	0.020
		0.0	3.0	381.0	8.0
		(0.0)	(33.0)	(5.0)	(0.0)
	ARM B	0.429	0.000	0.571	0.000
		3.0	0.0	4.0	0.0
		(33.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.973	0.004	0.000	0.023
		502.0	2.0	0.0	12.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.479	0.000	0.521	0.000
		34.0	0.0	37.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-CD	0.05	10.28	0.005		0.00	0.00	0.1		0.10
B-AD	0.04	4.90	0.008		0.00	0.01	0.1		0.21
A-BCD	0.10	10.25	0.010		0.00	0.01	0.1		0.10
D-AB	0.43	9.61	0.044		0.00	0.05	0.7		0.11
D-BC	0.46	6.71	0.069		0.00	0.07	1.1		0.16
C-ABD	0.03	10.16	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-CD	0.06	10.02	0.006		0.00	0.01	0.1		0.10
B-AD	0.04	4.57	0.010		0.01	0.01	0.1		0.22
A-BCD	0.12	9.92	0.012		0.01	0.01	0.2		0.10
D-AB	0.51	9.26	0.055		0.05	0.06	0.9		0.11
D-BC	0.55	6.26	0.089		0.07	0.10	1.4		0.18
C-ABD	0.03	9.90	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-CD	0.07	9.67	0.008		0.01	0.01	0.1		0.10
B-AD	0.06	4.11	0.013		0.01	0.01	0.2		0.25
A-BCD	0.15	9.45	0.016		0.01	0.02	0.2		0.11
D-AB	0.62	8.76	0.071		0.06	0.08	1.1		0.12
D-BC	0.68	5.64	0.120		0.10	0.13	2.0		0.20
C-ABD	0.04	9.55	0.004		0.00	0.00	0.1		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-CD	0.07	9.67	0.008		0.01	0.01	0.1		0.10
B-AD	0.06	4.11	0.013		0.01	0.01	0.2		0.25
A-BCD	0.15	9.45	0.016		0.02	0.02	0.2		0.11
D-AB	0.62	8.76	0.071		0.08	0.08	1.1		0.12
D-BC	0.68	5.64	0.120		0.13	0.14	2.0		0.20
C-ABD	0.04	9.55	0.004		0.00	0.00	0.1		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-CD	0.06	10.02	0.006		0.01	0.01	0.1		0.10
B-AD	0.04	4.57	0.010		0.01	0.01	0.2		0.22
A-BCD	0.12	9.92	0.012		0.02	0.01	0.2		0.10
D-AB	0.51	9.26	0.055		0.08	0.06	0.9		0.11
D-BC	0.55	6.26	0.089		0.14	0.10	1.5		0.18
C-ABD	0.03	9.90	0.003		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-CD	0.05	10.28	0.005		0.01	0.00	0.1		0.10
B-AD	0.04	4.90	0.008		0.01	0.01	0.1		0.21
A-BCD	0.10	10.25	0.010		0.01	0.01	0.1		0.10
D-AB	0.43	9.61	0.044		0.06	0.05	0.7		0.11
D-BC	0.46	6.71	0.069		0.10	0.08	1.2		0.16
C-ABD	0.03	10.16	0.002		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.0

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUING * DELAY *		* INCLUSIVE QUEUING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	5.5	3.7	0.6	0.10	0.6	0.10
B-AD	4.1	2.8	0.9	0.22	0.9	0.22
A-BCD	11.0	7.3	1.1	0.10	1.1	0.10
D-AB	46.8	31.2	5.4	0.12	5.4	0.12
D-BC	50.9	34.0	9.1	0.18	9.1	0.18
C-ABD	2.8	1.8	0.3	0.10	0.3	0.10
ALL	1357.2	904.8	17.4	0.01	17.4	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

---------- end of file ----------

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"P:\Transport\Projects\16-1084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\
Traffic Models\Picady\3. Solent Road - Brockhampton Lane\3. Solent Road - Brockhampton Lane SAT.vpi"
(drive-on-the-left) at 14:04:14 on Monday, 17 October 2016

RUN INFORMATION
****

RUN TITLE : Solent Road - Brockmapton Lane
LOCATION : Havant
DATE : 03/10/16
CLIENT : Seaward Properties Limited
ENUMERATOR : tgood [LCEN1-DT23]
JOB NUMBER : 16-1084
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MINOR ROAD (ARM D)
-
-
-
-
-
-
MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
-
-
-
-
-
-
MINOR ROAD (ARM B)

ARM A IS Solent Road (East)
ARM B IS Brockhampton Lane (S)
ARM C IS Solent Road (W)
ARM D IS Brockhampton Lane (N)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B	MINOR ROAD D
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.21 M.	(W) 7.21 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.	(WA-D) 2.20 M.
- VISIBILITY	(VC-B)198.00 M.	(VA-D)250.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 36.0 M.	(VD-A) 25.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.	(VD-C) 88.0 M.
- LANE 1 WIDTH	(WB-C) -	(WD-A) -
- LANE 2 WIDTH	(WB-A) -	(WD-C) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.11 M.	6.71 M.
WIDTH AT 10 M FROM JUNCTION	3.81 M.	5.41 M.
WIDTH AT 15 M FROM JUNCTION	2.96 M.	4.91 M.
WIDTH AT 20 M FROM JUNCTION	2.60 M.	4.52 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU	DERIVED: 3 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D
688.63	0.25	0.25	0.36

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2016 Observed SAT

TIME PERIOD BEGINS 11:15 AND ENDS 12:45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.99	7.48	4.99
ARM B	15.00	45.00	75.00	0.05	0.08	0.05
ARM C	15.00	45.00	75.00	4.06	6.09	4.06
ARM D	15.00	45.00	75.00	1.75	2.63	1.75

Demand set: 2016 Observed SAT

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
11:15 - 12:45	ARM A	0.000	0.003	0.962	0.035
		0.0	1.0	384.0	14.0
		(0.0)	(0.0)	(1.0)	(0.0)
	ARM B	0.500	0.000	0.250	0.250
		2.0	0.0	1.0	1.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.926	0.003	0.000	0.071
		301.0	1.0	0.0	23.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.493	0.000	0.507	0.000
		69.0	0.0	71.0	0.0
		(1.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11:15-11:30									
B-CD	0.02	8.90	0.002		0.00	0.00	0.0		0.11
B-AD	0.03	6.93	0.005		0.00	0.00	0.1		0.15
A-BCD	0.18	10.89	0.016		0.00	0.02	0.2		0.09
D-AB	0.87	10.05	0.086		0.00	0.09	1.4		0.11
D-BC	0.89	7.27	0.123		0.00	0.14	2.0		0.16
C-ABD	0.01	10.18	0.001		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11:30-11:45									
B-CD	0.02	8.59	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.54	0.006		0.00	0.01	0.1		0.15
A-BCD	0.21	10.68	0.020		0.02	0.02	0.3		0.10
D-AB	1.03	9.78	0.106		0.09	0.12	1.7		0.11
D-BC	1.06	6.93	0.153		0.14	0.18	2.6		0.17
C-ABD	0.01	9.93	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-CD	0.03	8.16	0.003		0.00	0.00	0.0		0.12
B-AD	0.05	6.00	0.008		0.01	0.01	0.1		0.17
A-BCD	0.26	10.39	0.025		0.02	0.03	0.4		0.10
D-AB	1.27	9.41	0.135		0.12	0.15	2.3		0.12
D-BC	1.30	6.47	0.201		0.18	0.25	3.6		0.19
C-ABD	0.02	9.58	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-CD	0.03	8.16	0.003		0.00	0.00	0.1		0.12
B-AD	0.05	6.00	0.008		0.01	0.01	0.1		0.17
A-BCD	0.26	10.39	0.025		0.03	0.03	0.4		0.10
D-AB	1.27	9.41	0.135		0.15	0.15	2.3		0.12
D-BC	1.30	6.47	0.201		0.25	0.25	3.7		0.19
C-ABD	0.02	9.58	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-CD	0.02	8.59	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.54	0.006		0.01	0.01	0.1		0.15
A-BCD	0.21	10.68	0.020		0.03	0.02	0.3		0.10
D-AB	1.03	9.78	0.106		0.15	0.12	1.8		0.11
D-BC	1.06	6.93	0.153		0.25	0.18	2.8		0.17
C-ABD	0.01	9.93	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-CD	0.02	8.90	0.002		0.00	0.00	0.0		0.11
B-AD	0.03	6.93	0.005		0.01	0.00	0.1		0.15
A-BCD	0.18	10.89	0.016		0.02	0.02	0.2		0.09
D-AB	0.87	10.05	0.086		0.12	0.10	1.5		0.11
D-BC	0.89	7.26	0.123		0.18	0.14	2.2		0.16
C-ABD	0.01	10.18	0.001		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.1
11.45	0.1
12.00	0.2
12.15	0.2
12.30	0.1
12.45	0.1

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.1
11.45	0.2
12.00	0.2
12.15	0.3
12.30	0.2
12.45	0.1

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	2.1	1.4	0.2	0.12	0.2	0.12
B-AD	3.4	2.3	0.5	0.16	0.5	0.16
A-BCD	19.3	12.8	1.9	0.10	1.9	0.10
D-AB	95.0	63.3	10.9	0.12	10.9	0.12
D-BC	97.7	65.2	17.0	0.17	17.0	0.17
C-ABD	1.4	0.9	0.1	0.10	0.1	0.10
ALL	1194.7	796.5	30.7	0.03	30.7	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.38	8.06	5.38
ARM B	15.00	45.00	75.00	0.05	0.08	0.05
ARM C	15.00	45.00	75.00	4.39	6.58	4.39
ARM D	15.00	45.00	75.00	1.89	2.83	1.89

Demand set: 2021 Base SAT

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
11.15 - 12.45	ARM A	0.000	0.002	0.963	0.035
		0.0	1.0	414.0	15.0
		(0.0)	(0.0)	(1.0)	(0.0)
	ARM B	0.500	0.000	0.250	0.250
		2.0	0.0	1.0	1.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.926	0.003	0.000	0.071
		325.0	1.0	0.0	25.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.490	0.000	0.510	0.000
		74.0	0.0	77.0	0.0
		(1.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-CD	0.02	8.78	0.002		0.00	0.00	0.0		0.11
B-AD	0.03	6.77	0.005		0.00	0.00	0.1		0.15
A-BCD	0.19	10.80	0.017		0.00	0.02	0.3		0.09
D-AB	0.93	9.93	0.094		0.00	0.10	1.5		0.11
D-BC	0.97	7.14	0.135		0.00	0.15	2.2		0.16
C-ABD	0.01	10.08	0.001		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-CD	0.02	8.44	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.35	0.006		0.00	0.01	0.1		0.16
A-BCD	0.22	10.58	0.021		0.02	0.02	0.3		0.10
D-AB	1.11	9.64	0.115		0.10	0.13	1.9		0.12
D-BC	1.15	6.78	0.170		0.15	0.20	2.9		0.18
C-ABD	0.01	9.81	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-CD	0.03	7.98	0.003		0.00	0.00	0.1		0.13
B-AD	0.05	5.77	0.008		0.01	0.01	0.1		0.17
A-BCD	0.28	10.26	0.027		0.02	0.03	0.4		0.10
D-AB	1.36	9.23	0.147		0.13	0.17	2.5		0.13
D-BC	1.41	6.28	0.225		0.20	0.29	4.1		0.20
C-ABD	0.02	9.43	0.002		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-CD	0.03	7.98	0.003		0.00	0.00	0.1		0.13
B-AD	0.05	5.77	0.008		0.01	0.01	0.1		0.17
A-BCD	0.28	10.26	0.027		0.03	0.03	0.4		0.10
D-AB	1.36	9.23	0.147		0.17	0.17	2.6		0.13
D-BC	1.41	6.28	0.225		0.29	0.29	4.3		0.21
C-ABD	0.02	9.43	0.002		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-CD	0.02	8.44	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.35	0.006		0.01	0.01	0.1		0.16
A-BCD	0.22	10.58	0.021		0.03	0.02	0.3		0.10
D-AB	1.11	9.63	0.115		0.17	0.13	2.0		0.12
D-BC	1.15	6.78	0.170		0.29	0.21	3.2		0.18
C-ABD	0.01	9.81	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-CD	0.02	8.77	0.002		0.00	0.00	0.0		0.11
B-AD	0.03	6.77	0.005		0.01	0.00	0.1		0.15
A-BCD	0.19	10.80	0.017		0.02	0.02	0.3		0.09
D-AB	0.93	9.92	0.094		0.13	0.10	1.6		0.11
D-BC	0.97	7.14	0.135		0.21	0.16	2.4		0.16
C-ABD	0.01	10.08	0.001		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.1
11.45	0.1
12.00	0.2
12.15	0.2
12.30	0.1
12.45	0.1

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.2
11.45	0.2
12.00	0.3
12.15	0.3
12.30	0.2
12.45	0.2

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	2.1	1.4	0.2	0.12	0.2	0.12
B-AD	3.4	2.3	0.6	0.16	0.6	0.16
A-BCD	20.6	13.8	2.0	0.10	2.0	0.10
D-AB	101.9	67.9	12.1	0.12	12.1	0.12
D-BC	106.0	70.7	19.3	0.18	19.3	0.18
C-ABD	1.4	0.9	0.1	0.10	0.1	0.10
ALL	1288.3	858.9	34.3	0.03	34.3	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base - Committed SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.53	8.29	5.53
ARM B	15.00	45.00	75.00	0.05	0.08	0.05
ARM C	15.00	45.00	75.00	4.53	6.79	4.53
ARM D	15.00	45.00	75.00	1.89	2.83	1.89

Demand set: 2021 Base - Committed SAT

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS (PERCENTAGE OF H.V.S)) ARM A	ARM B	ARM C	ARM D
11.15 - 12.45	ARM A	0.000	0.002	0.964	0.034
		0.0	1.0	426.0	15.0
		(0.0)	(0.0)	(1.0)	(0.0)
	ARM B	0.500	0.000	0.250	0.250
		2.0	0.0	1.0	1.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.928	0.003	0.000	0.069
		336.0	1.0	0.0	25.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.490	0.000	0.510	0.000
		74.0	0.0	77.0	0.0
		(1.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-CD	0.02	8.73	0.002		0.00	0.00	0.0		0.11
B-AD	0.03	6.72	0.005		0.00	0.00	0.1		0.15
A-BCD	0.19	10.77	0.017		0.00	0.02	0.3		0.09
D-AB	0.93	9.89	0.094		0.00	0.10	1.5		0.11
D-BC	0.97	7.08	0.136		0.00	0.16	2.2		0.16
C-ABD	0.01	10.04	0.001		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-CD	0.02	8.38	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.28	0.006		0.00	0.01	0.1		0.16
A-BCD	0.22	10.53	0.021		0.02	0.02	0.3		0.10
D-AB	1.11	9.59	0.116		0.10	0.13	1.9		0.12
D-BC	1.15	6.71	0.172		0.16	0.20	3.0		0.18
C-ABD	0.01	9.76	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-CD	0.03	7.90	0.003		0.00	0.00	0.1		0.13
B-AD	0.05	5.69	0.008		0.01	0.01	0.1		0.18
A-BCD	0.28	10.21	0.027		0.02	0.03	0.4		0.10
D-AB	1.36	9.17	0.148		0.13	0.17	2.5		0.13
D-BC	1.41	6.20	0.228		0.20	0.29	4.2		0.21
C-ABD	0.02	9.38	0.002		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-CD	0.03	7.90	0.003		0.00	0.00	0.1		0.13
B-AD	0.05	5.69	0.008		0.01	0.01	0.1		0.18
A-BCD	0.28	10.21	0.027		0.03	0.03	0.4		0.10
D-AB	1.36	9.17	0.148		0.17	0.17	2.6		0.13
D-BC	1.41	6.20	0.228		0.29	0.29	4.4		0.21
C-ABD	0.02	9.38	0.002		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-CD	0.02	8.38	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.28	0.006		0.01	0.01	0.1		0.16
A-BCD	0.22	10.53	0.021		0.03	0.02	0.3		0.10
D-AB	1.11	9.59	0.116		0.17	0.13	2.0		0.12
D-BC	1.15	6.71	0.172		0.29	0.21	3.3		0.18
C-ABD	0.01	9.76	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-CD	0.02	8.72	0.002		0.00	0.00	0.0		0.11
B-AD	0.03	6.71	0.005		0.01	0.00	0.1		0.15
A-BCD	0.19	10.77	0.017		0.02	0.02	0.3		0.09
D-AB	0.93	9.89	0.094		0.13	0.10	1.6		0.11
D-BC	0.97	7.08	0.136		0.21	0.16	2.5		0.16
C-ABD	0.01	10.04	0.001		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.1
11.45	0.1
12.00	0.2
12.15	0.2
12.30	0.1
12.45	0.1

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.2
11.45	0.2
12.00	0.3
12.15	0.3
12.30	0.2
12.45	0.2

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	2.1	1.4	0.2	0.12	0.2	0.12
B-AD	3.4	2.3	0.6	0.16	0.6	0.16
A-BCD	20.6	13.8	2.0	0.10	2.0	0.10
D-AB	101.9	67.9	12.1	0.12	12.1	0.12
D-BC	106.0	70.7	19.5	0.18	19.5	0.18
C-ABD	1.4	0.9	0.1	0.10	0.1	0.10
ALL	1320.0	880.0	34.6	0.03	34.7	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-A

Intercept For STREAM D-A	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM B-A

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM D-A	Slope For Opposing STREAM D-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM D-C

Intercept For STREAM D-C	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM B-C	Slope For Opposing STREAM B-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM B-A
0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

STREAM C-B

Intercept For STREAM C-B	Slope For Opposing STREAM A-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D

_	688.63	0.25	0.25	0.36	_

STREAM A-D

Intercept For STREAM A-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D
718.74	0.26	0.38	0.26

B-D Stream From Left Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

B-D Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Left Hand Lane

Intercept For STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

D-B Stream From Right Hand Lane

Intercept For STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D
0.00	0.00	0.00	0.00	0.00

Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing
0.00	0.00		

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

Demand set: 2021 Base - Committed - Proposed SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.66	8.49	5.66
ARM B	15.00	45.00	75.00	0.05	0.08	0.05
ARM C	15.00	45.00	75.00	4.66	6.99	4.66
ARM D	15.00	45.00	75.00	1.89	2.83	1.89

Demand set: 2021 Base - Committed - Proposed SAT

TIME	FROM/TO	TURNING PROPORTIONS (TURNING COUNTS (PERCENTAGE OF H.V.S)) ARM A	ARM B	ARM C	ARM D
11.15 - 12.45	ARM A	0.000	0.002	0.965	0.033
		0.0	1.0	437.0	15.0
		(0.0)	(0.0)	(1.0)	(0.0)
	ARM B	0.500	0.000	0.250	0.250
		2.0	0.0	1.0	1.0
		(0.0)	(0.0)	(0.0)	(0.0)
	ARM C	0.930	0.003	0.000	0.067
		347.0	1.0	0.0	25.0
		(1.0)	(0.0)	(0.0)	(0.0)
	ARM D	0.490	0.000	0.510	0.000
		74.0	0.0	77.0	0.0
		(1.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-CD	0.02	8.68	0.002		0.00	0.00	0.0		0.12
B-AD	0.03	6.66	0.005		0.00	0.00	0.1		0.15
A-BCD	0.19	10.73	0.018		0.00	0.02	0.3		0.09
D-AB	0.93	9.86	0.094		0.00	0.10	1.5		0.11
D-BC	0.97	7.03	0.137		0.00	0.16	2.3		0.16
C-ABD	0.01	10.01	0.001		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-CD	0.02	8.33	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.22	0.006		0.00	0.01	0.1		0.16
A-BCD	0.22	10.49	0.021		0.02	0.02	0.3		0.10
D-AB	1.11	9.55	0.116		0.10	0.13	1.9		0.12
D-BC	1.15	6.65	0.173		0.16	0.21	3.0		0.18
C-ABD	0.01	9.72	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-CD	0.03	7.84	0.004		0.00	0.00	0.1		0.13
B-AD	0.05	5.61	0.008		0.01	0.01	0.1		0.18
A-BCD	0.28	10.15	0.027		0.02	0.03	0.4		0.10
D-AB	1.36	9.12	0.149		0.13	0.17	2.5		0.13
D-BC	1.41	6.12	0.231		0.21	0.29	4.3		0.21
C-ABD	0.02	9.33	0.002		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-CD	0.03	7.83	0.004		0.00	0.00	0.1		0.13
B-AD	0.05	5.61	0.008		0.01	0.01	0.1		0.18
A-BCD	0.28	10.15	0.027		0.03	0.03	0.4		0.10
D-AB	1.36	9.12	0.149		0.17	0.17	2.6		0.13
D-BC	1.41	6.12	0.231		0.29	0.30	4.4		0.21
C-ABD	0.02	9.33	0.002		0.00	0.00	0.0		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-CD	0.02	8.33	0.003		0.00	0.00	0.0		0.12
B-AD	0.04	6.22	0.006		0.01	0.01	0.1		0.16
A-BCD	0.22	10.49	0.021		0.03	0.02	0.3		0.10
D-AB	1.11	9.55	0.116		0.17	0.13	2.0		0.12
D-BC	1.15	6.65	0.173		0.30	0.21	3.3		0.18
C-ABD	0.01	9.72	0.002		0.00	0.00	0.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-CD	0.02	8.68	0.002		0.00	0.00	0.0		0.12
B-AD	0.03	6.66	0.005		0.01	0.00	0.1		0.15
A-BCD	0.19	10.73	0.018		0.02	0.02	0.3		0.09
D-AB	0.93	9.85	0.094		0.13	0.10	1.6		0.11
D-BC	0.97	7.03	0.137		0.21	0.16	2.5		0.17
C-ABD	0.01	10.01	0.001		0.00	0.00	0.0		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM B-AD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM A-BCD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.1
11.45	0.1
12.00	0.2
12.15	0.2
12.30	0.1
12.45	0.1

QUEUE FOR STREAM D-BC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.2
11.45	0.2
12.00	0.3
12.15	0.3
12.30	0.2
12.45	0.2

QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUING * DELAY *		* INCLUSIVE QUEUING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-CD	2.1	1.4	0.3	0.12	0.3	0.12
B-AD	3.4	2.3	0.6	0.16	0.6	0.16
A-BCD	20.6	13.8	2.1	0.10	2.1	0.10
D-AB	101.9	67.9	12.2	0.12	12.2	0.12
D-BC	106.0	70.7	19.8	0.19	19.8	0.19
C-ABD	1.4	0.9	0.1	0.10	0.1	0.10
ALL	1350.3	900.2	35.0	0.03	35.0	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

---------- end of file ----------

Printed at 14:07:52 on 17/10/2016

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2016)

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Run with file:-
"P:\Transport\Projects\16-1084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\
Traffic Models\Picady\1. Solent Road - Office Car Park\1. Solent Road - Office Car Park.vpi"
(drive-on-the-left) at 11:02:47 on Monday, 17 October 2016

RUN INFORMATION
****

RUN TITLE : Solent Road - Office Car Park
LOCATION : Havant
DATE : 03/10/16
CLIENT : Seaward Properties Limited
ENUMERATOR : tgood [LCEN1-D123]
JOB NUMBER : 16-1084
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
-
-
-
-
-
-
MINOR ROAD (ARM B)

ARM A IS Solent Road (E)
ARM B IS Office Car Park
ARM C IS Solent Road (W)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.44 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 48.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 24.0 M.
- VISIBILITY TO RIGHT	(VB-A) 14.0 M.
- LANE 1 WIDTH	(WB-C) 2.53 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Observed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	11.26	16.89	11.26
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	4.89	7.33	4.89

Demand set: 2016 Observed AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.30				
	ARM A	0.000	0.039	0.961
		0.0	35.0	866.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.429	0.000	0.571
		3.0	0.0	4.0
		(67.0)	(0.0)	(25.0)
	ARM C	0.992	0.008	0.000
		388.0	3.0	0.0
		(7.0)	(33.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.09	4.44	0.020		0.00	0.02	0.3		0.23
C-A	4.87								
C-B	0.04	5.93	0.006		0.00	0.01	0.1		0.17
A-B	0.44								
A-C	10.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.10	4.10	0.026		0.02	0.03	0.4		0.25
C-A	5.81								
C-B	0.04	5.61	0.008		0.01	0.01	0.1		0.18
A-B	0.52								
A-C	12.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.13	3.62	0.035		0.03	0.04	0.5		0.29
C-A	7.12								
C-B	0.06	5.18	0.011		0.01	0.01	0.2		0.20
A-B	0.64								
A-C	15.89								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.13	3.62	0.035		0.04	0.04	0.5		0.29
C-A	7.12								
C-B	0.06	5.18	0.011		0.01	0.01	0.2		0.20
A-B	0.64								
A-C	15.89								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.10	4.10	0.026		0.04	0.03	0.4		0.25
C-A	5.81								
C-B	0.04	5.61	0.008		0.01	0.01	0.1		0.18
A-B	0.52								
A-C	12.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.09	4.44	0.020		0.03	0.02	0.3		0.23
C-A	4.87								
C-B	0.04	5.93	0.006		0.01	0.01	0.1		0.17
A-B	0.44								
A-C	10.87								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* EXCESSIVE QUEUEING * DELAY * (MIN)	* EXCESSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	9.6	6.4	2.5	0.25	2.5	0.25
C-A	534.1	356.0				
C-B	4.1	2.8	0.7	0.18	0.7	0.18
A-B	48.2	32.1				
A-C	1192.0	794.7				
ALL	1788.0	1192.0	3.2	0.00	3.2	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Observed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.27	12.41	8.27
ARM B	15.00	45.00	75.00	0.31	0.47	0.31
ARM C	15.00	45.00	75.00	9.99	14.98	9.99

Demand set: 2016 Observed PM

TIME	FROM/TO	ARM A	ARM B	ARM C
15.45 - 17.15				
	ARM A	0.000	0.024	0.976
		0.0	16.0	646.0
		(0.0)	(0.0)	(3.0)
	ARM B	0.720	0.000	0.280
		18.0	0.0	7.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.977	0.023	0.000
		781.0	18.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS (TURNING COUNTS)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-AC	0.31	5.84	0.054		0.00	0.06	0.8		0.18
C-A	9.80								
C-B	0.23	8.42	0.027		0.00	0.03	0.4		0.12
A-B	0.20								
A-C	8.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-AC	0.37	5.33	0.070		0.06	0.07	1.1		0.20
C-A	11.70								
C-B	0.27	8.11	0.033		0.03	0.03	0.5		0.13
A-B	0.24								
A-C	9.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.46	4.63	0.099		0.07	0.11	1.6		0.24
C-A	14.33								
C-B	0.33	7.68	0.043		0.03	0.04	0.7		0.14
A-B	0.29								
A-C	11.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.46	4.63	0.099		0.11	0.11	1.6		0.24
C-A	14.33								
C-B	0.33	7.68	0.043		0.04	0.04	0.7		0.14
A-B	0.29								
A-C	11.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.37	5.33	0.070		0.11	0.08	1.2		0.20
C-A	11.70								
C-B	0.27	8.11	0.033		0.04	0.03	0.5		0.13
A-B	0.24								
A-C	9.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.31	5.84	0.054		0.08	0.06	0.9		0.18
C-A	9.80								
C-B	0.23	8.42	0.027		0.03	0.03	0.4		0.12
A-B	0.20								
A-C	8.11								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* EXCESSIVE QUEUEING * DELAY * (MIN)	* EXCESSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	34.4	22.9	7.2	0.21	7.2	0.21
C-A	1075.0	716.7				
C-B	24.8	16.5	3.2	0.13	3.2	0.13
A-B	22.0	14.7				
A-C	889.2	592.8				
ALL	2045.4	1363.6	10.3	0.01	10.3	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.18	18.26	12.18
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	5.29	7.93	5.29

Demand set: 2021 Base AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.30				
	ARM A	0.000	0.039	0.961
		0.0	38.0	936.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.429	0.000	0.571
		3.0	0.0	4.0
		(67.0)	(0.0)	(25.0)
	ARM C	0.993	0.007	0.000
		420.0	3.0	0.0
		(7.0)	(33.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.09	4.30	0.020		0.00	0.02	0.3		0.24
C-A	5.27								
C-B	0.04	5.80	0.006		0.00	0.01	0.1		0.17
A-B	0.48								
A-C	11.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.10	3.93	0.027		0.02	0.03	0.4		0.26
C-A	6.29								
C-B	0.04	5.46	0.008		0.01	0.01	0.1		0.18
A-B	0.57								
A-C	14.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.13	3.41	0.038		0.03	0.04	0.6		0.30
C-A	7.71								
C-B	0.06	4.99	0.011		0.01	0.01	0.2		0.20
A-B	0.70								
A-C	17.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.13	3.41	0.038		0.04	0.04	0.6		0.30
C-A	7.71								
C-B	0.06	4.99	0.011		0.01	0.01	0.2		0.20
A-B	0.70								
A-C	17.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.10	3.93	0.027		0.04	0.03	0.4		0.26
C-A	6.29								
C-B	0.04	5.46	0.008		0.01	0.01	0.1		0.18
A-B	0.57								
A-C	14.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-AC	0.09	4.30	0.020		0.03	0.02	0.3		0.24
C-A	5.27								
C-B	0.04	5.80	0.006		0.01	0.01	0.1		0.17
A-B	0.48								
A-C	11.74								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	QUEUEING * DELAY * (MIN)	QUEUEING * DELAY * (MIN/VEH)	EXCLUSIVE QUEUEING * DELAY * (MIN)	EXCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	9.6	6.4	2.6	0.27	2.6	0.27
C-A	578.1	385.4				
C-B	4.1	2.8	0.8	0.19	0.8	0.19
A-B	52.3	34.9				
A-C	1288.3	858.9				
ALL	1932.5	1288.3	3.3	0.00	3.3	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY EXCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.91	13.37	8.91
ARM B	15.00	45.00	75.00	0.34	0.51	0.34
ARM C	15.00	45.00	75.00	10.59	15.88	10.59

Demand set: 2021 Base PM

TIME	FROM/TO	ARM A	ARM B	ARM C
15.45 - 17.15				
	ARM A	0.000	0.024	0.976
		0.0	17.0	696.0
		(0.0)	(0.0)	(2.0)
	ARM B	0.704	0.000	0.296
		19.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.994	0.006	0.000
		842.0	5.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS (TURNING COUNTS)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-AC	0.34	5.74	0.059		0.00	0.06	0.9		0.18
C-A	10.57								
C-B	0.06	8.31	0.008		0.00	0.01	0.1		0.12
A-B	0.21								
A-C	8.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-AC	0.40	5.20	0.078		0.06	0.08	1.2		0.21
C-A	12.62								
C-B	0.07	7.98	0.009		0.01	0.01	0.1		0.13
A-B	0.25								
A-C	10.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.50	4.45	0.111		0.08	0.12	1.8		0.25
C-A	15.45								
C-B	0.09	7.52	0.012		0.01	0.01	0.2		0.13
A-B	0.31								
A-C	12.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.50	4.45	0.111		0.12	0.12	1.9		0.25
C-A	15.45								
C-B	0.09	7.52	0.012		0.01	0.01	0.2		0.13
A-B	0.31								
A-C	12.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.40	5.20	0.078		0.12	0.09	1.3		0.21
C-A	12.62								
C-B	0.07	7.98	0.009		0.01	0.01	0.1		0.13
A-B	0.25								
A-C	10.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.34	5.73	0.059		0.09	0.06	1.0		0.19
C-A	10.57								
C-B	0.06	8.31	0.008		0.01	0.01	0.1		0.12
A-B	0.21								
A-C	8.73								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	QUEUEING * DELAY * (MIN)	QUEUEING * DELAY * (MIN/VEH)	EXCLUSIVE QUEUEING * DELAY * (MIN)	EXCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	37.2	24.8	8.0	0.22	8.0	0.22
C-A	1159.0	772.6				
C-B	6.9	4.6	0.9	0.13	0.9	0.13
A-B	23.4	15.6				
A-C	958.0	638.7				
ALL	2184.4	1456.3	8.9	0.00	8.9	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.31	18.47	12.31
ARM B	15.00	45.00	75.00	0.09	0.13	0.09
ARM C	15.00	45.00	75.00	5.39	8.08	5.39

Demand set: 2021 Base - Committed AM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.30	ARM A	0.000	0.039	0.961
		0.0	38.0	947.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.429	0.000	0.571
		3.0	0.0	4.0
		(67.0)	(0.0)	(25.0)
	ARM C	0.993	0.007	0.000
		428.0	3.0	0.0
		(7.0)	(33.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.09	4.28	0.021		0.00	0.02	0.3		0.24
C-A	5.37								
C-B	0.04	5.78	0.007		0.00	0.01	0.1		0.17
A-B	0.48								
A-C	11.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.10	3.90	0.027		0.02	0.03	0.4		0.26
C-A	6.41								
C-B	0.04	5.43	0.008		0.01	0.01	0.1		0.19
A-B	0.57								
A-C	14.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.13	3.37	0.038		0.03	0.04	0.6		0.31
C-A	7.85								
C-B	0.06	4.96	0.011		0.01	0.01	0.2		0.20
A-B	0.70								
A-C	17.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.13	3.37	0.038		0.04	0.04	0.6		0.31
C-A	7.85								
C-B	0.06	4.96	0.011		0.01	0.01	0.2		0.20
A-B	0.70								
A-C	17.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.10	3.90	0.027		0.04	0.03	0.4		0.26
C-A	6.41								
C-B	0.04	5.43	0.008		0.01	0.01	0.1		0.19
A-B	0.57								
A-C	14.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-AC	0.09	4.28	0.021		0.03	0.02	0.3		0.24
C-A	5.37								
C-B	0.04	5.78	0.007		0.01	0.01	0.1		0.17
A-B	0.48								
A-C	11.88								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* EXCESS QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	9.6	6.4	2.6	0.27	2.6	0.27
C-A	589.1	392.7				
C-B	4.1	2.8	0.8	0.19	0.8	0.19
A-B	52.3	34.9				
A-C	1303.5	869.0				
ALL	1958.7	1305.8	3.4	0.00	3.4	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESS DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.09	13.63	9.09
ARM B	15.00	45.00	75.00	0.34	0.51	0.34
ARM C	15.00	45.00	75.00	10.74	16.11	10.74

Demand set: 2021 Base - Committed PM

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
15.45 - 17.15				
	ARM A	0.000	0.023	0.977
		0.0	17.0	710.0
		(0.0)	(0.0)	(3.0)
	ARM B	0.704	0.000	0.296
		19.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.994	0.006	0.000
		854.0	5.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-AC	0.34	5.67	0.060		0.00	0.06	0.9		0.19
C-A	10.72								
C-B	0.06	8.26	0.008		0.00	0.01	0.1		0.12
A-B	0.21								
A-C	8.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-AC	0.40	5.13	0.079		0.06	0.08	1.2		0.21
C-A	12.80								
C-B	0.07	7.92	0.009		0.01	0.01	0.1		0.13
A-B	0.25								
A-C	10.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.50	4.35	0.114		0.08	0.13	1.8		0.26
C-A	15.67								
C-B	0.09	7.45	0.012		0.01	0.01	0.2		0.14
A-B	0.31								
A-C	13.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.50	4.35	0.114		0.13	0.13	1.9		0.26
C-A	15.67								
C-B	0.09	7.45	0.012		0.01	0.01	0.2		0.14
A-B	0.31								
A-C	13.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.40	5.13	0.079		0.13	0.09	1.4		0.21
C-A	12.80								
C-B	0.07	7.92	0.009		0.01	0.01	0.1		0.13
A-B	0.25								
A-C	10.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.34	5.67	0.060		0.09	0.06	1.0		0.19
C-A	10.72								
C-B	0.06	8.26	0.008		0.01	0.01	0.1		0.12
A-B	0.21								
A-C	8.91								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.1
16.15	0.1
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	QUEUEING * DELAY * (MIN)	QUEUEING * DELAY * (MIN/VEH)	EXCLUSIVE QUEUEING * DELAY * (MIN)	EXCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	37.2	24.8	8.2	0.22	8.2	0.22
C-A	1175.5	783.6				
C-B	6.9	4.6	0.9	0.13	0.9	0.13
A-B	23.4	15.6				
A-C	977.3	651.5				
ALL	2220.2	1480.1	9.1	0.00	9.1	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed - Proposed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.31	18.47	12.31
ARM B	15.00	45.00	75.00	0.60	0.90	0.60
ARM C	15.00	45.00	75.00	5.53	8.29	5.53

Demand set: 2021 Base - Committed - Proposed AM

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
08.00 - 09.30	ARM A	0.000	0.039	0.961
		0.0	38.0	947.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.667	0.000	0.333
		32.0	0.0	16.0
		(7.0)	(0.0)	(7.0)
	ARM C	0.968	0.032	0.000
		428.0	14.0	0.0
		(7.0)	(7.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.60	5.31	0.113		0.00	0.13	1.8		0.21
C-A	5.37								
C-B	0.18	7.18	0.024		0.00	0.02	0.4		0.14
A-B	0.48								
A-C	11.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.72	4.80	0.150		0.13	0.17	2.5		0.24
C-A	6.41								
C-B	0.21	6.75	0.031		0.02	0.03	0.5		0.15
A-B	0.57								
A-C	14.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.88	4.08	0.216		0.17	0.27	3.8		0.31
C-A	7.85								
C-B	0.26	6.16	0.042		0.03	0.04	0.6		0.17
A-B	0.70								
A-C	17.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.88	4.08	0.216		0.27	0.27	4.1		0.31
C-A	7.85								
C-B	0.26	6.16	0.042		0.04	0.04	0.6		0.17
A-B	0.70								
A-C	17.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.72	4.80	0.150		0.27	0.18	2.8		0.25
C-A	6.41								
C-B	0.21	6.75	0.031		0.04	0.03	0.5		0.15
A-B	0.57								
A-C	14.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-AC	0.60	5.31	0.113		0.18	0.13	2.0		0.21
C-A	5.37								
C-B	0.18	7.18	0.024		0.03	0.03	0.4		0.14
A-B	0.48								
A-C	11.88								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.1
08.30	0.2
08.45	0.3
09.00	0.3
09.15	0.2
09.30	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0
09.30	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* EXCESS QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	66.1	44.0	17.0	0.26	17.0	0.26
C-A	589.1	392.7				
C-B	19.3	12.8	3.0	0.15	3.0	0.15
A-B	52.3	34.9				
A-C	1303.5	869.0				
ALL	2030.2	1353.5	20.0	0.01	20.0	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESS DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed - Proposed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.09	13.63	9.09
ARM B	15.00	45.00	75.00	0.84	1.26	0.84
ARM C	15.00	45.00	75.00	10.89	16.33	10.89

Demand set: 2021 Base - Committed - Proposed PM

TIME	FROM/TO	ARM A	ARM B	ARM C
15.45 - 17.15				
	ARM A	0.000	0.023	0.977
		0.0	17.0	710.0
		(0.0)	(0.0)	(3.0)
	ARM B	0.716	0.000	0.284
		48.0	0.0	19.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.980	0.020	0.000
		854.0	17.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-AC	0.84	5.60	0.150		0.00	0.17	2.5		0.21
C-A	10.72								
C-B	0.21	8.26	0.026		0.00	0.03	0.4		0.12
A-B	0.21								
A-C	8.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-AC	1.00	5.05	0.199		0.17	0.24	3.5		0.25
C-A	12.80								
C-B	0.25	7.92	0.032		0.03	0.03	0.5		0.13
A-B	0.25								
A-C	10.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	1.23	4.27	0.288		0.24	0.39	5.6		0.33
C-A	15.67								
C-B	0.31	7.45	0.042		0.03	0.04	0.6		0.14
A-B	0.31								
A-C	13.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	1.23	4.27	0.288		0.39	0.40	5.9		0.33
C-A	15.67								
C-B	0.31	7.45	0.042		0.04	0.04	0.7		0.14
A-B	0.31								
A-C	13.03								

TIME	DEMAND (VEH/HR)	CAPACITY (VEH/HR)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.00	5.05	0.199		0.40	0.25	4.0		0.25
C-A	12.80								
C-B	0.25	7.92	0.032		0.04	0.03	0.5		0.13
A-B	0.25								
A-C	10.64								

TIME	DEMAND (VEH/HR)	CAPACITY (VEH/HR)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.84	5.60	0.150		0.25	0.18	2.8		0.21
C-A	10.72								
C-B	0.21	8.26	0.026		0.03	0.03	0.4		0.12
A-B	0.21								
A-C	8.91								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.2
16.15	0.2
16.30	0.4
16.45	0.4
17.00	0.3
17.15	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.00	0.0
16.15	0.0
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0

QUEUING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUING * DELAY *		* INCLUSIVE QUEUING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	92.2	61.5	24.3	0.26	24.3	0.26
C-A	1175.5	783.6				
C-B	23.4	15.6	3.1	0.13	3.1	0.13
A-B	23.4	15.6				
A-C	977.3	651.5				
ALL	2291.8	1527.8	27.4	0.01	27.4	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

---------- end of file ----------

Printed at 12:04:08 on 17/10/2016

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"P:\Transport\Projects\16-1084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\
Traffic Models\Picady\1. Solent Road - Office Car Park\1. Solent Road - Office Car Park SAT.vpi"
(drive-on-the-left) at 12:06:56 on Monday, 17 October 2016

RUN INFORMATION
****

RUN TITLE	: Solent Road - Office Car Park
LOCATION	: Havant
DATE	: 03/10/16
CLIENT	: Seaward Properties Limited
ENUMERATOR	: tgood [LCEN1-DT23]
JOB NUMBER	: 16-1084
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
-
-
-
-
-
-
MINOR ROAD (ARM B)

ARM A IS Solent Road (E)
ARM B IS Office Car Park
ARM C IS Solent Road (W)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.44 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 48.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 24.0 M.
- VISIBILITY TO RIGHT	(VB-A) 14.0 M.
- LANE 1 WIDTH	(WB-C) 2.53 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Observed SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	11.70	17.55	11.70
ARM B	15.00	45.00	75.00	0.21	0.32	0.21
ARM C	15.00	45.00	75.00	9.13	13.69	9.13

Demand set: 2016 Observed SAT

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.015	0.985
		0.0	14.0	922.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.588	0.000	0.412
		10.0	0.0	7.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		730.0	0.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-AC	0.21	5.70	0.037		0.00	0.04	0.6		0.18
C-A	9.16								
C-B	0.00	7.11	0.000		0.00	0.00	0.0		0.00
A-B	0.18								
A-C	11.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-AC	0.25	5.10	0.050		0.04	0.05	0.8		0.21
C-A	10.94								
C-B	0.00	6.72	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	13.81								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-AC	0.31	4.26	0.073		0.05	0.08	1.1		0.25
C-A	13.40								
C-B	0.00	6.18	0.000		0.00	0.00	0.0		0.00
A-B	0.26								
A-C	16.92								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-AC	0.31	4.26	0.073		0.08	0.08	1.2		0.25
C-A	13.40								
C-B	0.00	6.18	0.000		0.00	0.00	0.0		0.00
A-B	0.26								
A-C	16.92								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-AC	0.25	5.10	0.050		0.08	0.05	0.8		0.21
C-A	10.94								
C-B	0.00	6.72	0.000		0.00	0.00	0.0		0.00
A-B	0.21								
A-C	13.81								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-AC	0.21	5.70	0.037		0.05	0.04	0.6		0.18
C-A	9.16								
C-B	0.00	7.11	0.000		0.00	0.00	0.0		0.00
A-B	0.18								
A-C	11.57								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.1
12.00	0.1
12.15	0.1
12.30	0.1
12.45	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		EXCESS QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	23.4	15.6	5.0	0.22	5.0	0.22
C-A	1004.8	669.9				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	19.3	12.8				
A-C	1269.1	846.0				
ALL	2316.5	1544.4	5.0	0.00	5.0	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESS DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.63	18.94	12.63
ARM B	15.00	45.00	75.00	0.24	0.36	0.24
ARM C	15.00	45.00	75.00	9.85	14.78	9.85

Demand set: 2021 Base SAT

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.015	0.985
		0.0	15.0	995.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.579	0.000	0.421
		11.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		788.0	0.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-AC	0.24	5.48	0.043		0.00	0.04	0.6		0.19
C-A	9.89								
C-B	0.00	6.95	0.000		0.00	0.00	0.0		0.00
A-B	0.19								
A-C	12.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-AC	0.28	4.84	0.059		0.04	0.06	0.9		0.22
C-A	11.81								
C-B	0.00	6.53	0.000		0.00	0.00	0.0		0.00
A-B	0.22								
A-C	14.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-AC	0.35	3.91	0.089		0.06	0.10	1.4		0.28
C-A	14.46								
C-B	0.00	5.95	0.000		0.00	0.00	0.0		0.00
A-B	0.28								
A-C	18.26								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-AC	0.35	3.91	0.089		0.10	0.10	1.4		0.28
C-A	14.46								
C-B	0.00	5.95	0.000		0.00	0.00	0.0		0.00
A-B	0.28								
A-C	18.26								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-AC	0.28	4.84	0.059		0.10	0.06	1.0		0.22
C-A	11.81								
C-B	0.00	6.53	0.000		0.00	0.00	0.0		0.00
A-B	0.22								
A-C	14.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-AC	0.24	5.48	0.043		0.06	0.05	0.7		0.19
C-A	9.89								
C-B	0.00	6.95	0.000		0.00	0.00	0.0		0.00
A-B	0.19								
A-C	12.48								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.1
12.00	0.1
12.15	0.1
12.30	0.1
12.45	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	QUEUEING * DELAY * (MIN)	QUEUEING * DELAY * (MIN/VEH)	EXCESSIVE QUEUEING * DELAY * (MIN)	EXCESSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	26.2	17.4	6.1	0.23	6.1	0.23
C-A	1084.6	723.1				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	20.6	13.8				
A-C	1369.5	913.0				
ALL	2501.0	1667.3	6.1	0.00	6.1	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.80	19.20	12.80
ARM B	15.00	45.00	75.00	0.24	0.36	0.24
ARM C	15.00	45.00	75.00	10.02	15.04	10.02

Demand set: 2021 Base - Committed SAT

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.015	0.985
		0.0	15.0	1009.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.579	0.000	0.421
		11.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		802.0	0.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-AC	0.24	5.43	0.044		0.00	0.05	0.6		0.19
C-A	10.06								
C-B	0.00	6.92	0.000		0.00	0.00	0.0		0.00
A-B	0.19								
A-C	12.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-AC	0.28	4.77	0.060		0.05	0.06	0.9		0.22
C-A	12.02								
C-B	0.00	6.49	0.000		0.00	0.00	0.0		0.00
A-B	0.22								
A-C	15.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-AC	0.35	3.83	0.091		0.06	0.10	1.4		0.29
C-A	14.72								
C-B	0.00	5.90	0.000		0.00	0.00	0.0		0.00
A-B	0.28								
A-C	18.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-AC	0.35	3.83	0.091		0.10	0.10	1.5		0.29
C-A	14.72								
C-B	0.00	5.90	0.000		0.00	0.00	0.0		0.00
A-B	0.28								
A-C	18.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-AC	0.28	4.77	0.060		0.10	0.06	1.0		0.22
C-A	12.02								
C-B	0.00	6.49	0.000		0.00	0.00	0.0		0.00
A-B	0.22								
A-C	15.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-AC	0.24	5.43	0.044		0.06	0.05	0.7		0.19
C-A	10.06								
C-B	0.00	6.92	0.000		0.00	0.00	0.0		0.00
A-B	0.19								
A-C	12.66								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.1
12.00	0.1
12.15	0.1
12.30	0.1
12.45	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	QUEUEING * DELAY * (MIN)	QUEUEING * DELAY * (MIN/VEH)	INCLUSIVE QUEUEING * DELAY * (MIN)	INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	26.2	17.4	6.2	0.24	6.2	0.24
C-A	1103.9	735.9				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	20.6	13.8				
A-C	1388.8	925.9				
ALL	2539.5	1693.0	6.2	0.00	6.2	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
602.98	0.19	0.07

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
469.11	0.17	0.07	0.11	0.25

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
601.76	0.19	0.19

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed - Proposed SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.80	19.20	12.80
ARM B	15.00	45.00	75.00	0.74	1.11	0.74
ARM C	15.00	45.00	75.00	10.16	15.24	10.16

Demand set: 2021 Base - Committed - Proposed SAT

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.015	0.985
		0.0	15.0	1009.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.678	0.000	0.322
		40.0	0.0	19.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.986	0.014	0.000
		802.0	11.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-AC	0.74	5.14	0.144		0.00	0.17	2.3		0.23
C-A	10.06								
C-B	0.14	7.61	0.018		0.00	0.02	0.3		0.13
A-B	0.19								
A-C	12.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-AC	0.88	4.48	0.197		0.17	0.24	3.5		0.28
C-A	12.02								
C-B	0.16	7.14	0.023		0.02	0.02	0.3		0.14
A-B	0.22								
A-C	15.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-AC	1.08	3.53	0.307		0.24	0.43	6.0		0.40
C-A	14.72								
C-B	0.20	6.49	0.031		0.02	0.03	0.5		0.16
A-B	0.28								
A-C	18.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-AC	1.08	3.53	0.307		0.43	0.43	6.5		0.41
C-A	14.72								
C-B	0.20	6.49	0.031		0.03	0.03	0.5		0.16
A-B	0.28								
A-C	18.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-AC	0.88	4.48	0.197		0.43	0.25	4.0		0.28
C-A	12.02								
C-B	0.16	7.14	0.023		0.03	0.02	0.4		0.14
A-B	0.22								
A-C	15.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-AC	0.74	5.14	0.144		0.25	0.17	2.7		0.23
C-A	10.06								
C-B	0.14	7.61	0.018		0.02	0.02	0.3		0.13
A-B	0.19								
A-C	12.66								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.2
11.45	0.2
12.00	0.4
12.15	0.4
12.30	0.3
12.45	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
11.30	0.0
11.45	0.0
12.00	0.0
12.15	0.0
12.30	0.0
12.45	0.0

QUEUING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUING * DELAY *		* INCLUSIVE QUEUING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	81.2	54.1	24.9	0.31	24.9	0.31
C-A	1103.9	735.9				
C-B	15.1	10.1	2.2	0.15	2.2	0.15
A-B	20.6	13.8				
A-C	1388.8	925.9				
ALL	2609.7	1739.8	27.1	0.01	27.1	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

---------- end of file ----------

Printed at 12:09:17 on 17/10/2016

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2016)

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Run with file:-
"P:\Transport\Projects\16-1084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\
Traffic Models\Picady\2. Solent Road - Selborune Road\2. Solent Road - Selborune Road AM_PM.vpi"
(drive-on-the-left) at 12:13:39 on Monday, 17 October 2016

RUN INFORMATION
****

RUN TITLE : Solent Road - Selbourne Road
LOCATION : Havant
DATE : 03/10/16
CLIENT : Seaward Properties Limited
ENUMERATOR : tgood [LCEN1-DT23]
JOB NUMBER : 16-1084
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
-
-
-
-
-
-
MINOR ROAD (ARM B)

ARM A IS Solent Road (E)
ARM B IS Selborune Road
ARM C IS Solent Road (W)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.40 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.
- VISIBILITY	(VC-B)113.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (7)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 36.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.07 M.
WIDTH AT 10 M FROM JUNCTION	4.46 M.
WIDTH AT 15 M FROM JUNCTION	4.07 M.
WIDTH AT 20 M FROM JUNCTION	3.84 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Observed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.28	7.91	5.28
ARM B	15.00	45.00	75.00	1.14	1.71	1.14
ARM C	15.00	45.00	75.00	10.89	16.33	10.89

Demand set: 2016 Observed AM

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
08.00 - 09.30				
	ARM A	0.000	0.209	0.791
		0.0	88.0	334.0
		(0.0)	(0.0)	(8.0)
	ARM B	0.407	0.000	0.593
		37.0	0.0	54.0
		(0.0)	(0.0)	(4.0)
	ARM C	0.806	0.194	0.000
		702.0	169.0	0.0
		(1.0)	(2.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.68	9.73	0.070		0.00	0.07	1.1		0.11
B-A	0.46	5.80	0.080		0.00	0.09	1.2		0.19
C-AB	2.12	9.76	0.217		0.00	0.27	4.1		0.13
A-B	1.10								
A-C	4.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.81	9.43	0.086		0.07	0.09	1.4		0.12
B-A	0.55	5.18	0.107		0.09	0.12	1.7		0.22
C-AB	2.53	9.50	0.267		0.27	0.36	5.4		0.14
A-B	1.32								
A-C	5.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.99	8.98	0.110		0.09	0.12	1.8		0.13
B-A	0.68	4.32	0.157		0.12	0.18	2.6		0.27
C-AB	3.10	9.13	0.340		0.36	0.51	7.6		0.17
A-B	1.61								
A-C	6.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.99	8.98	0.110		0.12	0.12	1.8		0.13
B-A	0.68	4.32	0.157		0.18	0.18	2.8		0.27
C-AB	3.10	9.13	0.340		0.51	0.51	7.7		0.17
A-B	1.61								
A-C	6.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.81	9.43	0.086		0.12	0.09	1.5		0.12
B-A	0.55	5.17	0.107		0.18	0.12	1.9		0.22
C-AB	2.53	9.50	0.267		0.51	0.37	5.5		0.14
A-B	1.32								
A-C	5.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.68	9.73	0.070		0.09	0.08	1.2		0.11
B-A	0.46	5.80	0.080		0.12	0.09	1.4		0.19
C-AB	2.12	9.76	0.217		0.37	0.28	4.2		0.13
A-B	1.10								
A-C	4.19								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.1	
09.00	0.1	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.2	
09.00	0.2	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.4	
08.45	0.5	*
09.00	0.5	*
09.15	0.4	
09.30	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	QUEUEING * DELAY * (MIN)	QUEUEING * DELAY * (MIN/VEH)	EXCLUSIVE QUEUEING * DELAY * (MIN)	EXCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	74.3	49.6	8.7	0.12	8.7	0.12
B-A	50.9	34.0	11.6	0.23	11.6	0.23
C-AB	232.6	155.1	34.5	0.15	34.5	0.15
A-B	121.1	80.8				
A-C	459.7	306.5				
ALL	1905.0	1270.0	54.8	0.03	54.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY EXCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Observed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.00	13.50	9.00
ARM B	15.00	45.00	75.00	3.42	5.14	3.42
ARM C	15.00	45.00	75.00	8.16	12.24	8.16

Demand set: 2016 Observed PM

TIME	FROM/TO	ARM A	ARM B	ARM C
15.45 - 17.15				
	ARM A	0.000	0.201	0.799
		0.0	145.0	575.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.230	0.000	0.770
		63.0	0.0	211.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.691	0.309	0.000
		451.0	202.0	0.0
		(4.0)	(1.0)	(0.0)

TURNING PROPORTIONS (TURNING COUNTS)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-C	2.65	9.65	0.274		0.00	0.37	5.4		0.14
B-A	0.79	4.90	0.161		0.00	0.19	2.7		0.24
C-AB	2.53	9.01	0.281		0.00	0.39	5.7		0.15
A-B	1.82								
A-C	7.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	3.16	9.01	0.351		0.37	0.53	7.7		0.17
B-A	0.94	4.19	0.225		0.19	0.28	4.1		0.31
C-AB	3.03	8.57	0.353		0.39	0.54	8.0		0.18
A-B	2.17								
A-C	8.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	3.87	7.89	0.491		0.53	0.93	13.2		0.25
B-A	1.16	3.19	0.362		0.28	0.54	7.5		0.48
C-AB	3.71	7.97	0.465		0.54	0.85	12.6		0.23
A-B	2.66								
A-C	10.55								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	3.87	7.86	0.493		0.93	0.95	14.2		0.25
B-A	1.16	3.18	0.363		0.54	0.56	8.3		0.49
C-AB	3.71	7.97	0.465		0.85	0.86	13.1		0.23
A-B	2.66								
A-C	10.55								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	3.16	8.99	0.352		0.95	0.55	8.7		0.17
B-A	0.94	4.18	0.226		0.56	0.30	4.8		0.31
C-AB	3.03	8.57	0.353		0.86	0.56	8.4		0.18
A-B	2.17								
A-C	8.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.65	9.63	0.275		0.55	0.38	6.0		0.14
B-A	0.79	4.88	0.162		0.30	0.20	3.1		0.25
C-AB	2.53	9.01	0.281		0.56	0.40	6.0		0.15
A-B	1.82								
A-C	7.21								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.5	*
16.30	0.9	*
16.45	1.0	*
17.00	0.6	*
17.15	0.4	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.2	
16.15	0.3	
16.30	0.5	*
16.45	0.6	*
17.00	0.3	
17.15	0.2	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.5	*
16.30	0.8	*
16.45	0.9	*
17.00	0.6	*
17.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		EXCESSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	290.4	193.6	55.1	0.19	55.1	0.19
B-A	86.7	57.8	30.3	0.35	30.3	0.35
C-AB	278.0	185.4	53.9	0.19	53.9	0.19
A-B	199.6	133.1				
A-C	791.4	527.6				
ALL	2267.0	1511.3	139.3	0.06	139.3	0.06

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.70	8.55	5.70
ARM B	15.00	45.00	75.00	1.23	1.84	1.23
ARM C	15.00	45.00	75.00	11.77	17.66	11.77

Demand set: 2021 Base AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.30				
	ARM A	0.000	0.208	0.792
		0.0	95.0	361.0
		(0.0)	(0.0)	(8.0)
	ARM B	0.408	0.000	0.592
		40.0	0.0	58.0
		(0.0)	(0.0)	(4.0)
	ARM C	0.806	0.194	0.000
		759.0	183.0	0.0
		(1.0)	(2.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.73	9.61	0.076		0.00	0.08	1.2		0.11
B-A	0.50	5.55	0.090		0.00	0.10	1.4		0.20
C-AB	2.30	9.65	0.238		0.00	0.31	4.6		0.14
A-B	1.19								
A-C	4.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.87	9.27	0.094		0.08	0.10	1.5		0.12
B-A	0.60	4.87	0.123		0.10	0.14	2.0		0.23
C-AB	2.74	9.36	0.293		0.31	0.41	6.1		0.15
A-B	1.42								
A-C	5.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.06	8.75	0.122		0.10	0.14	2.0		0.13
B-A	0.73	3.94	0.186		0.14	0.22	3.2		0.31
C-AB	3.36	8.97	0.374		0.41	0.59	8.8		0.18
A-B	1.74								
A-C	6.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.06	8.75	0.122		0.14	0.14	2.1		0.13
B-A	0.73	3.93	0.187		0.22	0.23	3.4		0.31
C-AB	3.36	8.97	0.374		0.59	0.59	9.0		0.18
A-B	1.74								
A-C	6.62								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.87	9.26	0.094		0.14	0.10	1.6		0.12
B-A	0.60	4.86	0.123		0.23	0.14	2.2		0.24
C-AB	2.74	9.36	0.293		0.59	0.42	6.3		0.15
A-B	1.42								
A-C	5.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-C	0.73	9.60	0.076		0.10	0.08	1.3		0.11
B-A	0.50	5.54	0.091		0.14	0.10	1.6		0.20
C-AB	2.30	9.65	0.238		0.42	0.32	4.7		0.14
A-B	1.19								
A-C	4.53								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.1	
09.00	0.1	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.2	
09.00	0.2	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.4	
08.45	0.6	*
09.00	0.6	*
09.15	0.4	
09.30	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		EXCESSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	79.8	53.2	9.6	0.12	9.6	0.12
B-A	55.1	36.7	13.8	0.25	13.8	0.25
C-AB	251.9	167.9	39.6	0.16	39.6	0.16
A-B	130.8	87.2				
A-C	496.9	331.3				
ALL	2059.1	1372.8	63.0	0.03	63.0	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCESSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.70	14.55	9.70
ARM B	15.00	45.00	75.00	3.69	5.53	3.69
ARM C	15.00	45.00	75.00	8.80	13.20	8.80

Demand set: 2021 Base PM

TIME	FROM/TO	ARM A	ARM B	ARM C
15.45 - 17.15				
	ARM A	0.000	0.201	0.799
		0.0	156.0	620.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.231	0.000	0.769
		68.0	0.0	227.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.690	0.310	0.000
		486.0	218.0	0.0
		(4.0)	(1.0)	(0.0)

TURNING PROPORTIONS (TURNING COUNTS)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-C	2.85	9.41	0.303		0.00	0.43	6.1		0.15
B-A	0.85	4.62	0.185		0.00	0.22	3.1		0.26
C-AB	2.74	8.83	0.310		0.00	0.44	6.5		0.16
A-B	1.96								
A-C	7.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	3.40	8.67	0.392		0.43	0.63	9.1		0.19
B-A	1.02	3.85	0.264		0.22	0.35	5.0		0.35
C-AB	3.27	8.36	0.391		0.44	0.63	9.4		0.20
A-B	2.34								
A-C	9.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	4.17	7.22	0.577		0.63	1.30	18.0		0.32
B-A	1.25	2.74	0.455		0.35	0.78	10.4		0.65
C-AB	4.00	7.72	0.518		0.63	1.05	15.6		0.26
A-B	2.86								
A-C	11.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	4.17	7.15	0.583		1.30	1.36	20.0		0.33
B-A	1.25	2.72	0.459		0.78	0.81	12.0		0.68
C-AB	4.00	7.72	0.518		1.05	1.07	16.3		0.27
A-B	2.86								
A-C	11.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	3.40	8.62	0.395		1.36	0.67	10.6		0.20
B-A	1.02	3.83	0.266		0.81	0.37	6.1		0.36
C-AB	3.27	8.36	0.391		1.07	0.65	10.0		0.20
A-B	2.34								
A-C	9.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.85	9.38	0.304		0.67	0.44	6.9		0.15
B-A	0.85	4.61	0.185		0.37	0.23	3.7		0.27
C-AB	2.74	8.83	0.310		0.65	0.46	6.9		0.16
A-B	1.96								
A-C	7.78								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.6	*
16.30	1.3	*
16.45	1.4	*
17.00	0.7	*
17.15	0.4	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.2	
16.15	0.3	
16.30	0.8	*
16.45	0.8	*
17.00	0.4	
17.15	0.2	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.6	*
16.30	1.0	*
16.45	1.1	*
17.00	0.7	*
17.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		EXCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	312.4	208.3	70.7	0.23	70.7	0.23
B-A	93.6	62.4	40.2	0.43	40.2	0.43
C-AB	300.1	200.0	64.6	0.22	64.6	0.22
A-B	214.7	143.1				
A-C	853.4	568.9				
ALL	2443.2	1628.8	175.5	0.07	175.5	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY EXCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.81	8.72	5.81
ARM B	15.00	45.00	75.00	1.23	1.84	1.23
ARM C	15.00	45.00	75.00	11.90	17.85	11.90

Demand set: 2021 Base - Committed AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.30				
	ARM A	0.000	0.204	0.796
		0.0	95.0	370.0
		(0.0)	(0.0)	(8.0)
	ARM B	0.408	0.000	0.592
		40.0	0.0	58.0
		(0.0)	(0.0)	(4.0)
	ARM C	0.808	0.192	0.000
		769.0	183.0	0.0
		(1.0)	(2.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.73	9.57	0.076		0.00	0.08	1.2		0.11
B-A	0.50	5.50	0.091		0.00	0.10	1.4		0.20
C-AB	2.30	9.62	0.239		0.00	0.31	4.6		0.14
A-B	1.19								
A-C	4.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.87	9.23	0.094		0.08	0.10	1.5		0.12
B-A	0.60	4.81	0.125		0.10	0.14	2.0		0.24
C-AB	2.74	9.33	0.294		0.31	0.41	6.2		0.15
A-B	1.42								
A-C	5.54								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.06	8.70	0.122		0.10	0.14	2.0		0.13
B-A	0.73	3.87	0.190		0.14	0.23	3.3		0.32
C-AB	3.36	8.92	0.376		0.41	0.59	8.9		0.18
A-B	1.74								
A-C	6.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.06	8.70	0.122		0.14	0.14	2.1		0.13
B-A	0.73	3.87	0.190		0.23	0.23	3.5		0.32
C-AB	3.36	8.92	0.376		0.59	0.60	9.1		0.18
A-B	1.74								
A-C	6.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.87	9.23	0.094		0.14	0.10	1.6		0.12
B-A	0.60	4.81	0.125		0.23	0.14	2.3		0.24
C-AB	2.74	9.33	0.294		0.60	0.42	6.4		0.15
A-B	1.42								
A-C	5.54								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-C	0.73	9.57	0.076		0.10	0.08	1.3		0.11
B-A	0.50	5.49	0.091		0.14	0.10	1.6		0.20
C-AB	2.30	9.62	0.239		0.42	0.32	4.8		0.14
A-B	1.19								
A-C	4.64								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.1	
09.00	0.1	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.2	
09.00	0.2	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.4	
08.45	0.6	*
09.00	0.6	*
09.15	0.4	
09.30	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	79.8	53.2	9.7	0.12	9.7	0.12
B-A	55.1	36.7	14.0	0.25	14.0	0.25
C-AB	251.9	167.9	39.8	0.16	39.8	0.16
A-B	130.8	87.2				
A-C	509.3	339.5				
ALL	2085.3	1390.2	63.5	0.03	63.5	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed - Proposed AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.30

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.95	8.92	5.95
ARM B	15.00	45.00	75.00	1.23	1.84	1.23
ARM C	15.00	45.00	75.00	12.05	18.08	12.05

Demand set: 2021 Base - Committed - Proposed AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.30				
	ARM A	0.000	0.200	0.800
		0.0	95.0	381.0
		(0.0)	(0.0)	(8.0)
	ARM B	0.408	0.000	0.592
		40.0	0.0	58.0
		(0.0)	(0.0)	(4.0)
	ARM C	0.810	0.190	0.000
		781.0	183.0	0.0
		(1.0)	(2.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.73	9.54	0.076		0.00	0.08	1.2		0.11
B-A	0.50	5.44	0.092		0.00	0.10	1.4		0.20
C-AB	2.30	9.59	0.240		0.00	0.31	4.6		0.14
A-B	1.19								
A-C	4.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.87	9.18	0.095		0.08	0.10	1.5		0.12
B-A	0.60	4.75	0.126		0.10	0.14	2.1		0.24
C-AB	2.74	9.29	0.295		0.31	0.41	6.2		0.15
A-B	1.42								
A-C	5.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.06	8.64	0.123		0.10	0.14	2.0		0.13
B-A	0.73	3.79	0.194		0.14	0.23	3.3		0.33
C-AB	3.36	8.87	0.379		0.41	0.60	9.0		0.18
A-B	1.74								
A-C	6.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.06	8.63	0.123		0.14	0.14	2.1		0.13
B-A	0.73	3.78	0.194		0.23	0.24	3.5		0.33
C-AB	3.36	8.87	0.379		0.60	0.60	9.1		0.18
A-B	1.74								
A-C	6.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.87	9.18	0.095		0.14	0.11	1.6		0.12
B-A	0.60	4.74	0.126		0.24	0.15	2.3		0.24
C-AB	2.74	9.29	0.295		0.60	0.42	6.4		0.15
A-B	1.42								
A-C	5.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.15-09.30									
B-C	0.73	9.53	0.076		0.11	0.08	1.3		0.11
B-A	0.50	5.43	0.092		0.15	0.10	1.6		0.20
C-AB	2.30	9.59	0.240		0.42	0.32	4.8		0.14
A-B	1.19								
A-C	4.78								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.1	
09.00	0.1	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.1	
08.30	0.1	
08.45	0.2	
09.00	0.2	
09.15	0.1	
09.30	0.1	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.4	
08.45	0.6	*
09.00	0.6	*
09.15	0.4	
09.30	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	79.8	53.2	9.7	0.12	9.7	0.12
B-A	55.1	36.7	14.3	0.26	14.3	0.26
C-AB	251.9	167.9	40.1	0.16	40.1	0.16
A-B	130.8	87.2				
A-C	524.4	349.6				
ALL	2116.9	1411.3	64.1	0.03	64.2	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.85	14.78	9.85
ARM B	15.00	45.00	75.00	3.69	5.53	3.69
ARM C	15.00	45.00	75.00	8.98	13.46	8.98

Demand set: 2021 Base - Committed PM

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
15.45 - 17.15	ARM A	0.000	0.198	0.802
		0.0	156.0	632.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.231	0.000	0.769
		68.0	0.0	227.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.696	0.304	0.000
		500.0	218.0	0.0
		(3.0)	(1.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-C	2.85	9.36	0.304		0.00	0.43	6.2		0.15
B-A	0.85	4.57	0.187		0.00	0.22	3.2		0.27
C-AB	2.74	8.79	0.311		0.00	0.44	6.6		0.16
A-B	1.96								
A-C	7.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	3.40	8.60	0.395		0.43	0.64	9.2		0.19
B-A	1.02	3.80	0.268		0.22	0.36	5.0		0.36
C-AB	3.27	8.32	0.393		0.44	0.63	9.5		0.20
A-B	2.34								
A-C	9.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	4.17	7.10	0.587		0.64	1.35	18.6		0.33
B-A	1.25	2.67	0.467		0.36	0.81	10.9		0.67
C-AB	4.00	7.66	0.522		0.63	1.07	15.8		0.27
A-B	2.86								
A-C	11.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	4.17	7.02	0.593		1.35	1.41	20.8		0.35
B-A	1.25	2.65	0.471		0.81	0.85	12.5		0.71
C-AB	4.00	7.66	0.522		1.07	1.08	16.5		0.27
A-B	2.86								
A-C	11.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	3.40	8.55	0.398		1.41	0.67	10.7		0.20
B-A	1.02	3.77	0.270		0.85	0.38	6.2		0.37
C-AB	3.27	8.32	0.393		1.08	0.66	10.1		0.20
A-B	2.34								
A-C	9.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.85	9.34	0.305		0.67	0.45	6.9		0.15
B-A	0.85	4.56	0.187		0.38	0.24	3.7		0.27
C-AB	2.74	8.79	0.311		0.66	0.46	6.9		0.17
A-B	1.96								
A-C	7.93								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.6	*
16.30	1.3	*
16.45	1.4	*
17.00	0.7	*
17.15	0.4	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.2	
16.15	0.4	
16.30	0.8	*
16.45	0.9	*
17.00	0.4	
17.15	0.2	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.6	*
16.30	1.1	*
16.45	1.1	*
17.00	0.7	*
17.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		EXCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	312.4	208.3	72.4	0.23	72.4	0.23
B-A	93.6	62.4	41.5	0.44	41.5	0.44
C-AB	300.1	200.0	65.3	0.22	65.3	0.22
A-B	214.7	143.1				
A-C	869.9	579.9				
ALL	2478.9	1652.6	179.3	0.07	179.3	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY EXCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed - Proposed PM

TIME PERIOD BEGINS 15.45 AND ENDS 17.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	9.99	14.98	9.99
ARM B	15.00	45.00	75.00	3.69	5.53	3.69
ARM C	15.00	45.00	75.00	9.11	13.67	9.11

Demand set: 2021 Base - Committed - Proposed PM

TIME	FROM/TO	ARM A	ARM B	ARM C
15.45 - 17.15				
	ARM A	0.000	0.195	0.805
		0.0	156.0	643.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.231	0.000	0.769
		68.0	0.0	227.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.701	0.299	0.000
		511.0	218.0	0.0
		(3.0)	(1.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
15.45-16.00									
B-C	2.85	9.32	0.306		0.00	0.43	6.2		0.15
B-A	0.85	4.53	0.189		0.00	0.23	3.2		0.27
C-AB	2.74	8.76	0.312		0.00	0.45	6.6		0.16
A-B	1.96								
A-C	8.07								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.00-16.15									
B-C	3.40	8.55	0.398		0.43	0.65	9.3		0.19
B-A	1.02	3.74	0.273		0.23	0.36	5.1		0.37
C-AB	3.27	8.28	0.395		0.45	0.64	9.6		0.20
A-B	2.34								
A-C	9.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	4.17	6.99	0.596		0.65	1.40	19.2		0.34
B-A	1.25	2.60	0.480		0.36	0.85	11.3		0.71
C-AB	4.00	7.61	0.525		0.64	1.08	16.0		0.27
A-B	2.86								
A-C	11.80								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	4.17	6.90	0.604		1.40	1.47	21.7		0.36
B-A	1.25	2.57	0.485		0.85	0.90	13.2		0.75
C-AB	4.00	7.61	0.525		1.08	1.10	16.8		0.28
A-B	2.86								
A-C	11.80								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	3.40	8.49	0.401		1.47	0.68	10.9		0.20
B-A	1.02	3.72	0.274		0.90	0.39	6.4		0.38
C-AB	3.27	8.28	0.395		1.10	0.67	10.1		0.20
A-B	2.34								
A-C	9.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.85	9.29	0.306		0.68	0.45	7.0		0.16
B-A	0.85	4.51	0.189		0.39	0.24	3.8		0.27
C-AB	2.74	8.76	0.312		0.67	0.46	7.0		0.17
A-B	1.96								
A-C	8.07								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.6	*
16.30	1.4	*
16.45	1.5	*
17.00	0.7	*
17.15	0.4	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.2	
16.15	0.4	
16.30	0.8	*
16.45	0.9	*
17.00	0.4	
17.15	0.2	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.00	0.4	
16.15	0.6	*
16.30	1.1	*
16.45	1.1	*
17.00	0.7	*
17.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	312.4	208.3	74.3	0.24	74.3	0.24
B-A	93.6	62.4	43.0	0.46	43.0	0.46
C-AB	300.1	200.0	66.0	0.22	66.0	0.22
A-B	214.7	143.1				
A-C	885.0	590.0				
ALL	2509.2	1672.8	183.3	0.07	183.3	0.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

---------- end of file ----------

Printed at 12:19:16 on 17/10/2016

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"P:\Transport\Projects\16-1084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\
Traffic Models\Picady\2. Solent Road - Selborune Road\2. Solent Road - Selborune Road SAT.vpi"
(drive-on-the-left) at 12:25:18 on Monday, 17 October 2016

RUN INFORMATION
****

RUN TITLE : Solent Road - Selborune Road
LOCATION : Havant
DATE : 03/10/16
CLIENT : Seaward Properties Limited
ENUMERATOR : tgood [LOCAL-DT23]
JOB NUMBER : 16-1084
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

MAJOR ROAD (ARM C) ---------- MAJOR ROAD (ARM A)
-
-
-
-
-
-
MINOR ROAD (ARM B)

ARM A IS Solent Road (E)
ARM B IS Selborune Road
ARM C IS Solent Road (W)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.40 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.80 M.
- VISIBILITY	(VC-B)113.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (7)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 36.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	6.07 M.
WIDTH AT 10 M FROM JUNCTION	4.46 M.
WIDTH AT 15 M FROM JUNCTION	4.07 M.
WIDTH AT 20 M FROM JUNCTION	3.84 M.
- LENGTH OF FLARED SECTION	DERIVED: 1 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2016 Observed SAT

TIME PERIOD BEGINS 11.15 AND ENDS 12.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.96	11.94	7.96
ARM B	15.00	45.00	75.00	4.80	7.20	4.80
ARM C	15.00	45.00	75.00	11.69	17.53	11.69

Demand set: 2016 Observed SAT

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.256	0.744
		0.0	163.0	474.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.307	0.000	0.693
		118.0	0.0	266.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.594	0.406	0.000
		555.0	380.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2016 Observed SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-C	3.34	8.96	0.372		0.00	0.58	8.3		0.18
B-A	1.48	4.45	0.333		0.00	0.48	6.7		0.33
C-AB	4.77	9.36	0.510		0.00	1.02	14.8		0.21
A-B	2.05								
A-C	5.95								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-C	3.99	8.19	0.487		0.58	0.92	13.1		0.24
B-A	1.77	3.30	0.536		0.48	1.06	14.2		0.62
C-AB	5.69	8.97	0.635		1.02	1.71	25.1		0.30
A-B	2.44								
A-C	7.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-C	4.88	4.33	1.127		0.92	13.13	117.0		2.20
B-A	2.17	1.96	1.105		1.06	7.12	67.5		3.10
C-AB	6.97	8.43	0.827		1.71	4.67	61.7		0.57
A-B	2.99								
A-C	8.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-C	4.88	4.15	1.176		13.13	24.80	285.4		4.81
B-A	2.17	1.90	1.138		7.12	11.99	144.1		5.65
C-AB	6.97	8.43	0.827		4.67	5.26	82.9		0.68
A-B	2.99								
A-C	8.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-C	3.99	5.37	0.743		24.80	7.22	240.2		3.26
B-A	1.77	2.44	0.724		11.99	4.45	124.8		3.91
C-AB	5.69	8.97	0.635		5.26	1.91	31.3		0.35
A-B	2.44								
A-C	7.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-C	3.34	8.51	0.392		7.22	0.66	15.6		0.23
B-A	1.48	4.37	0.339		4.45	0.53	12.2		0.42
C-AB	4.77	9.36	0.510		1.91	1.08	16.5		0.22
A-B	2.05								
A-C	5.95								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
12.30	0.6	*
12.45	0.9	*
13.00	13.1	*************
13.15	24.8	*************************
13.30	7.2	*******
13.45	0.7	*

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
12.30	0.5	
12.45	1.1	*
13.00	7.1	*******
13.15	12.0	************
13.30	4.5	****
13.45	0.5	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
12.30	1.0	*
12.45	1.7	**
13.00	4.7	*****
13.15	5.3	*****
13.30	1.9	**
13.45	1.1	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	366.1	244.1	679.5	1.86	679.5	1.86
B-A	162.4	108.3	369.4	2.27	369.5	2.27
C-AB	523.0	348.7	232.2	0.44	232.3	0.44
A-B	224.4	149.6				
A-C	652.4	435.0				
ALL	2692.3	1794.9	1281.1	0.48	1281.3	0.48

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base SAT

TIME PERIOD BEGINS 11:15 AND ENDS 12:45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.59	12.88	8.59
ARM B	15.00	45.00	75.00	5.18	7.76	5.18
ARM C	15.00	45.00	75.00	12.61	18.92	12.61

Demand set: 2021 Base SAT

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.256	0.744
		0.0	176.0	511.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.307	0.000	0.693
		127.0	0.0	287.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.594	0.406	0.000
		599.0	410.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base SAT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-C	3.60	8.53	0.422		0.00	0.71	10.1		0.20
B-A	1.59	4.12	0.386		0.00	0.60	8.2		0.38
C-AB	5.14	9.20	0.559		0.00	1.24	17.9		0.24
A-B	2.21								
A-C	6.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-C	4.30	7.09	0.607		0.71	1.46	20.0		0.35
B-A	1.90	2.77	0.686		0.60	1.81	22.6		0.98
C-AB	6.14	8.78	0.699		1.24	2.30	33.2		0.36
A-B	2.64								
A-C	7.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-C	5.27	3.71	1.421		1.46	26.25	213.9		4.34
B-A	2.33	1.69	1.376		1.81	12.54	111.1		5.38
C-AB	7.52	8.20	0.917		2.30	8.73	106.5		0.85
A-B	3.23								
A-C	9.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-C	5.27	3.58	1.470		26.25	51.62	584.2		10.10
B-A	2.33	1.62	1.441		12.54	23.44	270.1		10.76
C-AB	7.52	8.20	0.917		8.73	11.54	178.5		1.28
A-B	3.23								
A-C	9.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-C	4.30	4.75	0.906		51.62	46.24	734.0		9.89
B-A	1.90	2.13	0.895		23.44	21.40	336.3		10.30
C-AB	6.14	8.78	0.699		11.54	2.79	57.8		0.60
A-B	2.64								
A-C	7.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-C	3.60	5.78	0.623		46.24	15.43	462.6		5.58
B-A	1.59	2.61	0.610		21.40	7.89	219.7		6.13
C-AB	5.14	9.20	0.559		2.79	1.33	20.7		0.26
A-B	2.21								
A-C	6.41								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	0.7	*
11.45	1.5	*
12.00	26.3	**************************
12.15	51.6	**
12.30	46.2	**
12.45	15.4	***************

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	0.6	*
11.45	1.8	**
12.00	12.5	************
12.15	23.4	************************
12.30	21.4	**********************
12.45	7.9	********

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	1.2	*
11.45	2.3	**
12.00	8.7	*********
12.15	11.5	***********
12.30	2.8	***
12.45	1.3	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		QUEUEING * DELAY *		EXCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	395.0	263.4	2024.7	5.13	2045.4	5.18
B-A	174.8	116.5	968.1	5.54	980.0	5.61
C-AB	564.3	376.2	414.7	0.73	414.8	0.74
A-B	242.3	161.5				
A-C	703.4	468.9				
ALL	2904.3	1936.2	3407.5	1.17	3440.2	1.18

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* EXCLUSIVE DELAY EXCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed

TIME PERIOD BEGINS 11:15 AND ENDS 12:45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.77	13.16	8.77
ARM B	15.00	45.00	75.00	5.18	7.76	5.18
ARM C	15.00	45.00	75.00	12.79	19.18	12.79

Demand set: 2021 Base - Committed

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.251	0.749
		0.0	176.0	526.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.307	0.000	0.693
		127.0	0.0	287.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.599	0.401	0.000
		613.0	410.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-C	3.60	8.44	0.426		0.00	0.73	10.2		0.20
B-A	1.59	4.06	0.392		0.00	0.62	8.4		0.39
C-AB	5.14	9.15	0.562		0.00	1.25	18.1		0.24
A-B	2.21								
A-C	6.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-C	4.30	6.87	0.626		0.73	1.57	21.4		0.37
B-A	1.90	2.68	0.709		0.62	1.96	24.1		1.06
C-AB	6.14	8.73	0.704		1.25	2.36	33.9		0.37
A-B	2.64								
A-C	7.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-C	5.27	3.58	1.472		1.57	28.09	227.8		4.76
B-A	2.33	1.64	1.421		1.96	13.34	117.9		5.86
C-AB	7.52	8.14	0.925		2.36	9.36	112.2		0.89
A-B	3.23								
A-C	9.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-C	5.27	3.44	1.530		28.09	55.53	627.3		11.05
B-A	2.33	1.55	1.501		13.34	25.17	289.0		11.73
C-AB	7.52	8.14	0.925		9.36	12.58	192.9		1.38
A-B	3.23								
A-C	9.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-C	4.30	4.66	0.924		55.53	51.43	802.3		10.90
B-A	1.90	2.08	0.913		25.17	23.66	366.2		11.32
C-AB	6.14	8.73	0.704		12.58	2.89	62.9		0.65
A-B	2.64								
A-C	7.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-C	3.60	5.68	0.634		51.43	21.93	550.3		6.68
B-A	1.59	2.56	0.622		23.66	10.72	257.8		7.20
C-AB	5.14	9.15	0.562		2.89	1.35	21.0		0.26
A-B	2.21								
A-C	6.60								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	0.7	*
11.45	1.6	**
12.00	28.1	**********
12.15	55.5	**********
12.30	51.4	**********
12.45	21.9	*********

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	0.6	*
11.45	2.0	**
12.00	13.3	**********
12.15	25.2	**********
12.30	23.7	**********
12.45	10.7	**********

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	1.3	*
11.45	2.4	**
12.00	9.4	*********
12.15	12.6	**********
12.30	2.9	***
12.45	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	395.0	263.4	2239.2	5.67	2281.5	5.78
B-A	174.8	116.5	1063.3	6.08	1085.8	6.21
C-AB	564.3	376.2	441.2	0.78	441.3	0.78
A-B	242.3	161.5				
A-C	724.0	482.7				
ALL	2944.2	1962.8	3743.7	1.27	3808.6	1.29

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

.SLOPES AND INTERCEPT
(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
681.16	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2021 Base - Committed - Proposed

TIME PERIOD BEGINS 11:15 AND ENDS 12:45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.91	13.37	8.91
ARM B	15.00	45.00	75.00	5.18	7.76	5.18
ARM C	15.00	45.00	75.00	12.94	19.41	12.94

Demand set: 2021 Base - Committed - Proposed

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
11.15 - 12.45				
	ARM A	0.000	0.247	0.753
		0.0	176.0	537.0
		(0.0)	(0.0)	(1.0)
	ARM B	0.307	0.000	0.693
		127.0	0.0	287.0
		(2.0)	(0.0)	(0.0)
	ARM C	0.604	0.396	0.000
		625.0	410.0	0.0
		(1.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2021 Base - Committed - Proposed
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.15-11.30									
B-C	3.60	8.38	0.430		0.00	0.74	10.3		0.21
B-A	1.59	4.01	0.397		0.00	0.63	8.6		0.40
C-AB	5.14	9.12	0.564		0.00	1.26	18.3		0.24
A-B	2.21								
A-C	6.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.30-11.45									
B-C	4.30	6.69	0.643		0.74	1.68	22.7		0.40
B-A	1.90	2.61	0.728		0.63	2.09	25.4		1.13
C-AB	6.14	8.69	0.707		1.26	2.40	34.5		0.37
A-B	2.64								
A-C	8.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
11.45-12.00									
B-C	5.27	3.48	1.514		1.68	29.57	239.2		5.13
B-A	2.33	1.60	1.459		2.09	14.00	123.5		6.27
C-AB	7.52	8.09	0.931		2.40	9.87	116.8		0.92
A-B	3.23								
A-C	9.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.00-12.15									
B-C	5.27	3.33	1.582		29.57	58.71	662.2		11.84
B-A	2.33	1.50	1.552		14.00	26.57	304.5		12.51
C-AB	7.52	8.09	0.931		9.87	13.43	204.6		1.46
A-B	3.23								
A-C	9.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.15-12.30									
B-C	4.30	4.58	0.939		58.71	55.65	857.7		11.63
B-A	1.90	2.05	0.929		26.57	23.22	379.6		12.23
C-AB	6.14	8.69	0.707		13.43	2.97	67.5		0.70
A-B	2.64								
A-C	8.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
12.30-12.45									
B-C	3.60	5.75	0.626		55.65	24.93	604.3		7.23
B-A	1.59	2.47	0.645		23.22	11.59	261.0		7.55
C-AB	5.14	9.12	0.564		2.97	1.37	21.3		0.27
A-B	2.21								
A-C	6.74								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	0.7	*
11.45	1.7	**
12.00	29.6	**********
12.15	58.7	**********
12.30	55.6	**********
12.45	24.9	**********

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	0.6	*
11.45	2.1	**
12.00	14.0	**********
12.15	26.6	**********
12.30	23.2	**********
12.45	11.6	**********

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
11.30	1.3	*
11.45	2.4	**
12.00	9.9	**********
12.15	13.4	**********
12.30	3.0	***
12.45	1.4	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	395.0	263.4	2396.4	6.07	2450.4	6.20
B-A	174.8	116.5	1102.6	6.31	1129.8	6.46
C-AB	564.3	376.2	463.0	0.82	463.1	0.82
A-B	242.3	161.5				
A-C	739.1	492.8				
ALL	2975.8	1983.9	3962.0	1.33	4043.3	1.36

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

********END OF RUN********

---------- end of file ----------

Printed at 13:38:08 on 17/10/2016

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
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Filename: 4. Brockhampton Road - Solent Road - Marples Way AM.j9
Path: P:\Transport\Projects\16-T084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\Traffic Models\Arcady\4. Brockhampton Road - Solent Road - Marples Way
Report generation date: 17/10/2016 14:21:56

»2016 Observed, AM
»2021 Base, AM
»2021 Base + Committed, AM
»2021 Base + Committed + Proposed, AM

Summary of junction performance

	AM	
	Queue (Veh)	RFC
	2016 Observed	
A - Brockhampton Road (N)	3.7	0.81
B - Solent Road	0.9	0.46
C - Brockhampton Road (S)	0.5	0.32
D - Marples Way	0.2	0.14
	2021 Base	
A - Brockhampton Road (N)	6.2	0.90
B - Solent Road	1.0	0.50
C - Brockhampton Road (S)	0.5	0.35
D - Marples Way	0.2	0.15
	2021 Base + Committed	
A - Brockhampton Road (N)	9.1	0.95
B - Solent Road	1.1	0.52
C - Brockhampton Road (S)	0.6	0.36
D - Marples Way	0.1	0.11
	2021 Base + Committed + Proposed	
A - Brockhampton Road (N)	12.4	1.00
B - Solent Road	0.1	0.09
C - Brockhampton Road (S)	0.5	0.35
D - Marples Way	0.2	0.16

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

File summary

File Description

Title	Brockhampton Road (N) - Solent Road - Brockhampton Road (S) - Marples Way
Location	Havant
Site number	
Date	05/10/2016
Version	
Status	(new file)
Identifier	TG
Client	Seaward Properties Limited
Jobnumber	16-T084
Enumerator	ICENIPROJECTS\tgood
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Observed	AM	ONE HOUR	08:00	09:30	15	✓
D3	2021 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2021 Base + Committed	AM	ONE HOUR	08:00	09:30	15	✓
D5	2021 Base + Committed + Proposed	AM	ONE HOUR	08:00	09:30	15	✓

Analysis Set Details

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

2016 Observed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	18.21	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Brockhampton Road (N)	
B	Solent Road	
C	Brockhampton Road (S)	
D	Marples Way	

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
A - Brockhampton Road (N)	3.72	4.73	13.8	9.8	29.0	28.5	
B - Solent Road	3.77	4.64	8.9	13.5	29.0	16.5	
C - Brockhampton Road (S)	3.42	3.42	0.0	25.2	29.0	14.0	
D - Marples Way	3.67	3.76	5.4	39.3	29.0	11.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - Brockhampton Road (N)	Direct	Validation	-825
B - Solent Road	Direct	Validation	-150
C - Brockhampton Road (S)	Direct	Validation	0
D - Marples Way	Direct	Validation	-750

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Brockhampton Road (N)	0.565	487
B - Solent Road	0.599	1224
C - Brockhampton Road (S)	0.557	1104
D - Marples Way	0.593	490

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2016 Observed	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	241	100.000
B - Solent Road		ONE HOUR	✓	460	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	270	100.000
D - Marples Way		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	5	103	119	14
	B - Solent Road	52	4	294	110
	C - Brockhampton Road (S)	61	164	0	45
	D - Marples Way	1	15	16	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	8	8	0
	B - Solent Road	2	25	2	1
	C - Brockhampton Road (S)	5	9	0	2
	D - Marples Way	0	13	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.81	54.43	3.7	F	221	332
B - Solent Road	0.46	6.13	0.9	A	422	633
C - Brockhampton Road (S)	0.32	5.75	0.5	A	248	372
D - Marples Way	0.14	15.15	0.2	C	31	47

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	181	45	150	368	0.493	178	89	0.0	0.9	18.605	C
B - Solent Road	346	87	115	1129	0.307	345	213	0.0	0.4	4.579	A
C - Brockhampton Road (S)	203	51	140	959	0.212	202	320	0.0	0.3	4.752	A
D - Marples Way	26	6	214	335	0.076	25	128	0.0	0.1	11.599	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	217	54	180	351	0.618	214	107	0.9	1.5	25.975	D
B - Solent Road	414	103	139	1114	0.371	413	256	0.4	0.6	5.130	A
C - Brockhampton Road (S)	243	61	168	944	0.257	242	384	0.3	0.3	5.130	A
D - Marples Way	31	8	257	310	0.099	30	153	0.1	0.1	12.887	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	265	66	221	327	0.811	258	131	1.5	3.4	47.211	E
B - Solent Road	506	127	167	1096	0.462	505	311	0.6	0.8	6.080	A
C - Brockhampton Road (S)	297	74	205	924	0.322	297	468	0.3	0.5	5.733	A
D - Marples Way	37	9	314	275	0.136	37	187	0.1	0.2	15.105	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	265	66	221	327	0.811	264	131	3.4	3.7	54.429	F
B - Solent Road	506	127	171	1094	0.463	506	314	0.8	0.9	6.125	A
C - Brockhampton Road (S)	297	74	206	924	0.322	297	472	0.5	0.5	5.746	A
D - Marples Way	37	9	315	275	0.136	37	188	0.2	0.2	15.154	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	217	54	181	350	0.619	225	107	3.7	1.7	30.250	D
B - Solent Road	414	103	145	1110	0.372	415	261	0.9	0.6	5.181	A
C - Brockhampton Road (S)	243	61	169	943	0.257	243	390	0.5	0.3	5.146	A
D - Marples Way	31	8	258	309	0.099	31	155	0.2	0.1	12.937	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	181	45	152	367	0.494	184	90	1.7	1.0	20.008	C
B - Solent Road	346	87	119	1126	0.307	347	217	0.6	0.4	4.623	A
C - Brockhampton Road (S)	203	51	141	958	0.212	204	325	0.3	0.3	4.774	A
D - Marples Way	26	6	216	334	0.077	26	129	0.1	0.1	11.668	B

2021 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	26.10	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2021 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	260	100.000
B - Solent Road		ONE HOUR	✓	497	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	292	100.000
D - Marples Way		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	5	111	129	15
	B - Solent Road	56	4	318	119
	C - Brockhampton Road (S)	66	177	0	49
	D - Marples Way	1	16	17	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	8	8	0
	B - Solent Road	2	0	2	1
	C - Brockhampton Road (S)	5	9	0	2
	D - Marples Way	0	13	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.90	85.11	6.2	F	239	358
B - Solent Road	0.50	6.64	1.0	A	456	684
C - Brockhampton Road (S)	0.35	6.05	0.5	A	268	402
D - Marples Way	0.15	16.26	0.2	C	33	50

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	196	49	162	362	0.541	191	96	0.0	1.1	20.630	C
B - Solent Road	374	94	124	1126	0.332	372	229	0.0	0.5	4.764	A
C - Brockhampton Road (S)	220	55	150	954	0.231	219	346	0.0	0.3	4.890	A
D - Marples Way	27	7	231	326	0.083	27	138	0.0	0.1	12.020	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	234	58	194	343	0.681	230	115	1.1	1.9	30.989	D
B - Solent Road	447	112	149	1110	0.402	446	275	0.5	0.7	5.416	A
C - Brockhampton Road (S)	263	66	180	938	0.280	262	415	0.3	0.4	5.326	A
D - Marples Way	32	8	276	298	0.108	32	166	0.1	0.1	13.521	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	286	72	237	318	0.899	273	140	1.9	5.2	65.442	F
B - Solent Road	547	137	177	1092	0.501	546	333	0.7	1.0	6.571	A
C - Brockhampton Road (S)	321	80	220	917	0.351	321	503	0.4	0.5	6.033	A
D - Marples Way	40	10	338	261	0.152	39	203	0.1	0.2	16.194	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	286	72	238	318	0.900	282	141	5.2	6.2	85.106	F
B - Solent Road	547	137	183	1089	0.502	547	337	1.0	1.0	6.642	A
C - Brockhampton Road (S)	321	80	221	916	0.351	321	509	0.5	0.5	6.051	A
D - Marples Way	40	10	339	261	0.152	40	203	0.2	0.2	16.259	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	234	58	195	343	0.682	249	116	6.2	2.4	42.993	E
B - Solent Road	447	112	160	1103	0.405	448	284	1.0	0.7	5.505	A
C - Brockhampton Road (S)	263	66	182	937	0.280	263	426	0.5	0.4	5.348	A
D - Marples Way	32	8	278	298	0.109	33	168	0.2	0.1	13.594	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	196	49	163	361	0.542	200	97	2.4	1.2	23.001	C
B - Solent Road	374	94	129	1123	0.333	375	234	0.7	0.5	4.819	A
C - Brockhampton Road (S)	220	55	152	953	0.231	220	352	0.4	0.3	4.918	A
D - Marples Way	27	7	232	325	0.083	27	140	0.1	0.1	12.105	B

2021 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	34.27	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2021 Base + Committed	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	281	100.000
B - Solent Road		ONE HOUR	✓	506	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	299	100.000
D - Marples Way		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	5	119	142	15
	B - Solent Road	59	4	324	119
	C - Brockhampton Road (S)	71	179	0	49
	D - Marples Way	1	6	18	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	7	8	0
	B - Solent Road	2	0	2	1
	C - Brockhampton Road (S)	5	9	0	2
	D - Marples Way	0	13	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.95	112.82	9.1	F	258	387
B - Solent Road	0.52	6.87	1.1	A	464	696
C - Brockhampton Road (S)	0.36	6.15	0.6	A	274	412
D - Marples Way	0.11	15.52	0.1	C	25	37

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	212	53	156	366	0.578	206	102	0.0	1.3	21.900	C
B - Solent Road	381	95	134	1119	0.340	379	229	0.0	0.5	4.850	A
C - Brockhampton Road (S)	225	56	152	953	0.236	224	360	0.0	0.3	4.932	A
D - Marples Way	20	5	238	330	0.062	20	138	0.0	0.1	11.590	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	253	63	188	348	0.725	248	122	1.3	2.3	34.579	D
B - Solent Road	455	114	161	1102	0.413	454	275	0.5	0.7	5.548	A
C - Brockhampton Road (S)	269	67	183	937	0.287	268	432	0.3	0.4	5.386	A
D - Marples Way	24	6	285	301	0.081	24	166	0.1	0.1	12.984	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	309	77	230	324	0.954	291	149	2.3	7.1	79.337	F
B - Solent Road	557	139	189	1085	0.514	556	331	0.7	1.0	6.787	A
C - Brockhampton Road (S)	329	82	223	915	0.360	329	522	0.4	0.6	6.127	A
D - Marples Way	30	7	349	262	0.113	30	202	0.1	0.1	15.459	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	309	77	230	324	0.955	301	150	7.1	9.1	112.818	F
B - Solent Road	557	139	196	1081	0.515	557	336	1.0	1.1	6.873	A
C - Brockhampton Road (S)	329	82	224	915	0.360	329	529	0.6	0.6	6.146	A
D - Marples Way	30	7	350	262	0.114	30	203	0.1	0.1	15.516	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	253	63	188	348	0.726	277	123	9.1	3.1	59.686	F
B - Solent Road	455	114	178	1092	0.417	456	288	1.1	0.7	5.676	A
C - Brockhampton Road (S)	269	67	186	935	0.287	269	448	0.6	0.4	5.412	A
D - Marples Way	24	6	287	300	0.081	24	168	0.1	0.1	13.053	B

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	212	53	158	365	0.579	218	103	3.1	1.5	25.365	D
B - Solent Road	381	95	141	1115	0.342	382	235	0.7	0.5	4.913	A
C - Brockhampton Road (S)	225	56	154	952	0.237	225	368	0.4	0.3	4.962	A
D - Marples Way	20	5	240	329	0.062	20	140	0.1	0.1	11.661	B

2021 Base + Committed + Proposed, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	62.88	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2021 Base + Committed + Proposed	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	285	100.000
B - Solent Road		ONE HOUR	✓	88	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	305	100.000
D - Marples Way		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	5	123	142	15
	B - Solent Road	61	4	4	19
	C - Brockhampton Road (S)	71	185	0	49
	D - Marples Way	1	16	18	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	7	8	0
	B - Solent Road	2	0	2	1
	C - Brockhampton Road (S)	5	9	0	2
	D - Marples Way	0	13	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	1.00	147.31	12.4	F	262	392
B - Solent Road	0.09	3.65	0.1	A	81	121
C - Brockhampton Road (S)	0.35	5.66	0.5	A	280	420
D - Marples Way	0.16	17.22	0.2	C	34	51

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	215	54	168	359	0.598	209	103	0.0	1.4	23.218	C
B - Solent Road	66	17	134	1120	0.059	66	244	0.0	0.1	3.414	A
C - Brockhampton Road (S)	230	57	79	991	0.232	228	120	0.0	0.3	4.722	A
D - Marples Way	28	7	244	318	0.088	27	63	0.0	0.1	12.366	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	256	64	202	340	0.754	251	124	1.4	2.6	38.482	E
B - Solent Road	79	20	161	1103	0.072	79	292	0.1	0.1	3.514	A
C - Brockhampton Road (S)	274	69	95	982	0.279	274	145	0.3	0.4	5.078	A
D - Marples Way	33	8	293	289	0.115	33	76	0.1	0.1	14.051	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	314	78	247	314	0.999	289	151	2.6	8.9	95.542	F
B - Solent Road	97	24	186	1087	0.089	97	350	0.1	0.1	3.633	A
C - Brockhampton Road (S)	336	84	115	972	0.346	335	168	0.4	0.5	5.650	A
D - Marples Way	41	10	358	250	0.163	40	92	0.1	0.2	17.152	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	314	78	248	314	1.000	300	152	8.9	12.4	147.314	F
B - Solent Road	97	24	192	1083	0.089	97	355	0.1	0.1	3.647	A
C - Brockhampton Road (S)	336	84	116	971	0.346	336	173	0.5	0.5	5.662	A
D - Marples Way	41	10	359	250	0.163	41	93	0.2	0.2	17.224	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	256	64	203	339	0.755	291	125	12.4	3.8	87.028	F
B - Solent Road	79	20	183	1089	0.073	79	310	0.1	0.1	3.567	A
C - Brockhampton Road (S)	274	69	98	981	0.280	275	165	0.5	0.4	5.103	A
D - Marples Way	33	8	294	288	0.115	34	78	0.2	0.1	14.144	B

09:15 - 09:30

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	215	54	170	358	0.599	223	104	3.8	1.6	28.143	D
B - Solent Road	66	17	142	1115	0.059	66	251	0.1	0.1	3.432	A
C - Brockhampton Road (S)	230	57	80	990	0.232	230	128	0.4	0.3	4.739	A
D - Marples Way	28	7	246	317	0.088	28	65	0.1	0.1	12.455	B

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
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Filename: 4. Brockhampton Road - Solent Road - Marples Way PM.j9
Path: P:\Transport\Projects\16-T084 - Seaward Properties Limited - Langstone Gate, Havant\4. Calculations\Traffic Models\Arcady\4. Brockhampton Road - Solent Road - Marples Way
Report generation date: 17/10/2016 14:31:33

»2016 Observed, PM
»2021 Base, PM
»2021 Base + Committed, PM
»2021 Base + Committed + Proposed, PM

Summary of junction performance

	PM	
	Queue (Veh)	RFC
	2016 Observed	
A - Brockhampton Road (N)	2.0	0.68
B - Solent Road	0.9	0.48
C - Brockhampton Road (S)	1.0	0.51
D - Marples Way	1.0	0.52
	2021 Base	
A - Brockhampton Road (N)	3.2	0.79
B - Solent Road	1.1	0.53
C - Brockhampton Road (S)	1.2	0.56
D - Marples Way	2.0	0.70
	2021 Base + Committed	
A - Brockhampton Road (N)	4.2	0.84
B - Solent Road	1.2	0.55
C - Brockhampton Road (S)	1.4	0.58
D - Marples Way	3.2	0.82
	2021 Base + Committed + Proposed	
A - Brockhampton Road (N)	4.8	0.87
B - Solent Road	1.3	0.56
C - Brockhampton Road (S)	1.4	0.59
D - Marples Way	4.2	0.89

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

File summary

File Description

Title	Brockhampton Road (N) - Solent Road - Brockhampton Road (S) - Marples Way
Location	Havant
Site number	
Date	05/10/2016
Version	
Status	(new file)
Identifier	TG
Client	Seaward Properties Limited
Jobnumber	16-T084
Enumerator	ICENIPROJECTS\tgood
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2016 Observed	PM	ONE HOUR	15:45	17:15	15	✓
D3	2021 Base	PM	ONE HOUR	15:45	17:15	15	✓
D4	2021 Base + Committed	PM	ONE HOUR	15:45	17:15	15	✓
D5	2021 Base + Committed + Proposed	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

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

2016 Observed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	14.74	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Brockhampton Road (N)	
B	Solent Road	
C	Brockhampton Road (S)	
D	Marples Way	

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
A - Brockhampton Road (N)	3.72	4.73	13.8	9.8	29.0	28.5	
B - Solent Road	3.77	4.64	8.9	13.5	29.0	16.5	
C - Brockhampton Road (S)	3.42	3.42	0.0	25.2	29.0	14.0	
D - Marples Way	3.67	3.76	5.4	39.3	29.0	11.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - Brockhampton Road (N)	Direct	Validation	-770
B - Solent Road	Direct	Validation	-400
C - Brockhampton Road (S)	Direct	Validation	100
D - Marples Way	Direct	Validation	-670

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Brockhampton Road (N)	0.565	542
B - Solent Road	0.599	974
C - Brockhampton Road (S)	0.557	1204
D - Marples Way	0.593	570

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2016 Observed	PM	ONE HOUR	15:45	17:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	181	100.000
B - Solent Road		ONE HOUR	✓	371	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	516	100.000
D - Marples Way		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	81	99	1
	B - Solent Road	109	0	245	17
	C - Brockhampton Road (S)	178	329	0	9
	D - Marples Way	13	26	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	2	1	0
	B - Solent Road	4	0	5	6
	C - Brockhampton Road (S)	2	1	0	0
	D - Marples Way	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.68	38.11	2.0	E	166	249
B - Solent Road	0.48	8.28	0.9	A	340	511
C - Brockhampton Road (S)	0.51	6.66	1.0	A	473	710
D - Marples Way	0.52	46.79	1.0	E	69	103

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	136	34	292	370	0.368	134	224	0.0	0.6	15.121	C
B - Solent Road	279	70	101	872	0.320	277	326	0.0	0.5	6.041	A
C - Brockhampton Road (S)	388	97	95	1134	0.343	386	283	0.0	0.5	4.800	A
D - Marples Way	56	14	461	288	0.196	56	20	0.0	0.2	15.432	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	163	41	351	337	0.483	161	269	0.6	0.9	20.332	C
B - Solent Road	334	83	121	860	0.388	333	391	0.5	0.6	6.825	A
C - Brockhampton Road (S)	464	116	114	1123	0.413	463	340	0.5	0.7	5.449	A
D - Marples Way	67	17	553	233	0.289	67	24	0.2	0.4	21.538	C

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	199	50	428	294	0.679	195	329	0.9	1.9	35.245	E
B - Solent Road	408	102	146	845	0.483	407	477	0.6	0.9	8.202	A
C - Brockhampton Road (S)	568	142	139	1109	0.512	567	414	0.7	1.0	6.629	A
D - Marples Way	83	21	677	160	0.517	80	30	0.4	1.0	44.072	E

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	199	50	430	292	0.682	199	330	1.9	2.0	38.114	E
B - Solent Road	408	102	149	843	0.484	408	480	0.9	0.9	8.277	A
C - Brockhampton Road (S)	568	142	140	1108	0.513	568	418	1.0	1.0	6.663	A
D - Marples Way	83	21	678	159	0.520	82	30	1.0	1.0	46.794	E

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	163	41	354	335	0.486	167	271	2.0	1.0	21.896	C
B - Solent Road	334	83	126	857	0.389	335	395	0.9	0.6	6.905	A
C - Brockhampton Road (S)	464	116	115	1123	0.413	465	346	1.0	0.7	5.487	A
D - Marples Way	67	17	555	232	0.291	70	24	1.0	0.4	22.530	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	136	34	295	368	0.370	138	226	1.0	0.6	15.731	C
B - Solent Road	279	70	104	870	0.321	280	330	0.6	0.5	6.108	A
C - Brockhampton Road (S)	388	97	96	1134	0.343	389	288	0.7	0.5	4.842	A
D - Marples Way	56	14	465	286	0.198	57	20	0.4	0.3	15.792	C

2021 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	21.02	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2021 Base	PM	ONE HOUR	15:45	17:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	195	100.000
B - Solent Road		ONE HOUR	✓	399	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	557	100.000
D - Marples Way		ONE HOUR	✓	81	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	87	107	1
	B - Solent Road	117	0	264	18
	C - Brockhampton Road (S)	192	355	0	10
	D - Marples Way	14	28	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	2	1	0
	B - Solent Road	4	0	5	6
	C - Brockhampton Road (S)	2	1	0	0
	D - Marples Way	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.79	57.44	3.2	F	179	268
B - Solent Road	0.53	9.05	1.1	A	366	549
C - Brockhampton Road (S)	0.56	7.35	1.2	A	511	767
D - Marples Way	0.70	88.09	2.0	F	74	111

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	147	37	315	357	0.411	144	242	0.0	0.7	16.713	C
B - Solent Road	300	75	109	867	0.346	298	351	0.0	0.5	6.308	A
C - Brockhampton Road (S)	419	105	102	1130	0.371	417	305	0.0	0.6	5.032	A
D - Marples Way	61	15	497	267	0.229	60	22	0.0	0.3	17.320	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	175	44	378	322	0.545	173	290	0.7	1.1	23.999	C
B - Solent Road	359	90	131	854	0.420	358	421	0.5	0.7	7.255	A
C - Brockhampton Road (S)	501	125	122	1119	0.448	500	367	0.6	0.8	5.810	A
D - Marples Way	73	18	596	208	0.350	72	26	0.3	0.5	26.319	D

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	215	54	459	276	0.778	208	354	1.1	2.8	48.734	E
B - Solent Road	439	110	156	840	0.523	438	512	0.7	1.1	8.926	A
C - Brockhampton Road (S)	613	153	149	1103	0.556	612	444	0.8	1.2	7.298	A
D - Marples Way	89	22	729	129	0.694	84	32	0.5	1.8	74.253	F

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	215	54	464	273	0.786	213	355	2.8	3.2	57.442	F
B - Solent Road	439	110	161	837	0.525	439	517	1.1	1.1	9.053	A
C - Brockhampton Road (S)	613	153	150	1103	0.556	613	450	1.2	1.2	7.354	A
D - Marples Way	89	22	731	127	0.700	88	32	1.8	2.0	88.093	F

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	175	44	385	318	0.552	183	292	3.2	1.3	28.017	D
B - Solent Road	359	90	139	849	0.422	360	429	1.1	0.7	7.379	A
C - Brockhampton Road (S)	501	125	123	1118	0.448	502	376	1.2	0.8	5.862	A
D - Marples Way	73	18	599	206	0.354	79	26	2.0	0.6	29.400	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	147	37	319	355	0.414	149	244	1.3	0.7	17.693	C
B - Solent Road	300	75	112	865	0.347	301	356	0.7	0.5	6.396	A
C - Brockhampton Road (S)	419	105	103	1130	0.371	420	311	0.8	0.6	5.082	A
D - Marples Way	61	15	501	264	0.231	62	22	0.6	0.3	17.900	C

2021 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	27.10	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2021 Base + Committed	PM	ONE HOUR	15:45	17:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	205	100.000
B - Solent Road		ONE HOUR	✓	414	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	577	100.000
D - Marples Way		ONE HOUR	✓	81	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	91	113	1
	B - Solent Road	127	0	269	18
	C - Brockhampton Road (S)	204	363	0	10
	D - Marples Way	14	28	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	2	1	0
	B - Solent Road	3	0	5	6
	C - Brockhampton Road (S)	2	1	0	0
	D - Marples Way	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.84	72.05	4.2	F	188	282
B - Solent Road	0.55	9.46	1.2	A	380	570
C - Brockhampton Road (S)	0.58	7.79	1.4	A	529	794
D - Marples Way	0.82	143.53	3.2	F	74	111

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	154	39	321	354	0.436	151	258	0.0	0.7	17.550	C
B - Solent Road	312	78	113	867	0.359	309	360	0.0	0.6	6.429	A
C - Brockhampton Road (S)	434	109	109	1126	0.386	432	313	0.0	0.6	5.165	A
D - Marples Way	61	15	519	254	0.240	60	22	0.0	0.3	18.448	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	184	46	385	318	0.580	182	309	0.7	1.3	26.122	D
B - Solent Road	372	93	136	854	0.436	371	431	0.6	0.8	7.449	A
C - Brockhampton Road (S)	519	130	131	1114	0.466	518	376	0.6	0.9	6.028	A
D - Marples Way	73	18	623	192	0.379	72	26	0.3	0.6	29.573	D

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	226	56	466	272	0.829	217	377	1.3	3.5	57.256	F
B - Solent Road	456	114	160	840	0.543	454	523	0.8	1.2	9.293	A
C - Brockhampton Road (S)	635	159	160	1097	0.579	633	454	0.9	1.3	7.725	A
D - Marples Way	89	22	762	110	0.812	81	32	0.6	2.6	106.165	F

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	226	56	471	269	0.839	223	379	3.5	4.2	72.048	F
B - Solent Road	456	114	166	836	0.545	456	529	1.2	1.2	9.456	A
C - Brockhampton Road (S)	635	159	161	1097	0.579	635	461	1.3	1.4	7.792	A
D - Marples Way	89	22	764	108	0.822	87	32	2.6	3.2	143.527	F

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	184	46	396	311	0.592	195	313	4.2	1.6	33.133	D
B - Solent Road	372	93	148	847	0.440	374	443	1.2	0.8	7.637	A
C - Brockhampton Road (S)	519	130	132	1113	0.466	521	390	1.4	0.9	6.093	A
D - Marples Way	73	18	626	190	0.383	83	26	3.2	0.7	36.298	E

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	154	39	325	351	0.439	157	261	1.6	0.8	18.835	C
B - Solent Road	312	78	117	864	0.361	313	365	0.8	0.6	6.535	A
C - Brockhampton Road (S)	434	109	110	1126	0.386	435	320	0.9	0.6	5.223	A
D - Marples Way	61	15	524	251	0.243	62	22	0.7	0.3	19.189	C

2021 Base + Committed + Proposed, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A,B,C,D	30.97	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2021 Base + Committed + Proposed	PM	ONE HOUR	15:45	17:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Brockhampton Road (N)		ONE HOUR	✓	208	100.000
B - Solent Road		ONE HOUR	✓	426	100.000
C - Brockhampton Road (S)		ONE HOUR	✓	586	100.000
D - Marples Way		ONE HOUR	✓	81	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	94	113	1
	B - Solent Road	131	0	277	18
	C - Brockhampton Road (S)	204	372	0	10
	D - Marples Way	14	28	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Brockhampton Road (N)	B - Solent Road	C - Brockhampton Road (S)	D - Marples Way
From	A - Brockhampton Road (N)	0	2	1	0
	B - Solent Road	3	0	5	6
	C - Brockhampton Road (S)	2	1	0	0
	D - Marples Way	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Brockhampton Road (N)	0.87	82.50	4.8	F	191	286
B - Solent Road	0.56	9.77	1.3	A	391	586
C - Brockhampton Road (S)	0.59	8.01	1.4	A	538	807
D - Marples Way	0.89	179.40	4.2	F	74	111

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	157	39	328	350	0.448	153	261	0.0	0.8	18.062	C
B - Solent Road	321	80	113	867	0.370	318	368	0.0	0.6	6.532	A
C - Brockhampton Road (S)	441	110	112	1125	0.392	439	319	0.0	0.6	5.228	A
D - Marples Way	61	15	529	248	0.246	60	22	0.0	0.3	19.000	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	187	47	393	313	0.597	185	313	0.8	1.4	27.479	D
B - Solent Road	383	96	136	854	0.448	382	442	0.6	0.8	7.615	A
C - Brockhampton Road (S)	527	132	135	1112	0.474	526	383	0.6	0.9	6.131	A
D - Marples Way	73	18	634	185	0.393	72	26	0.3	0.6	31.302	D

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	229	57	474	268	0.855	219	381	1.4	4.0	62.969	F
B - Solent Road	469	117	158	841	0.558	467	534	0.8	1.2	9.587	A
C - Brockhampton Road (S)	645	161	164	1095	0.589	643	461	0.9	1.4	7.930	A
D - Marples Way	89	22	776	101	0.879	79	32	0.6	3.2	127.879	F

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	229	57	480	264	0.867	226	384	4.0	4.8	82.497	F
B - Solent Road	469	117	165	837	0.560	469	541	1.2	1.3	9.774	A
C - Brockhampton Road (S)	645	161	165	1095	0.589	645	469	1.4	1.4	8.006	A
D - Marples Way	89	22	778	100	0.892	85	32	3.2	4.2	179.403	F

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	187	47	407	305	0.613	199	317	4.8	1.7	37.263	E
B - Solent Road	383	96	151	845	0.453	385	456	1.3	0.8	7.850	A
C - Brockhampton Road (S)	527	132	135	1111	0.474	529	400	1.4	0.9	6.199	A
D - Marples Way	73	18	638	183	0.397	87	26	4.2	0.7	41.853	E

17:00 - 17:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - Brockhampton Road (N)	157	39	332	347	0.451	160	264	1.7	0.9	19.558	C
B - Solent Road	321	80	118	864	0.371	322	375	0.8	0.6	6.648	A
C - Brockhampton Road (S)	441	110	113	1124	0.392	442	326	0.9	0.7	5.287	A
D - Marples Way	61	15	534	245	0.249	62	22	0.7	0.3	19.836	C

LinSig V1 style report

User and Project Details

Project:	
Title:	
Location:	
File name:	Havant Linsig provided by LA.lsg3x
Author:	
Company:	
Address:	
Notes:	

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	Filter	A	0	0
F	Pedestrian		6	6
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		6	6

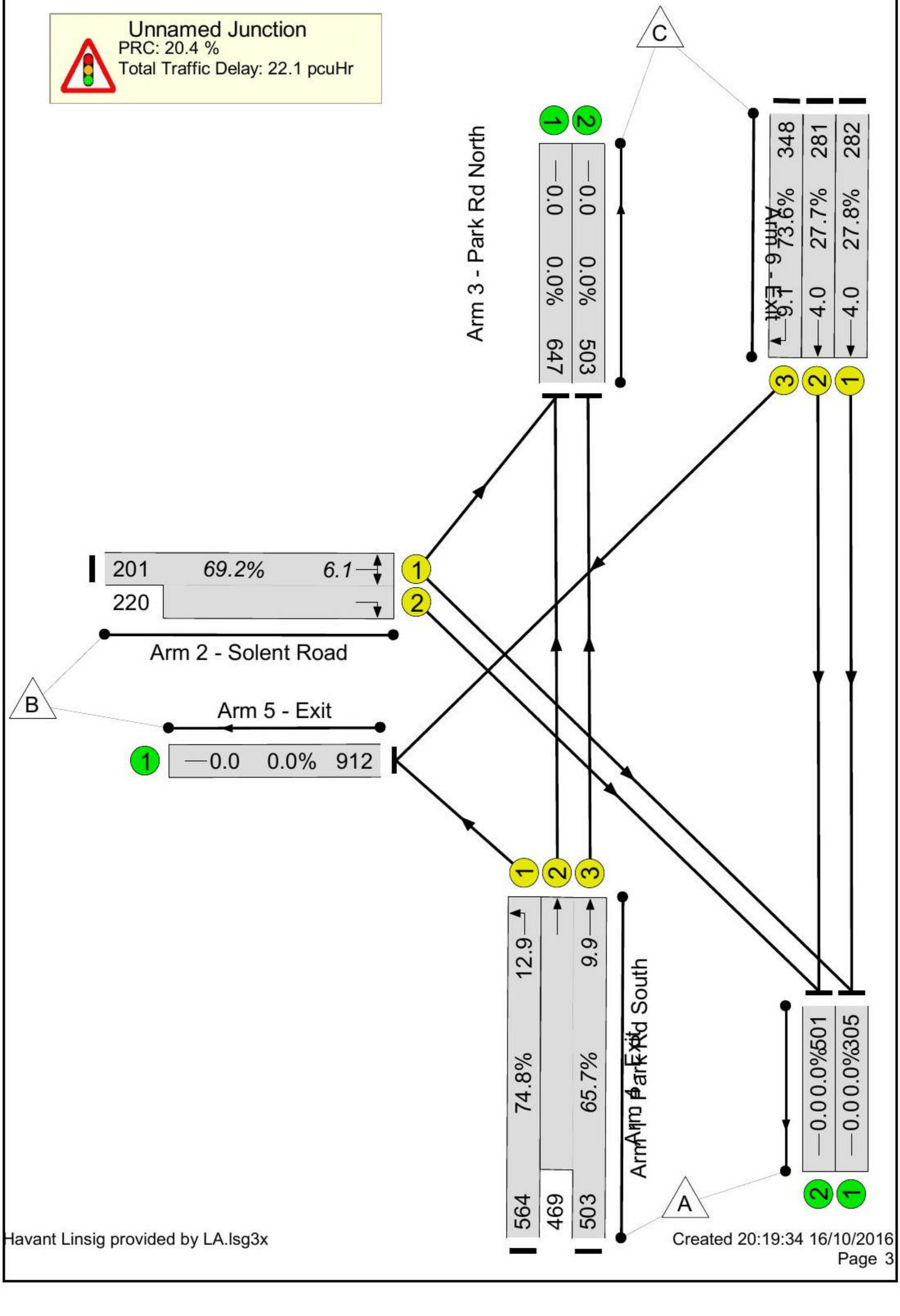
Scenario 1: 'AM OBSERVED 2016' (FG1: '2016 AM OBSERVED', Plan 1: 'With Phase E')

Network Layout Diagram

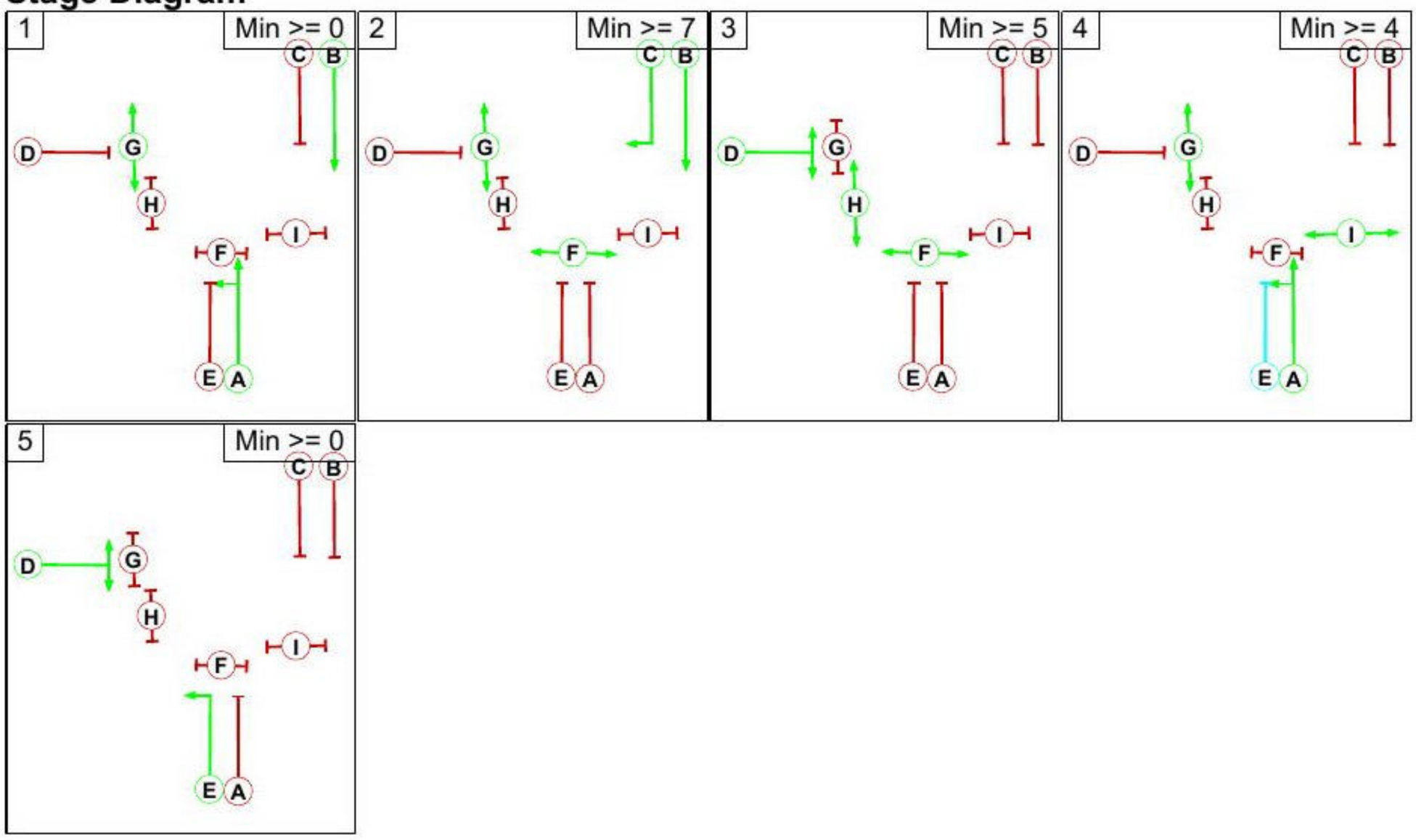
Unnamed Junction

PRC: 20.4 %

Total Traffic Delay: 22.1 pcuHr



Stage Diagram



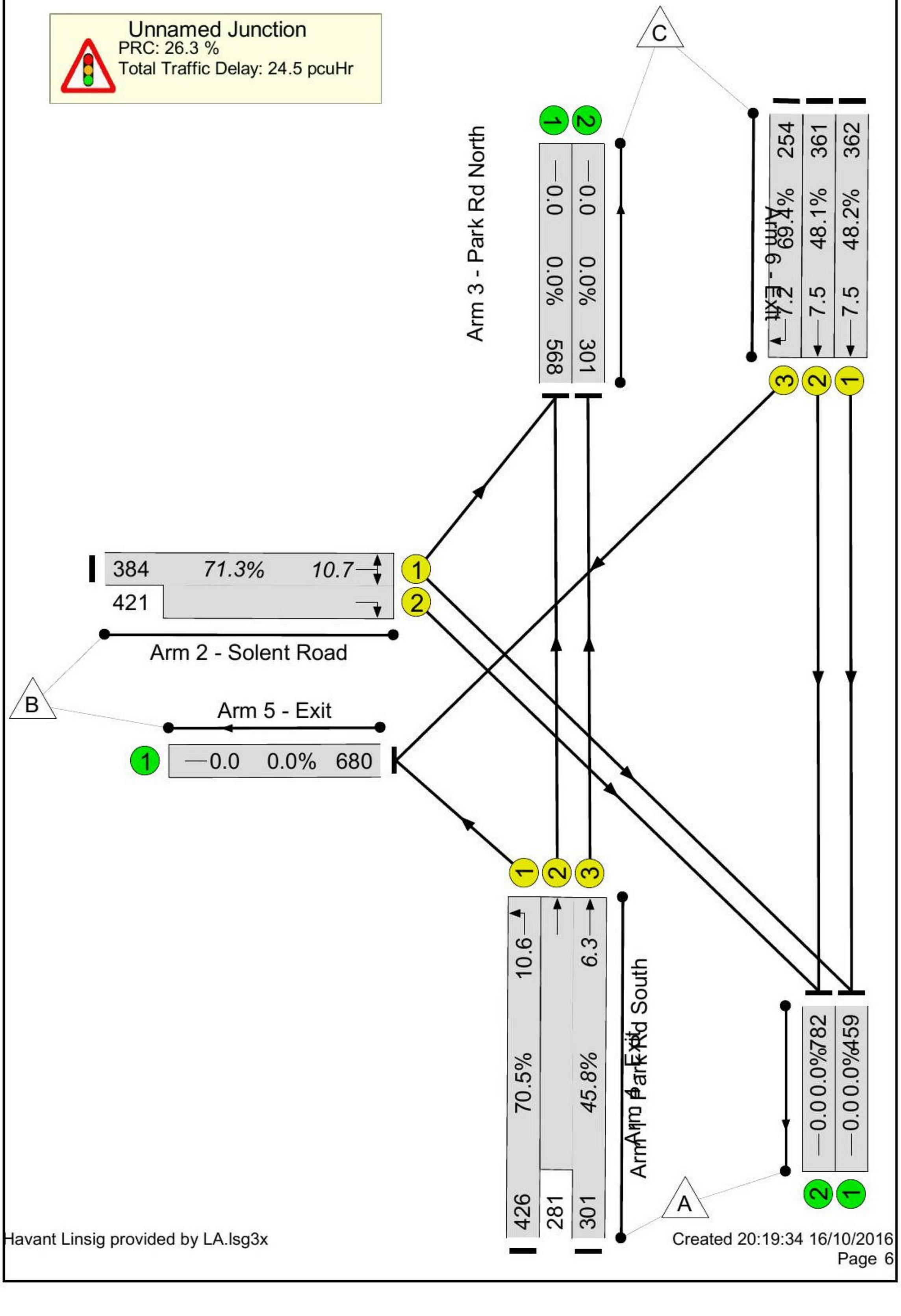
Scenario 2: 'PM OBSERVED 2016' (FG2: '2016 PM OBSERVED', Plan 1: 'With Phase E')

Network Layout Diagram

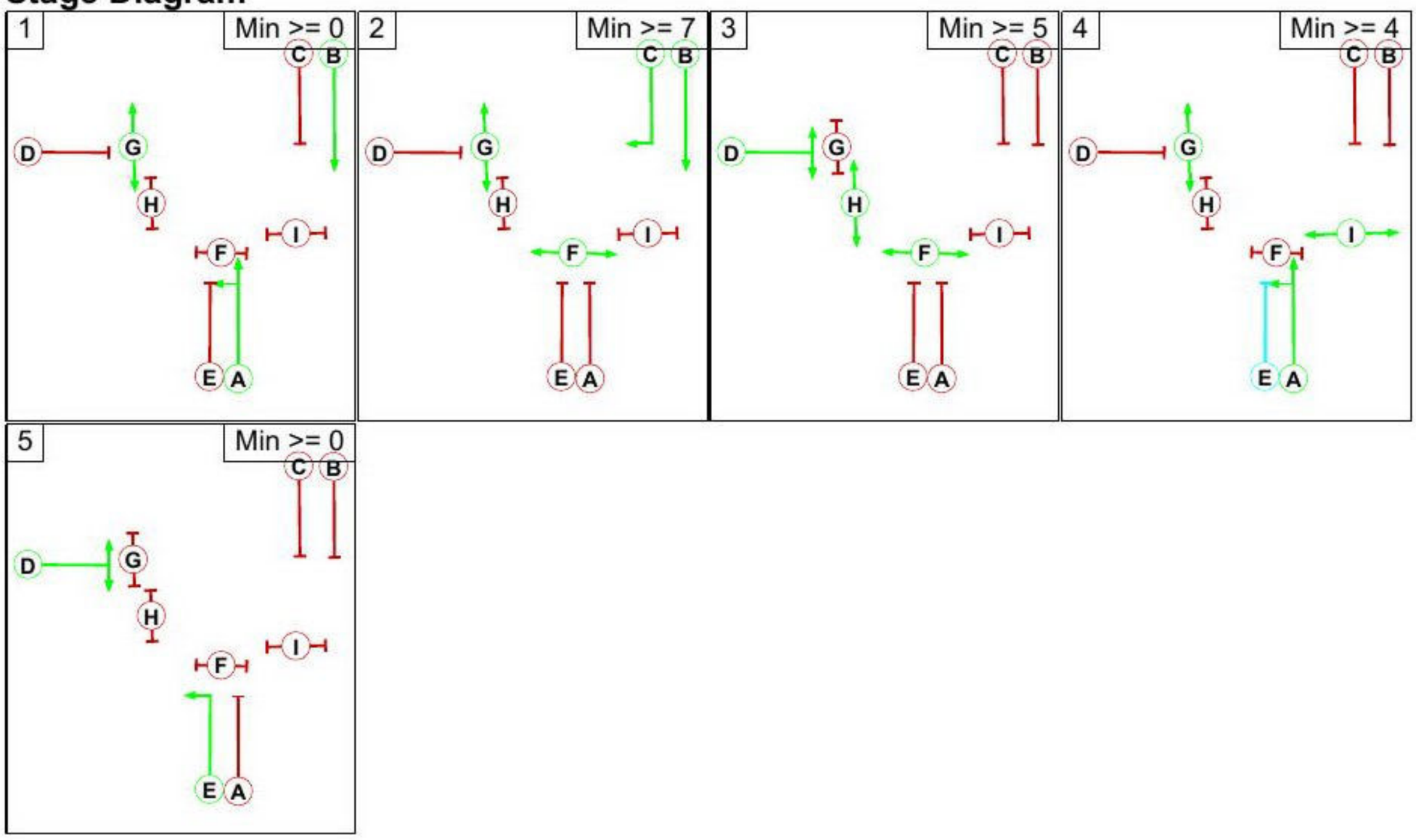
Unnamed Junction

PRC: 26.3 %

Total Traffic Delay: 24.5 pcuHr



Stage Diagram



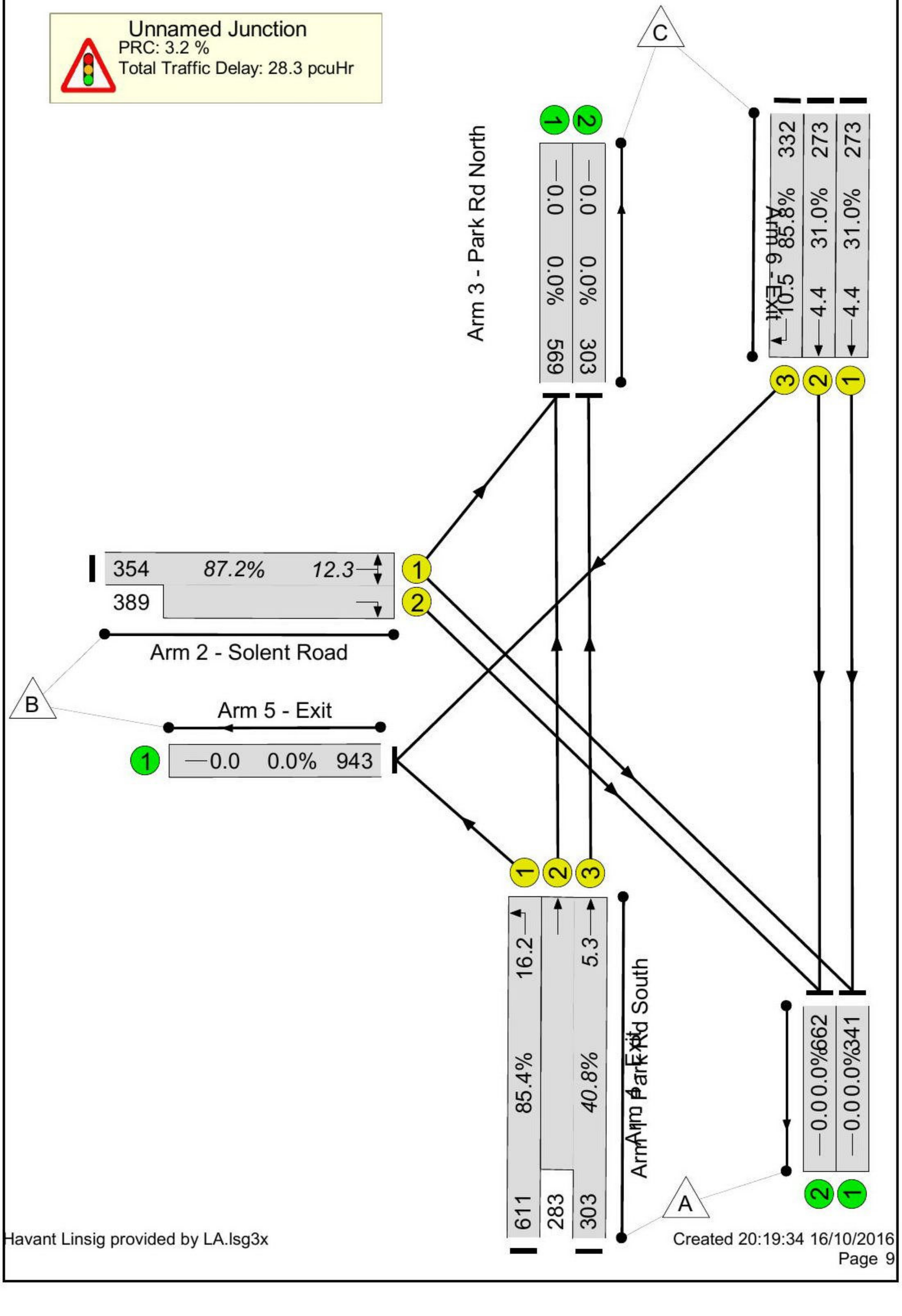
Scenario 3: 'SAT OBSERVED 2016' (FG3: '2016 SAT OBSERVED', Plan 1: 'With Phase E')

Network Layout Diagram

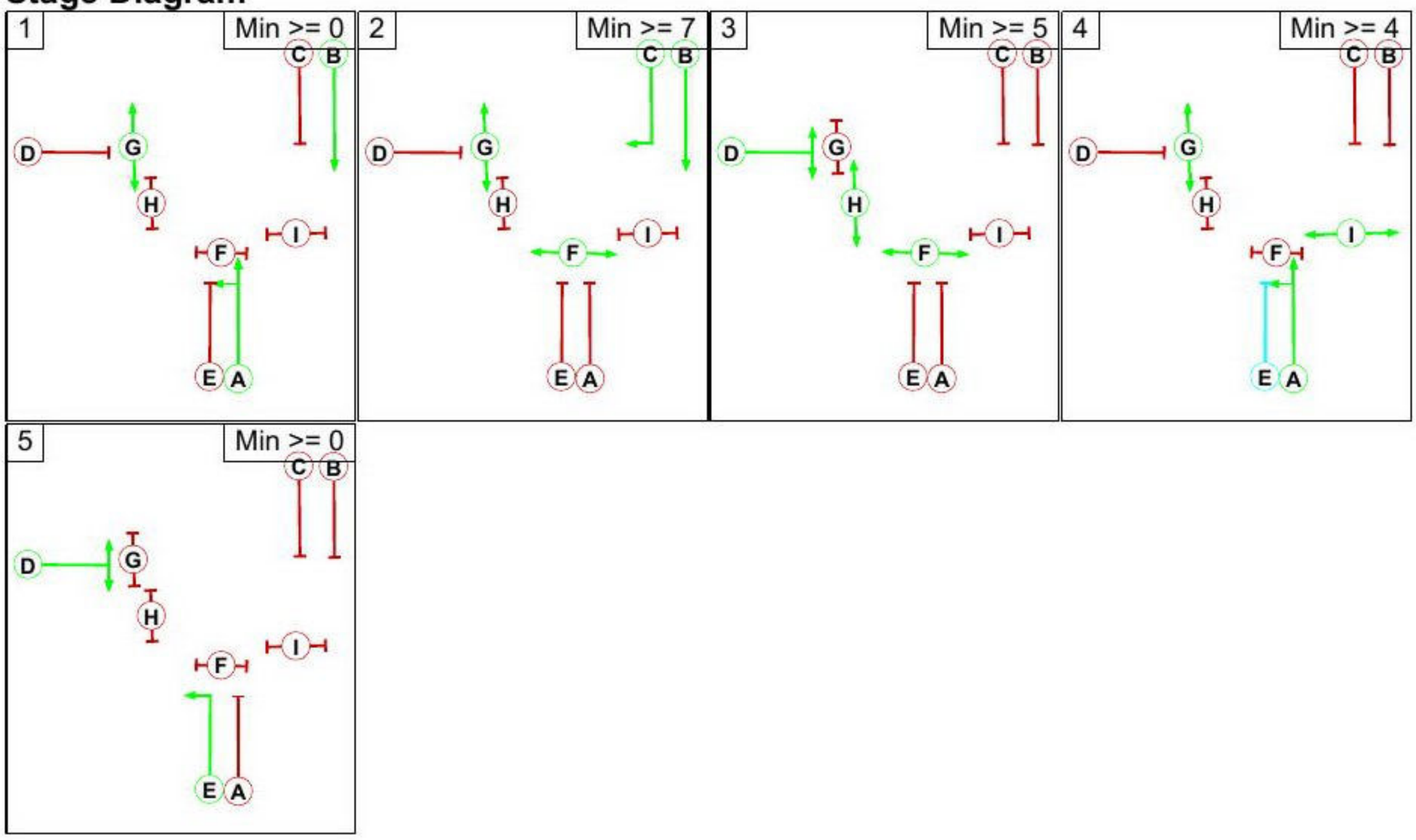
Unnamed Junction

PRC: 3.2 %

Total Traffic Delay: 28.3 pcuHr



Stage Diagram



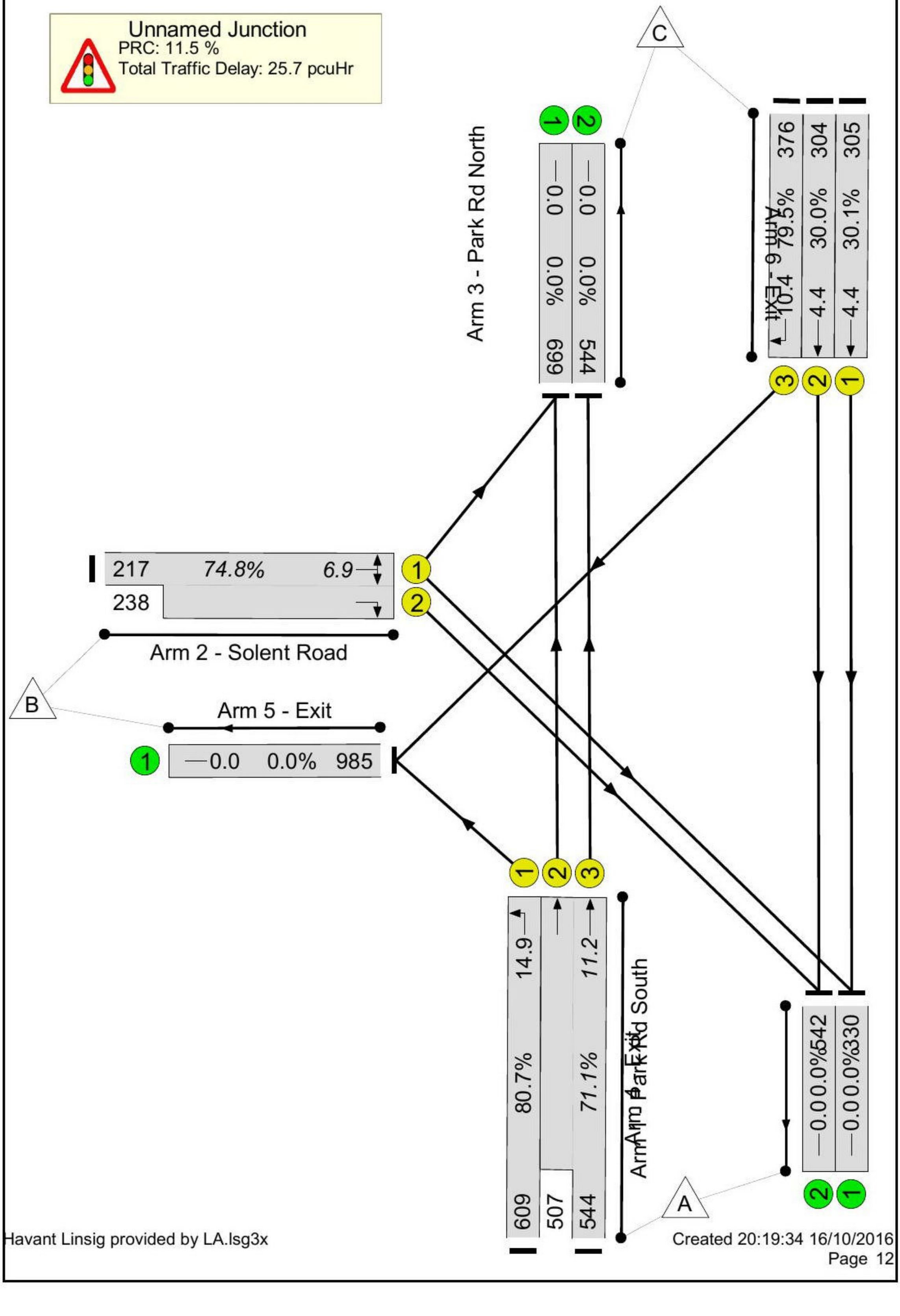
Scenario 4: 'AM BASE 2021' (FG4: '2021 AM BASE', Plan 1: 'With Phase E')

Network Layout Diagram

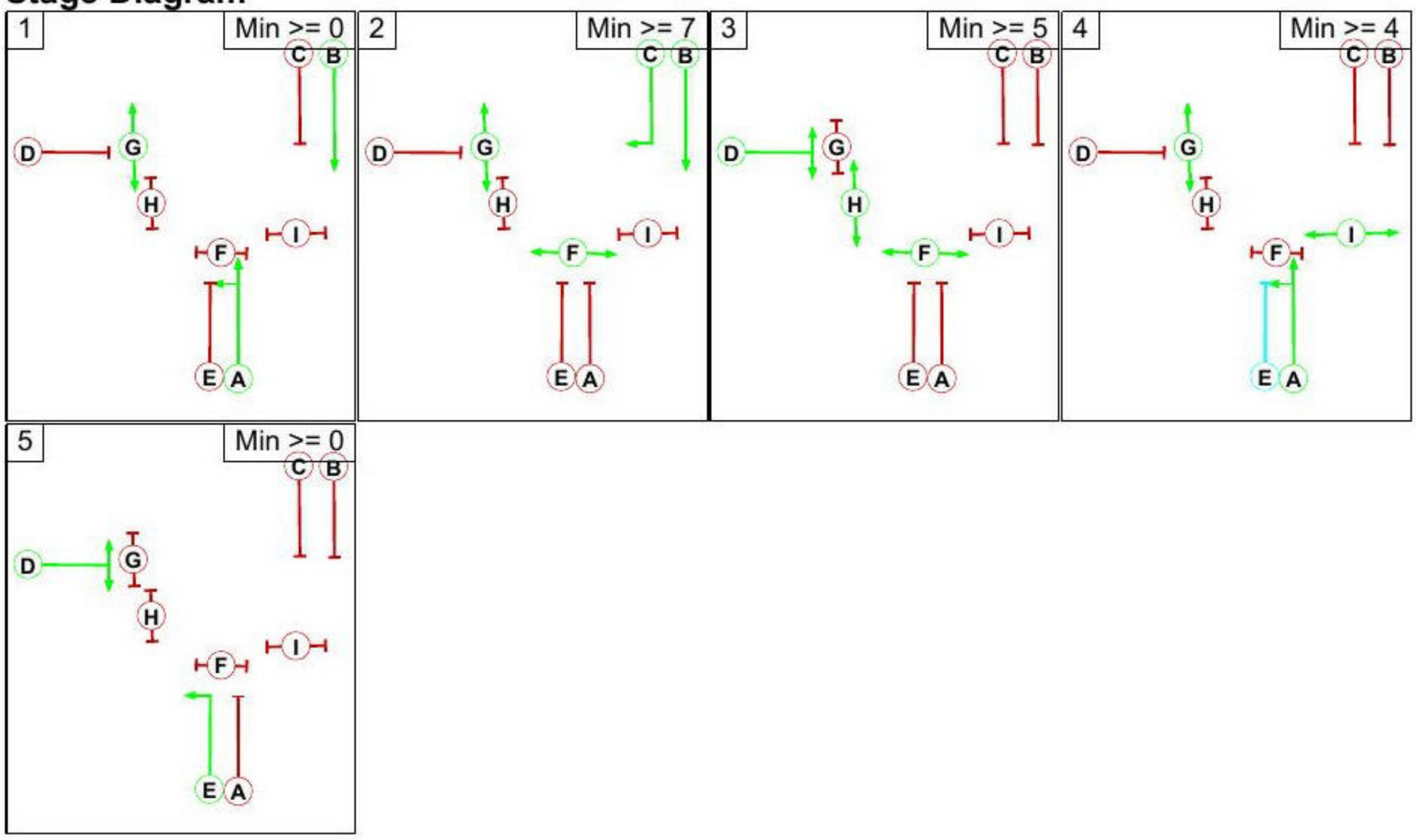
Unnamed Junction

PRC: 11.5 %

Total Traffic Delay: 25.7 pcuHr



Stage Diagram



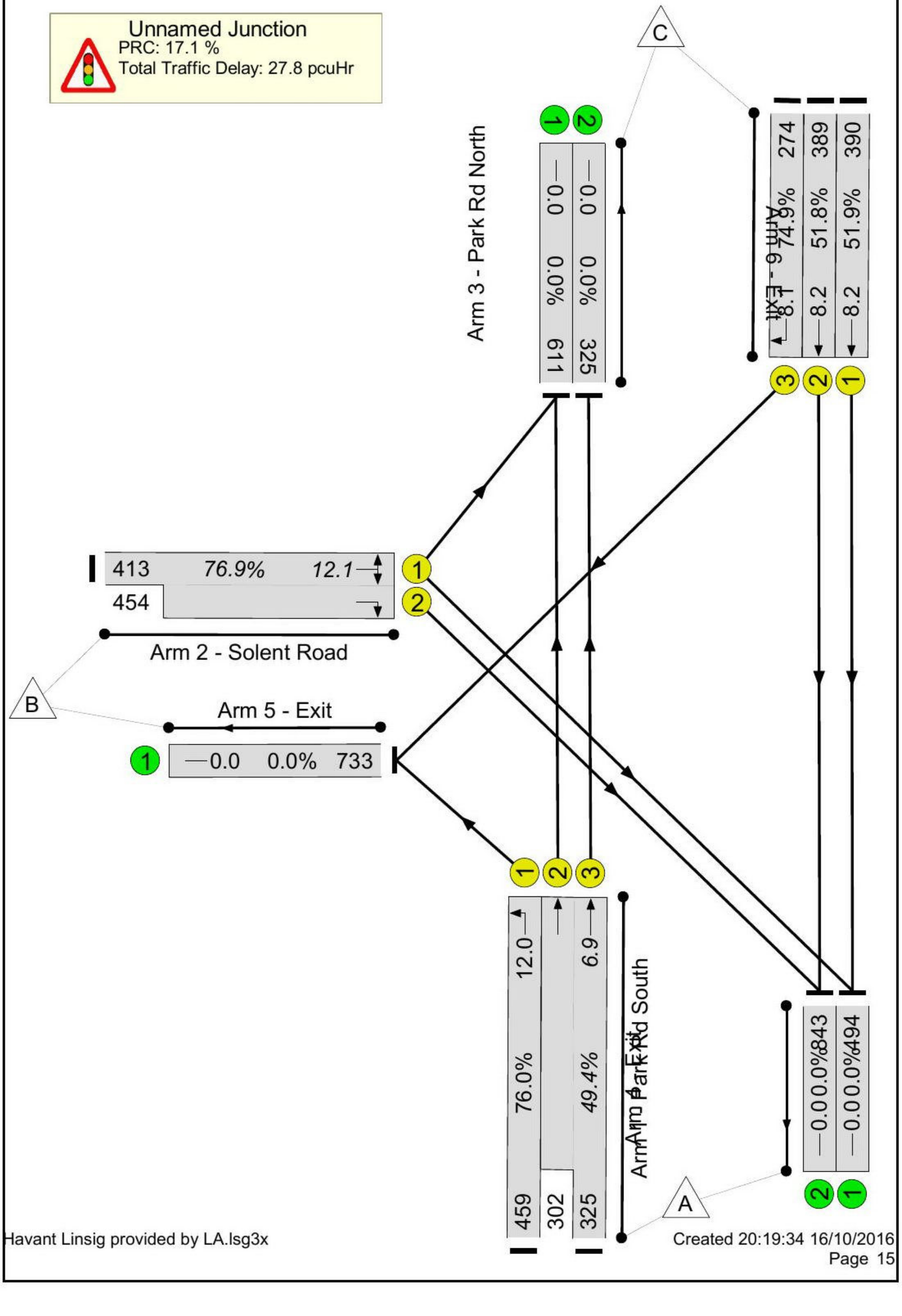
Scenario 5: 'PM BASE 2021' (FG5: '2021 PM BASE', Plan 1: 'With Phase E')

Network Layout Diagram

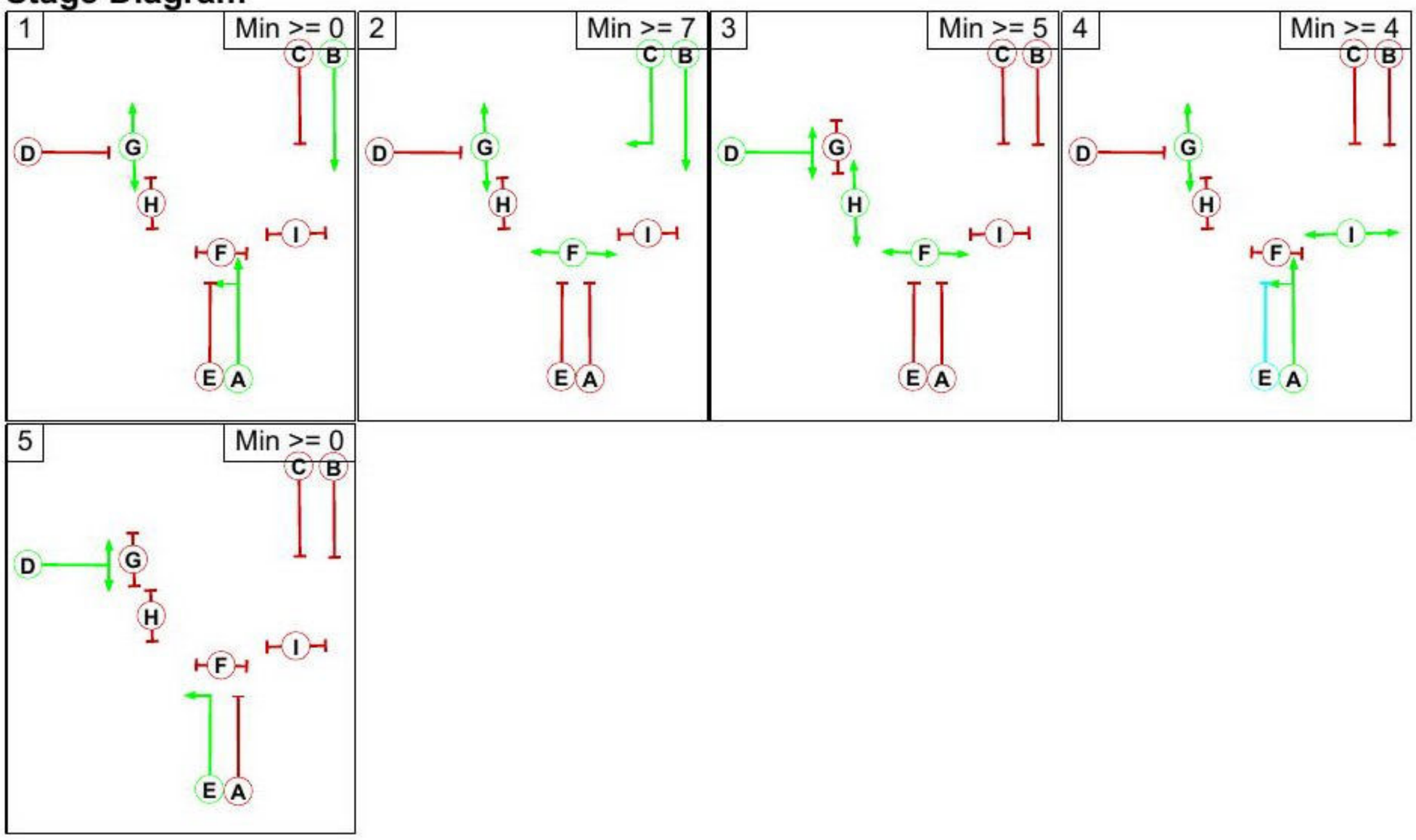
Unnamed Junction

PRC: 17.1 %

Total Traffic Delay: 27.8 pcuHr



Stage Diagram



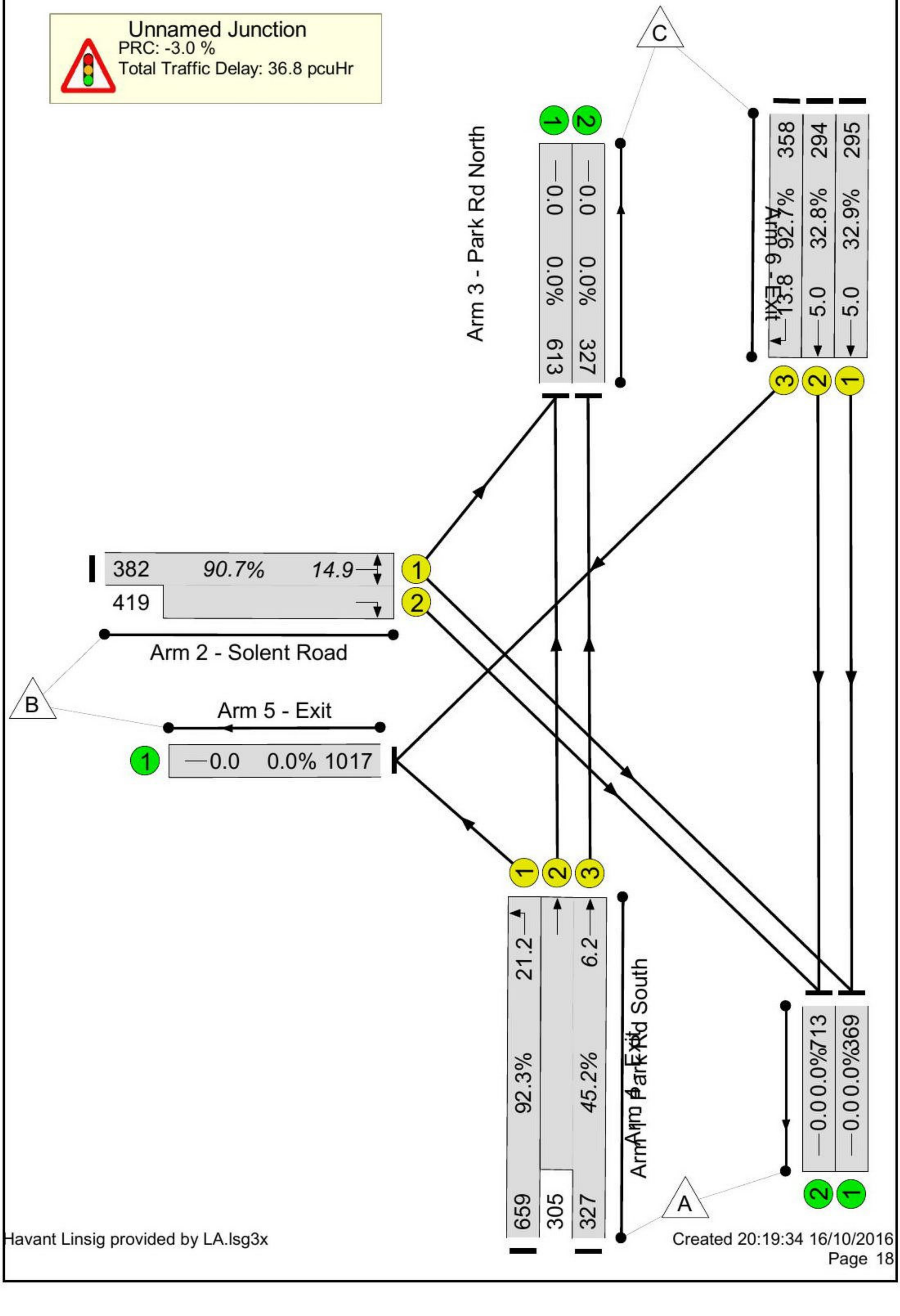
Scenario 6: 'SAT BASE 2021' (FG6: '2021 SAT BASE', Plan 1: 'With Phase E')

Network Layout Diagram

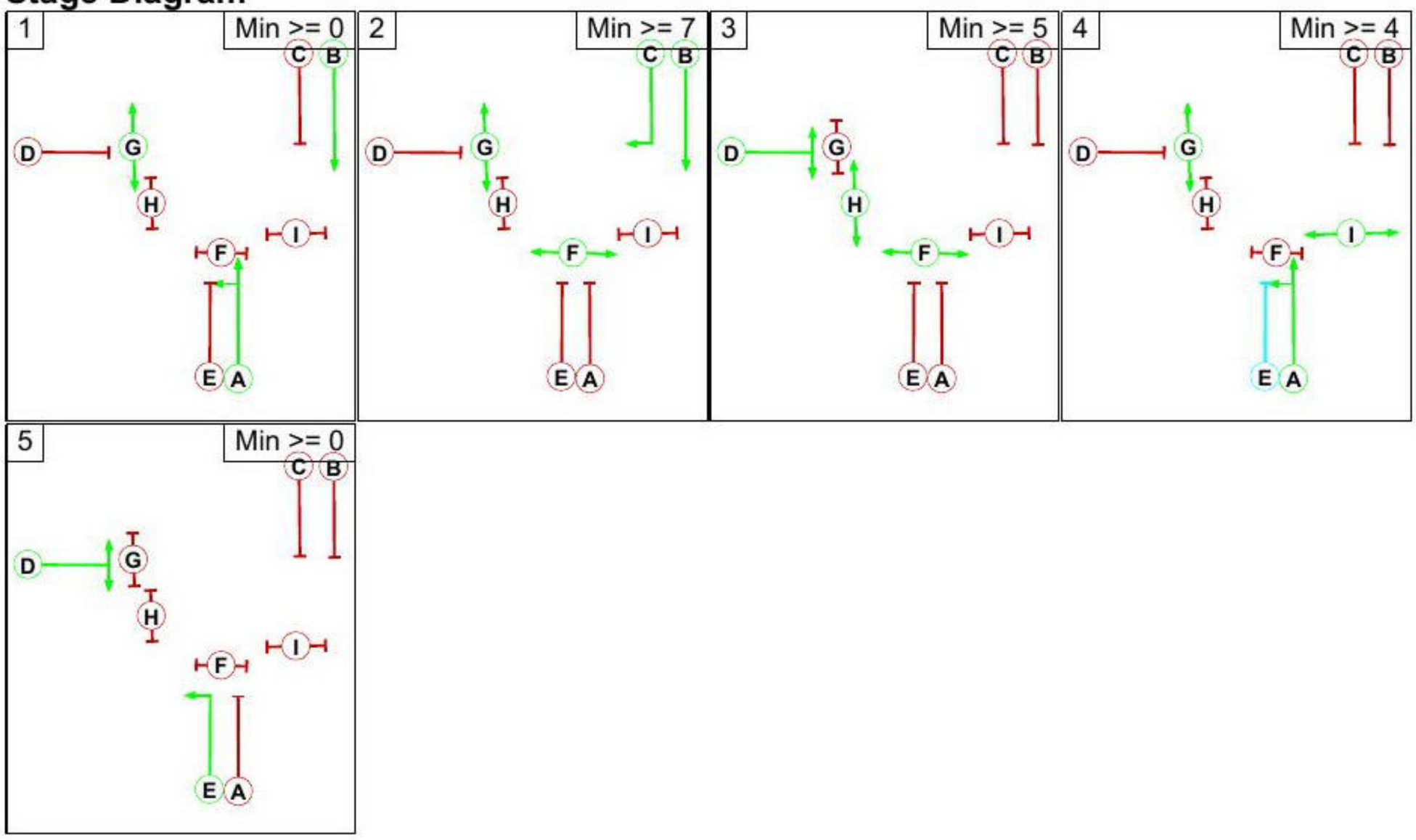
Unnamed Junction

PRC: -3.0 %

Total Traffic Delay: 36.8 pcuHr



Stage Diagram



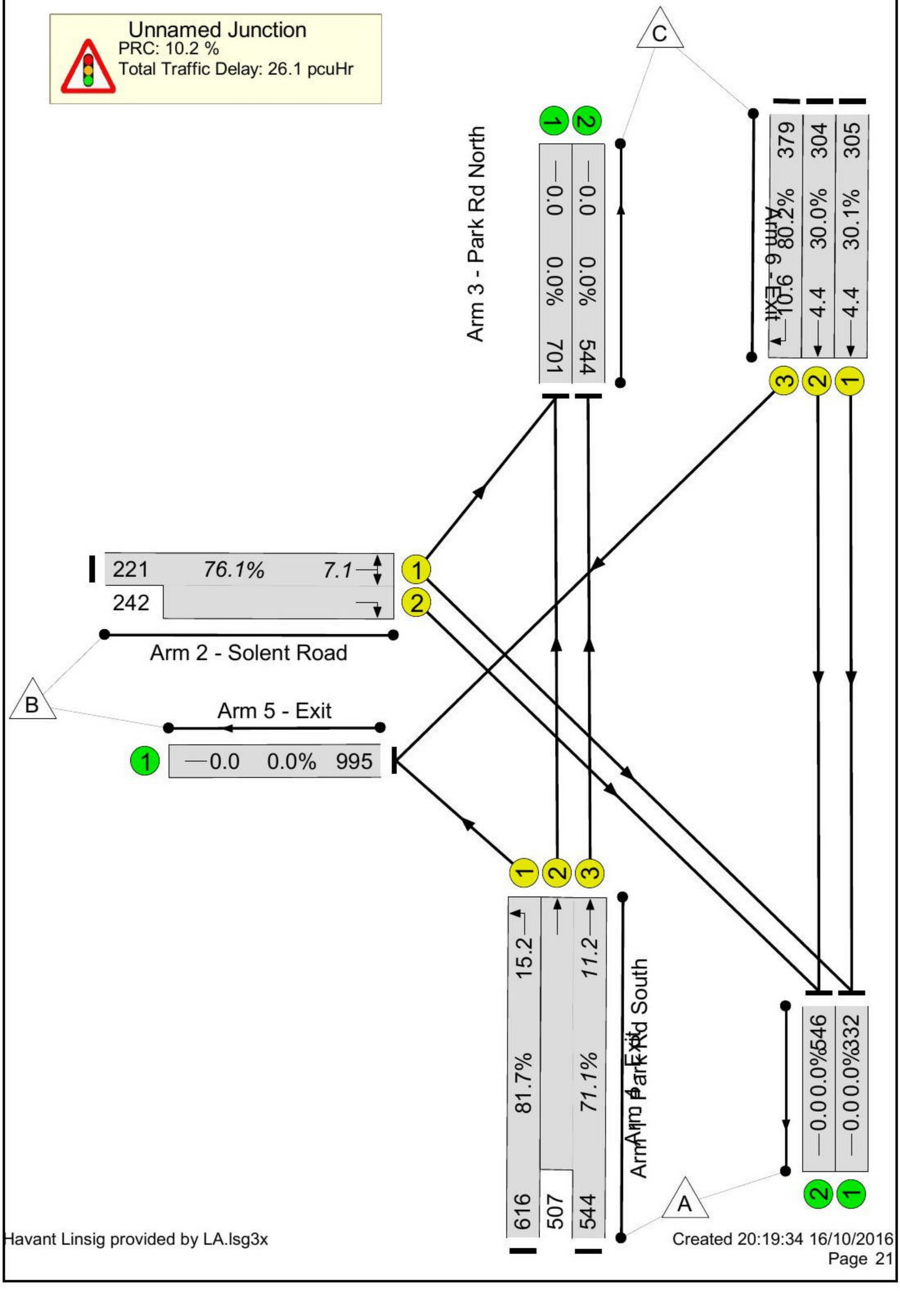
Scenario 13: 'AM BASE + COMMIT 2021' (FG7: '2021 AM BASE + COMMITTED', Plan 1: 'With Phase E')

Network Layout Diagram

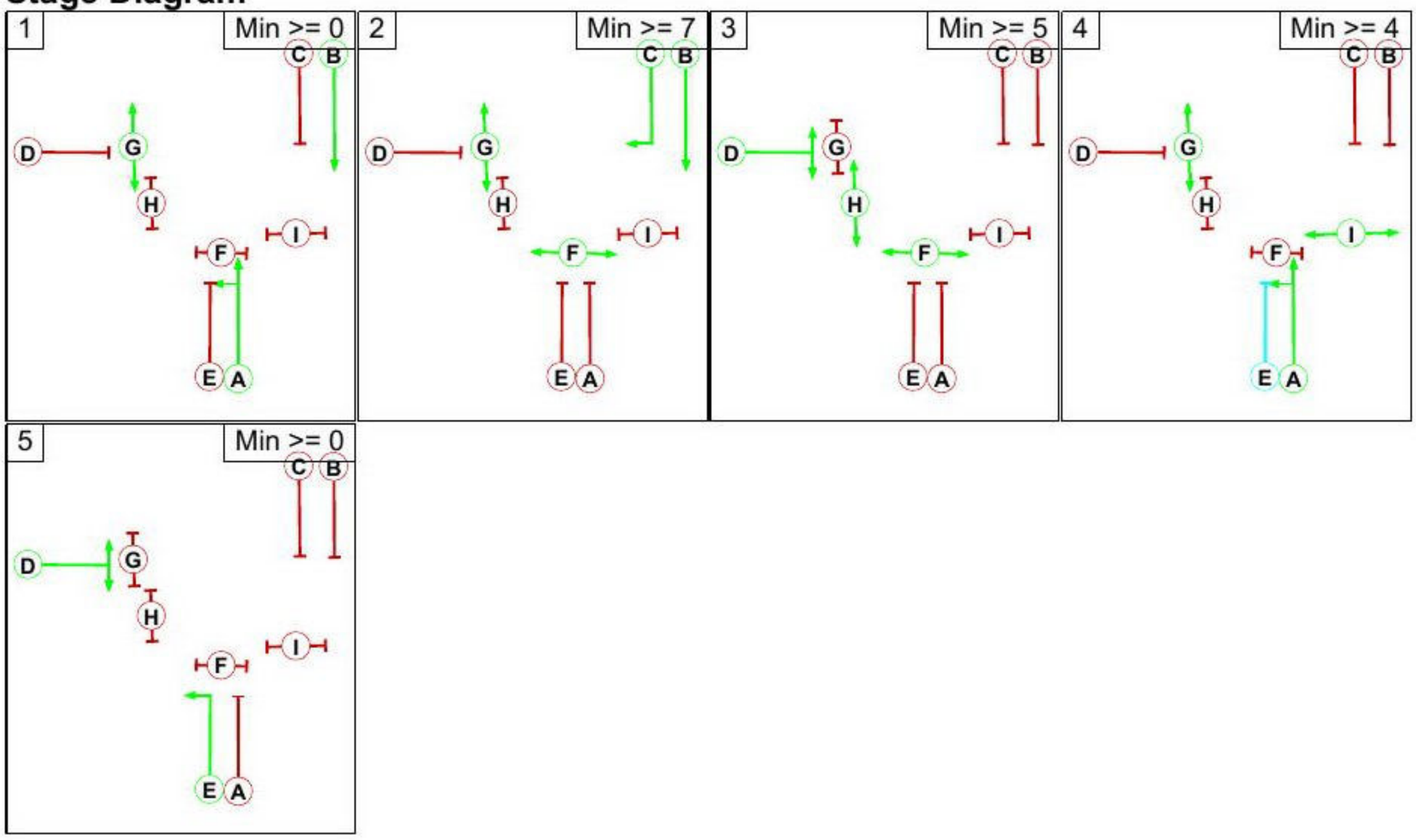
Unnamed Junction

PRC: 10.2 %

Total Traffic Delay: 26.1 pcuHr



Stage Diagram



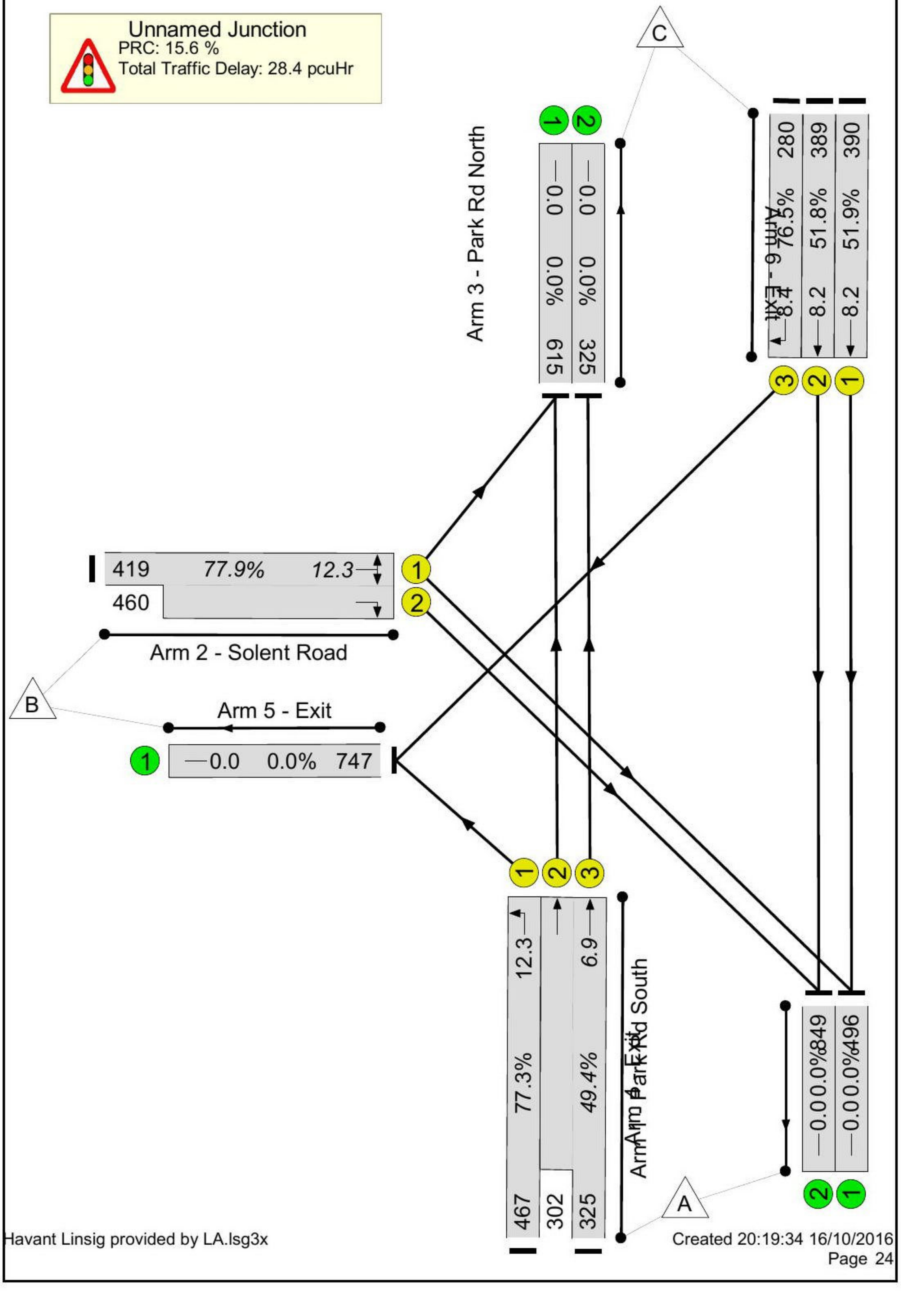
Scenario 14: 'PM BASE + COMMIT 2021' (FG8: '2021 PM BASE + COMMITTED', Plan 1: 'With Phase E')

Network Layout Diagram

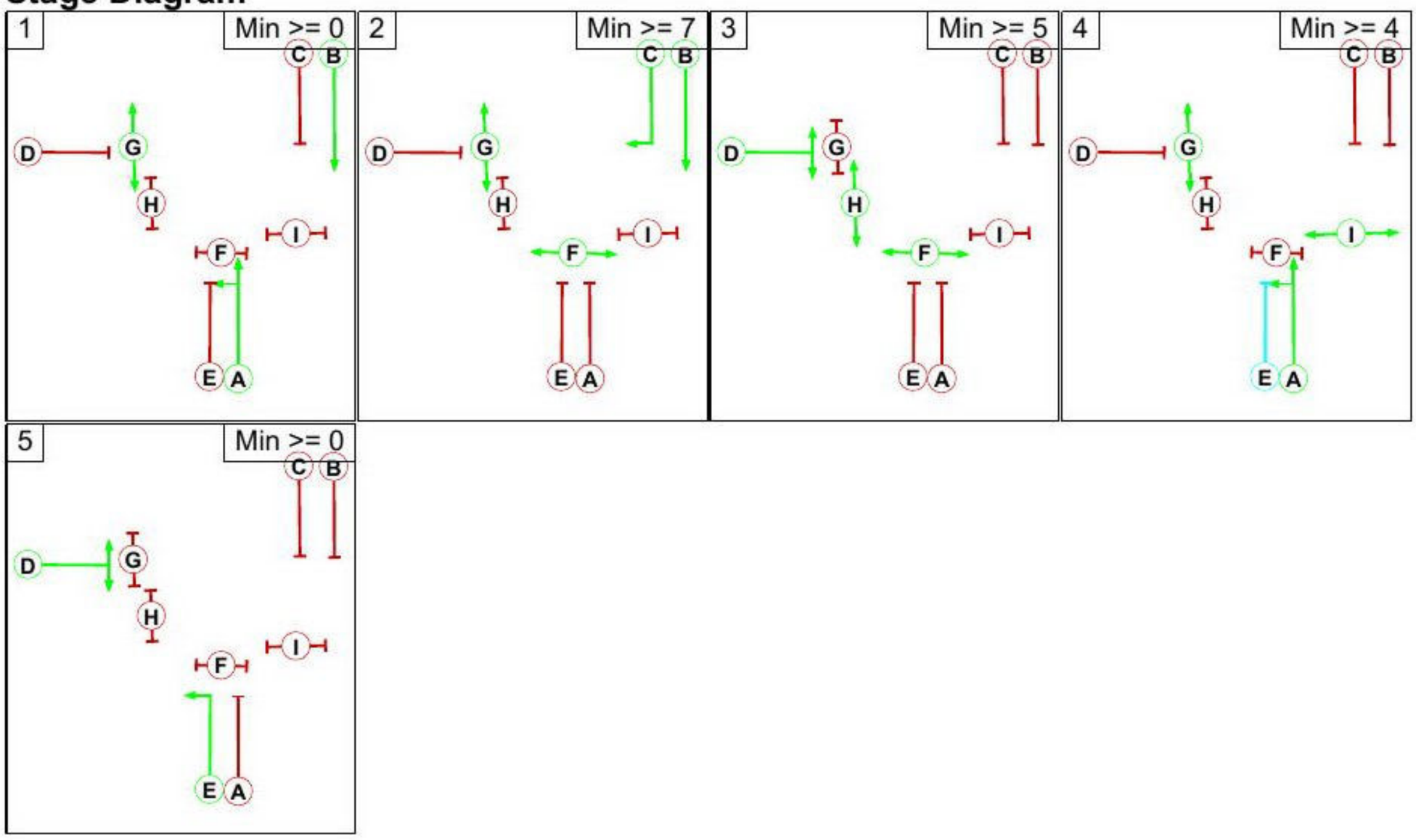
Unnamed Junction

PRC: 15.6 %

Total Traffic Delay: 28.4 pcuHr



Stage Diagram



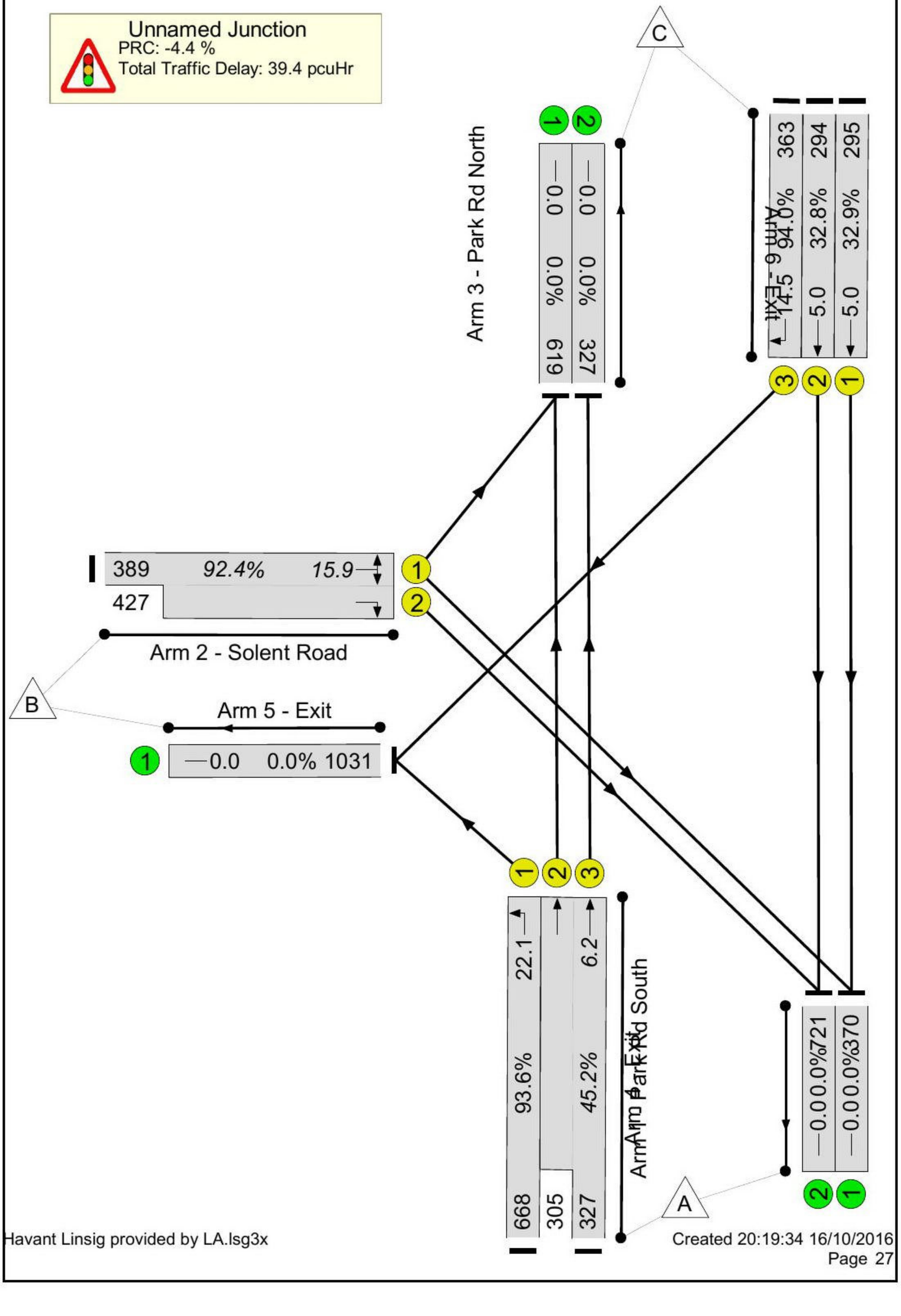
Scenario 15: 'SAT BASE + COMMIT 2021' (FG9: '2021 SAT BASE + COMMITTED', Plan 1: 'With Phase E')

Network Layout Diagram

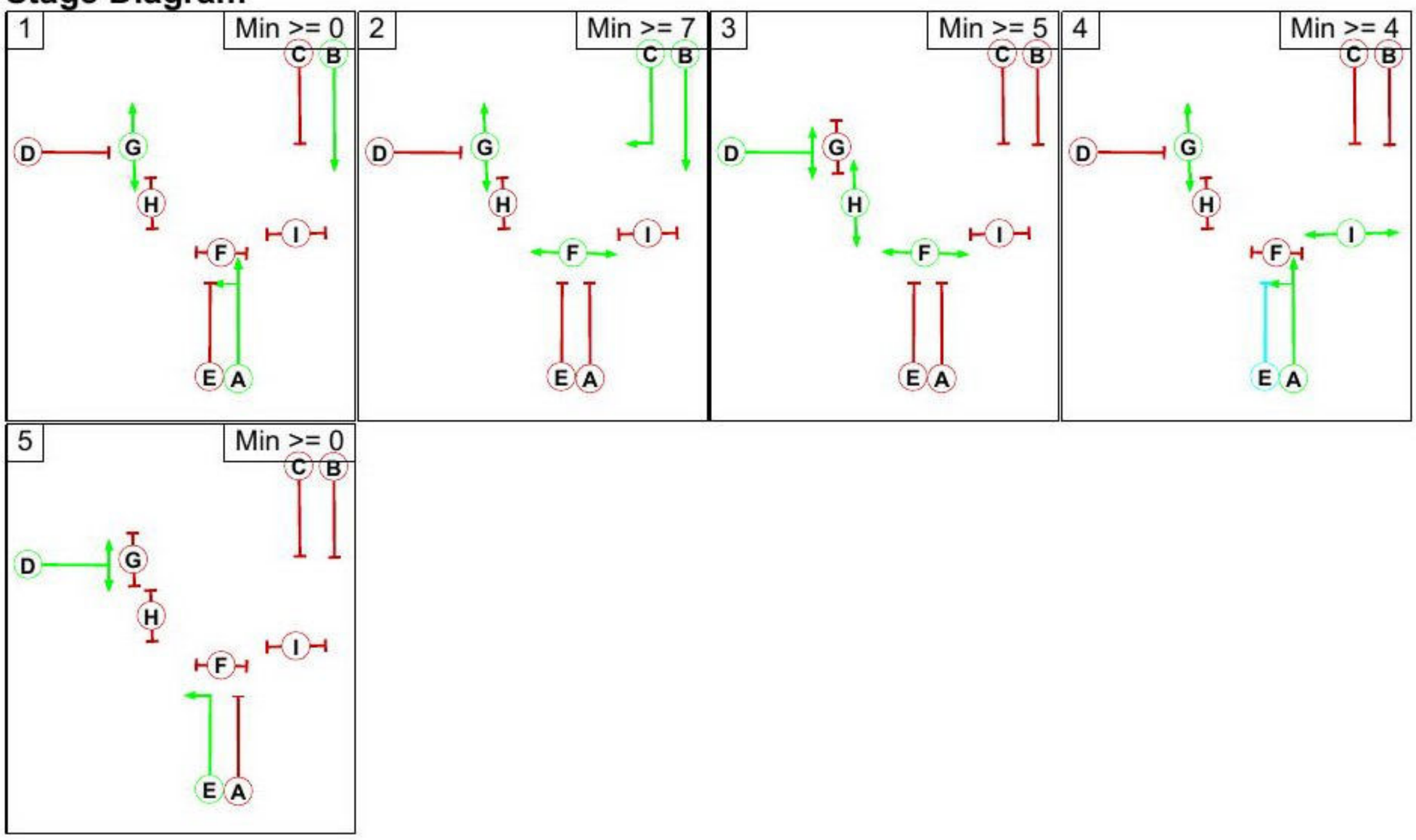
Unnamed Junction

PRC: -4.4 %

Total Traffic Delay: 39.4 pcuHr



Stage Diagram



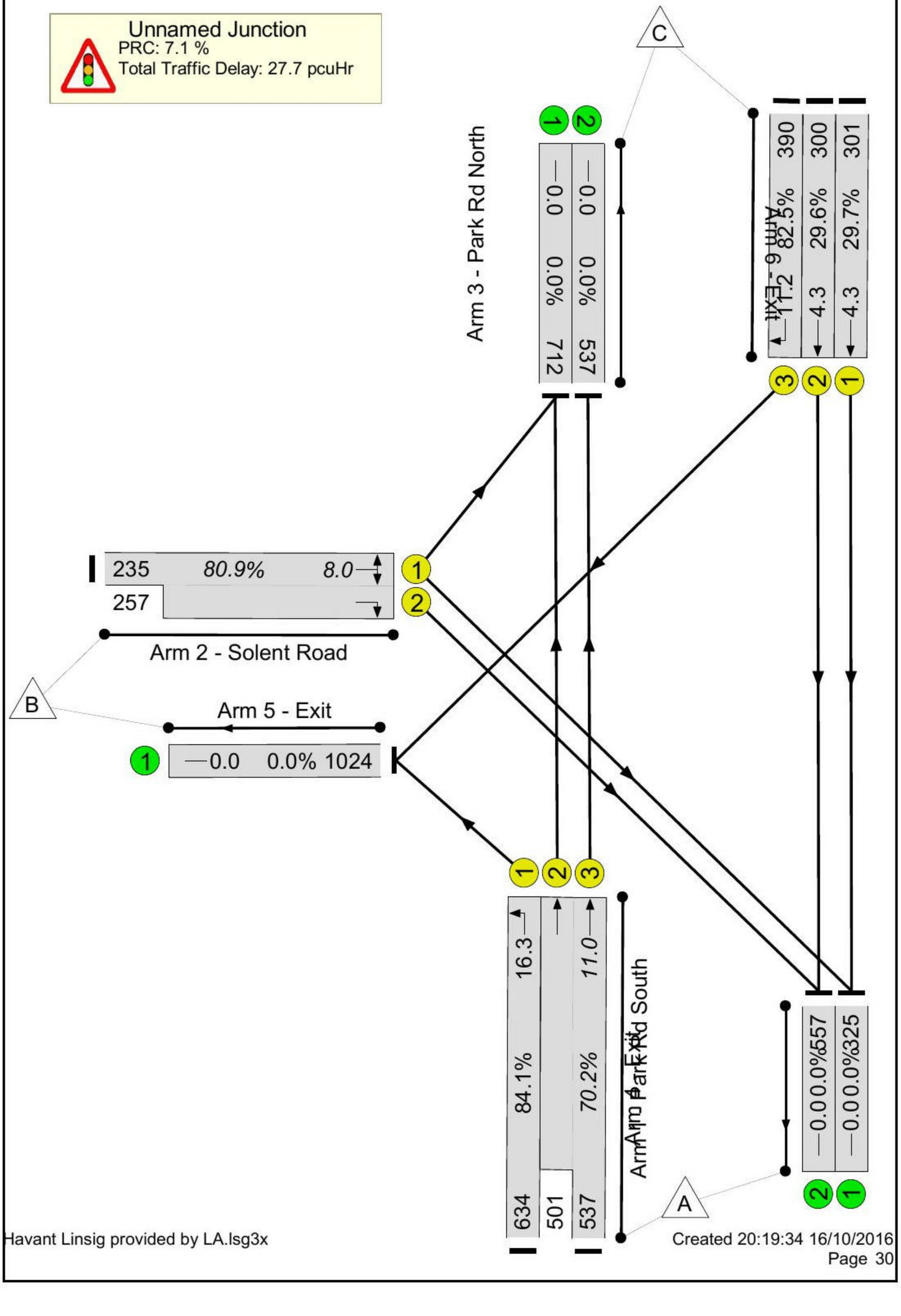
Scenario 16: 'AM BASE + COMMIT + PRO 2021' (FG10: '2021 AM BASE+ COMMITTED + PRO', Plan 1: 'With Phase E')

Network Layout Diagram

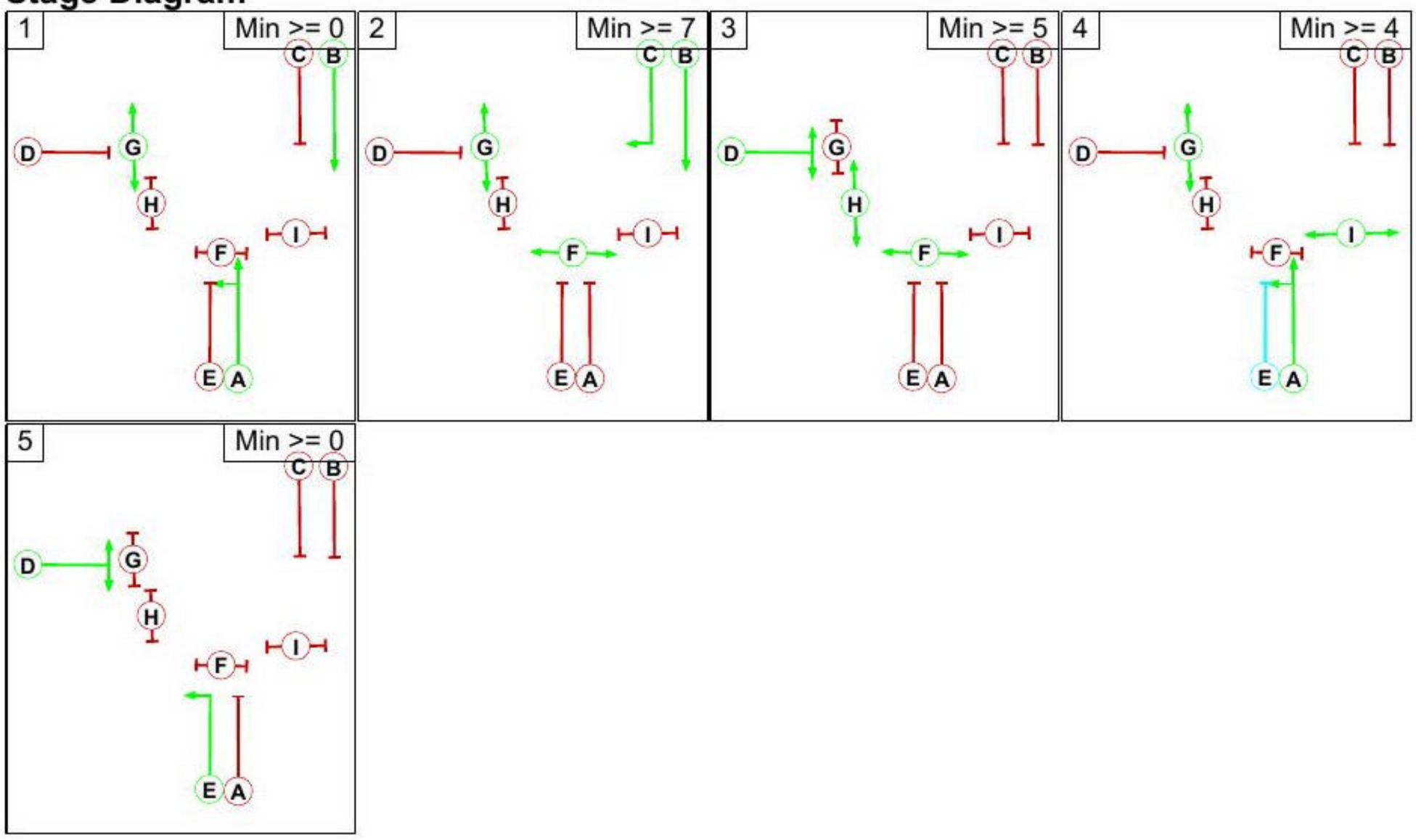
Unnamed Junction

PRC: 7.1 %

Total Traffic Delay: 27.7 pcuHr



Stage Diagram



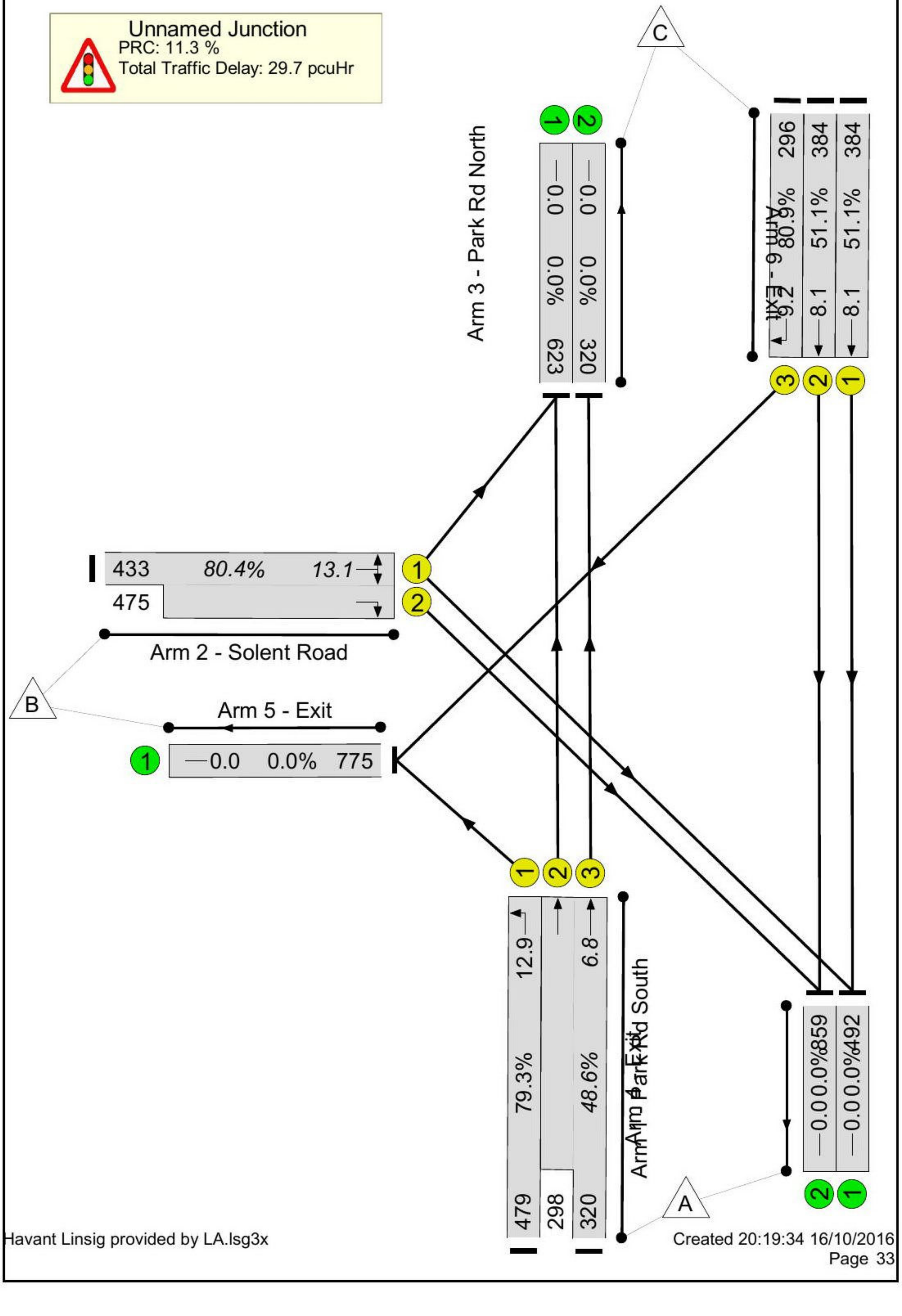
Scenario 17: 'PM BASE + COMMIT + PRO 2021' (FG11: '2021 PM BASE + COMMITTED + PRO', Plan 1: 'With Phase E')

Network Layout Diagram

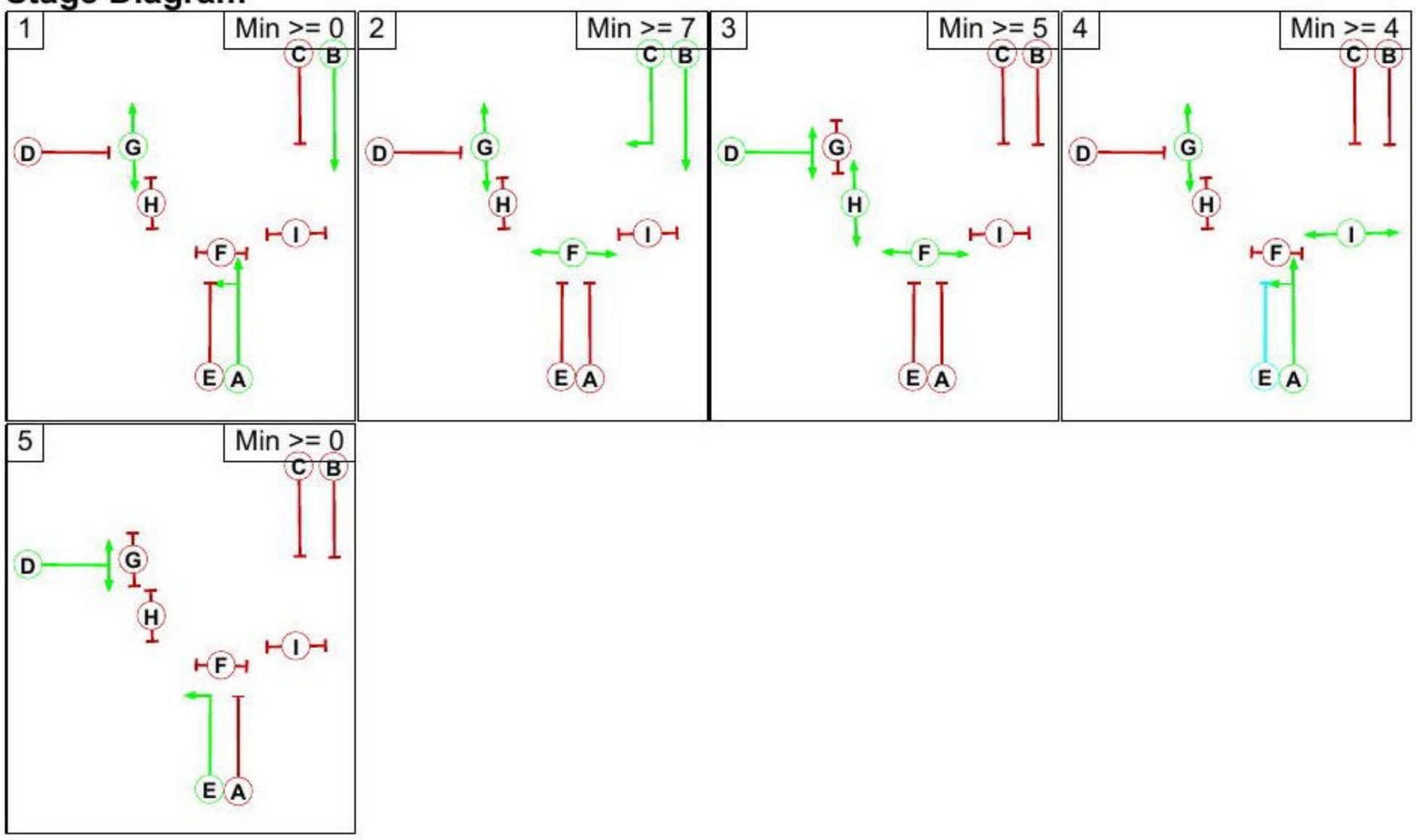
Unnamed Junction

PRC: 11.3 %

Total Traffic Delay: 29.7 pcuHr

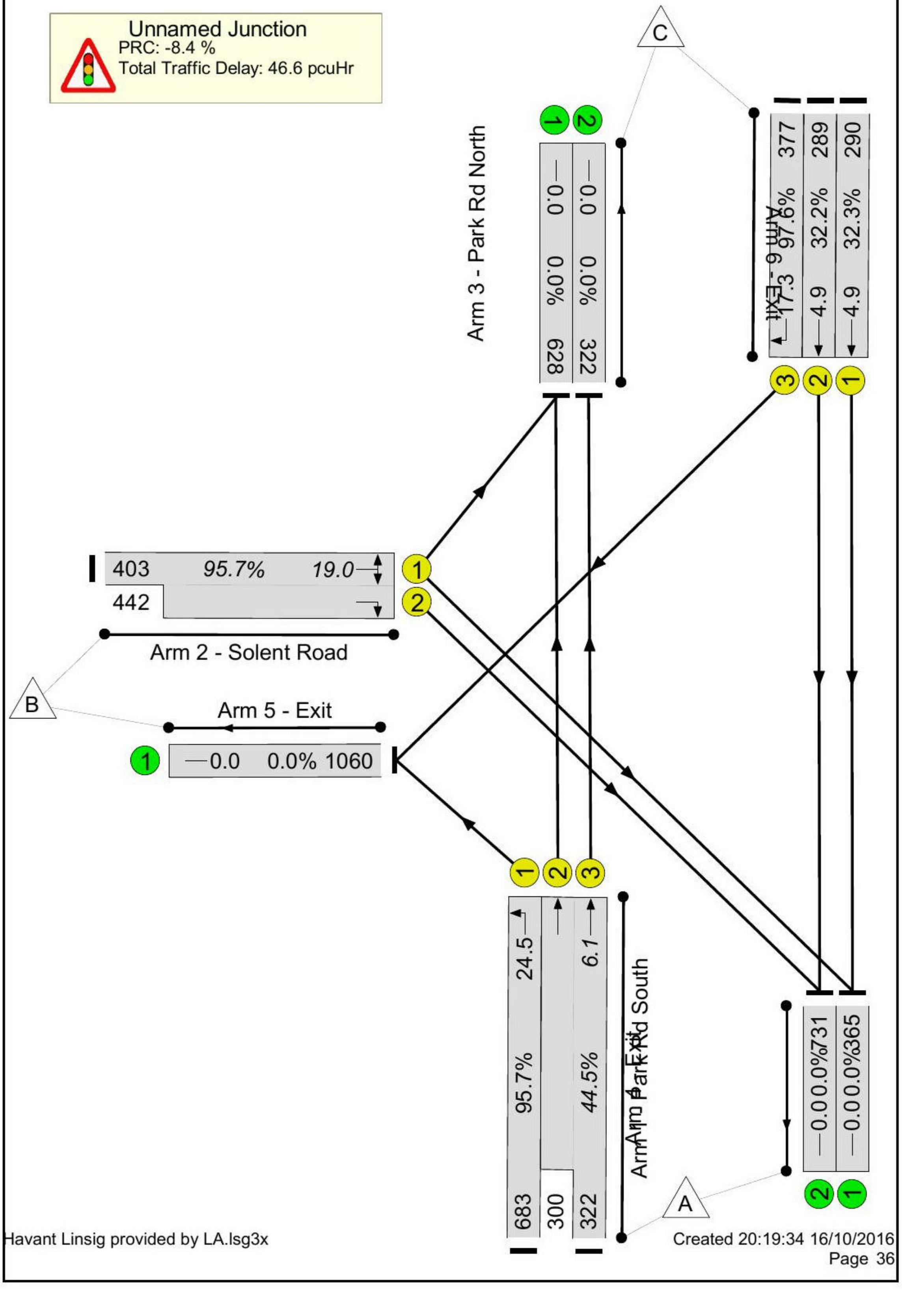


Stage Diagram

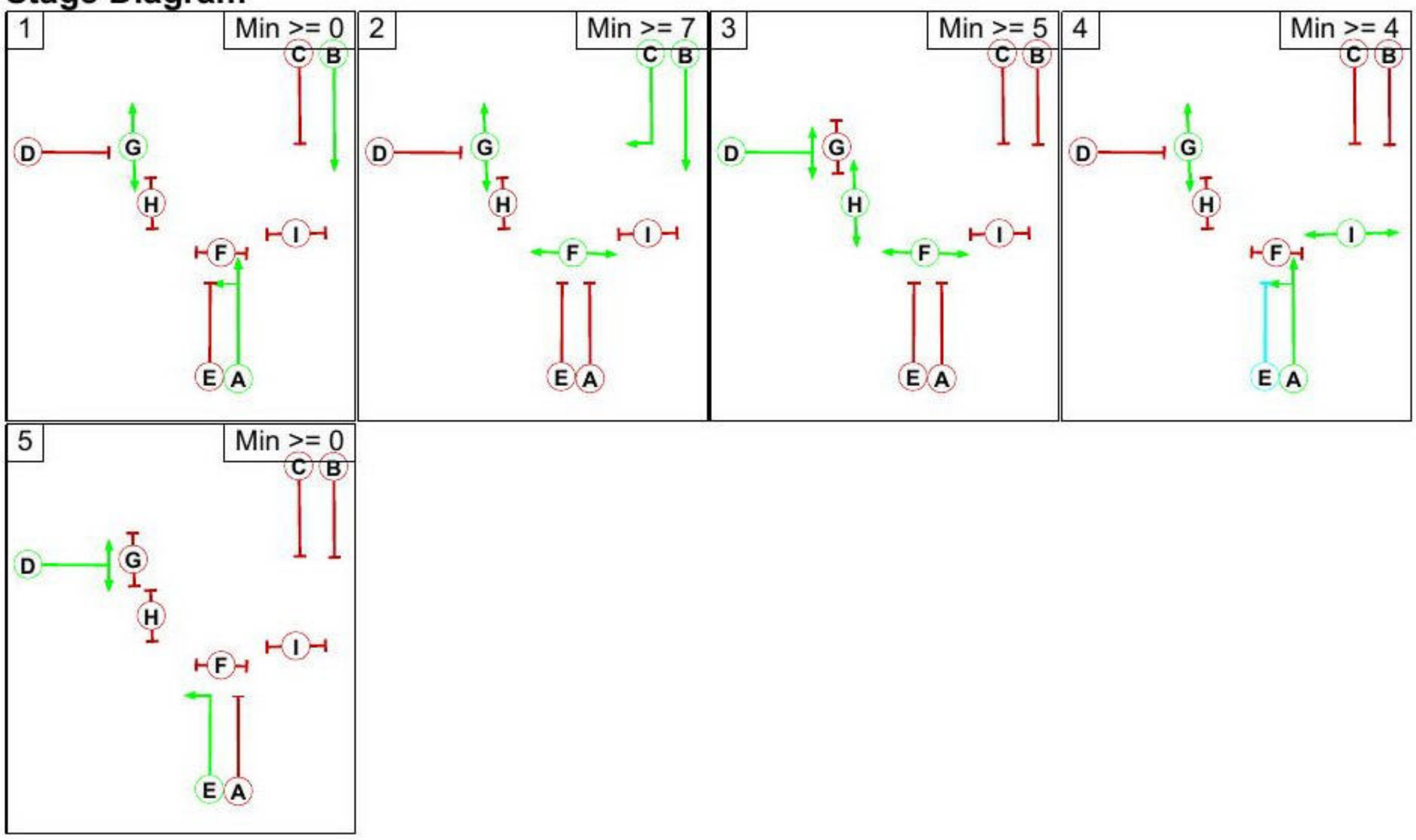


Scenario 18: 'SAT BASE + COMMIT + PRO 2021' (FG12: '2021 SAT BASE + COMMITTED + PRO', Plan 1: 'With Phase E')

Network Layout Diagram


Unnamed Junction
PRC: -8.4 %
Total Traffic Delay: 46.6 pcuHr
C
Arm 3 - Park Rd North
1
2
—0.0 0.0% 628
—0.0 0.0% 322
Arm 1 - Exit
17.3
4.9
4.9
97.6% 377
32.2% 289
32.3% 290
3
2
1
403 95.7% 19.0
442
1
2
Arm 2 - Solent Road
B
Arm 5 - Exit
1
—0.0 0.0% 1060
1
2
3
24.5
6.1
683 95.7%
300
322 44.5%
Arm 4 - Park Rd South
Arm 4 - Exit
—0.0 0.0% 731
—0.0 0.0% 365
2
1
A

Stage Diagram



Phase Intergreens Matrix

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

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	A	Losing	2	2
1	3	B	Losing	2	2
2	1	C	Losing	4	4
2	3	B	Losing	2	2
2	3	C	Losing	2	2
2	5	B	Losing	2	2
2	5	C	Losing	2	2
3	1	B	Gaining absolute	10	10
3	1	D	Losing	5	5
3	1	H	Losing	1	1
3	2	B	Gaining absolute	7	7
3	2	D	Losing	1	1
3	4	D	Losing	5	5
3	4	H	Losing	1	1
4	2	A	Losing	4	4
4	2	C	Gaining absolute	9	9
4	3	A	Losing	3	3
4	3	G	Losing	1	1

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5
1		5	9	8	7
2	11		11	10	10
3	10	9		15	10
4	8	9	10		8
5	5	X	X	10	

Phases in Stage

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

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Park Rd South)	U	A E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	12.00
1/2 (Park Rd South)	U	A	2	3	15.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
1/3 (Park Rd South)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 6 Ahead	Inf
2/1 (Solent Road)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Right Arm 6 Left	12.00 12.00
2/2 (Solent Road)	U	D	2	3	15.0	Geom	-	3.00	0.00	N	Arm 4 Right	15.00
3/1 (Park Rd North)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
3/2 (Park Rd North)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
3/3 (Park Rd North)	U	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 5 Right	15.00
4/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows

Scenario 1: 'AM OBSERVED 2016' (FG1: '2016 AM OBSERVED', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right Arm 6 Left	12.00 12.00	11.4 % 88.6 %	1702	1702
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM OBSERVED 2016' (FG2: '2016 PM OBSERVED', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	25.3 %	1702	1702
				Arm 6 Left	12.00	74.7 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'SAT OBSERVED 2016' (FG3: '2016 SAT OBSERVED', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	19.2 %	1702	1702
				Arm 6 Left	12.00	80.8 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'AM BASE 2021' (FG4: '2021 AM BASE', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	11.5 %	1702	1702
				Arm 6 Left	12.00	88.5 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'PM BASE 2021' (FG5: '2021 PM BASE', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	25.2 %	1702	1702
				Arm 6 Left	12.00	74.8 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'SAT BASE 2021' (FG6: '2021 SAT BASE', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	19.4 %	1702	1702
				Arm 6 Left	12.00	80.6 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 13: 'AM BASE + COMMIT 2021' (FG7: '2021 AM BASE + COMMITTED', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right Arm 6 Left	12.00 12.00	12.2 % 87.8 %	1702	1702
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 14: 'PM BASE + COMMIT 2021' (FG8: '2021 PM BASE + COMMITTED', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	25.3 %	1702	1702
				Arm 6 Left	12.00	74.7 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 15: 'SAT BASE + COMMIT 2021' (FG9: '2021 SAT BASE + COMMITTED', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	19.3 %	1702	1702
				Arm 6 Left	12.00	80.7 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 16: 'AM BASE + COMMIT + PRO 2021' (FG10: '2021 AM BASE+ COMMITTED + PRO', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	10.2 %	1702	1702
				Arm 6 Left	12.00	89.8 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 17: 'PM BASE + COMMIT + PRO 2021' (FG11: '2021 PM BASE + COMMITTED + PRO', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	24.9 %	1702	1702
				Arm 6 Left	12.00	75.1 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 18: 'SAT BASE + COMMIT + PRO 2021' (FG12: '2021 SAT BASE + COMMITTED + PRO', Plan 1: 'With Phase E')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Park Rd South)	3.00	0.00	Y	Arm 5 Left	12.00	100.0 %	1702	1702
1/2 (Park Rd South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
1/3 (Park Rd South)	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Solent Road)	3.00	0.00	Y	Arm 4 Right	12.00	18.6 %	1702	1702
				Arm 6 Left	12.00	81.4 %		
2/2 (Solent Road)	3.00	0.00	N	Arm 4 Right	15.00	100.0 %	1868	1868
3/1 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/2 (Park Rd North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
3/3 (Park Rd North)	3.25	0.00	N	Arm 5 Right	15.00	100.0 %	1891	1891
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2016 AM OBSERVED'	08:00	09:00	01:00	
2: '2016 PM OBSERVED'	17:00	18:00	01:00	
3: '2016 SAT OBSERVED'	12:00	13:00	01:00	
4: '2021 AM BASE'	08:00	09:00	01:00	
5: '2021 PM BASE'	17:00	18:00	01:00	
6: '2021 SAT BASE'	12:00	13:00	01:00	
7: '2021 AM BASE + COMMITTED'	08:00	09:00	01:00	
8: '2021 PM BASE + COMMITTED'	17:00	18:00	01:00	
9: '2021 SAT BASE + COMMITTED'	12:00	13:00	01:00	
10: '2021 AM BASE+ COMMITTED + PRO'	08:00	09:00	01:00	
11: '2021 PM BASE + COMMITTED + PRO'	17:00	18:00	01:00	
12: '2021 SAT BASE + COMMITTED + PRO'	12:00	13:00	01:00	

Traffic Flows, Desired

FG1: '2016 AM OBSERVED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	564	972	1536
	B	243	0	178	421
	C	583	348	0	931
	Tot.	826	912	1150	2888

FG2: '2016 PM OBSERVED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	426	582	1008
	B	518	0	287	805
	C	723	254	0	977
	Tot.	1241	680	869	2790

FG3: '2016 SAT OBSERVED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	811	588	1197
	B	457	0	286	743
	C	548	332	0	878
	Tot.	1005	943	872	2818

FG4: '2021 AM BASE'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	309	1351	1680
	B	283	0	132	455
	C	609	376	0	985
	Tot.	872	985	1243	3100

FG5: '2021 PM BASE'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	459	627	1086
	B	558	0	309	867
	C	779	274	0	1053
	Tot.	1337	733	936	3006

FG6: '2021 SAT BASE'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	359	632	1291
	B	493	0	308	801
	C	589	358	0	947
	Tot.	1082	1017	940	3039

FG7: '2021 AM BASE + COMMITTED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	316	1351	1687
	B	283	0	184	468
	C	609	379	0	988
	Tot.	878	695	1245	3118

FG8: '2021 PM BASE + COMMITTED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	467	627	1094
	B	566	0	313	879
	C	779	280	0	1059
	Tot.	1345	747	940	3032

FG9: '2021 SAT BASE + COMMITTED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	368	632	1000
	B	502	0	314	816
	C	589	368	0	952
	Tot.	1091	1031	946	3068

FG10: '2021 AM BASE+ COMMITTED + PRO'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	334	1038	1672
	B	281	0	211	492
	C	601	390	0	991
	Tot.	882	1024	1249	3155

FG11: '2021 PM BASE + COMMITTED + PRO'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	479	618	1097
	B	583	0	325	908
	C	788	296	0	1084
	Tot.	1357	775	943	3089

FG12: '2021 SAT BASE + COMMITTED + PRO'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	383	622	1005
	B	517	0	328	845
	C	573	377	0	956
	Tot.	1098	1060	950	3106

Stage Timings

Scenario 1: 'AM OBSERVED 2016' (FG1: '2016 AM OBSERVED', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	19	5	6
Change Point	0	27	51	67

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	74.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	74.8%
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	564	1702	754	74.8%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	972	2055 1915	1479	65.7%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	14	-	427	1702 1868	809	69.2%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	282	1940	1014	27.8%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	281	1940	1014	27.7%
3/3	Park Rd North Right	U	N/A	N/A	C		1	21	-	348	1891	473	73.6%
4/1	Exit	U	N/A	N/A	-		-	-	-	305	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	912	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	647	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**16.9**	**5.3**	**0.0**	**22.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**16.9**	**5.3**	**0.0**	**22.1**	**-**	**-**	**-**	**-**
1/1	564	564	-	-	-	3.2	1.5	-	4.7	29.7	11.4	4.5	12.9
1/3+2/2	972	972	-	-	-	4.9	1.0	-	5.8	21.8	8.9	4.0	9.9
2/1+2/2	427	427	-	-	-	4.0	1.1	-	5.1	43.8	5.0	4.4	6.1
3/1	282	282	-	-	-	0.9	0.2	-	1.1	14.2	3.8	0.2	4.0
3/2	287	287	-	-	-	0.9	0.2	-	1.1	14.2	3.8	0.2	4.0
3/3	348	348	-	-	-	2.9	1.4	-	4.3	44.5	7.7	4.4	9.1
4/1	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	912	912	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	20.4	Total Delay for Signalled Lanes (pcuHr):	22.13	Cycle Time (s): 88
	PRC Over All Lanes (%):	20.4	Total Delay Over All Lanes(pcuHr):	22.13	

Stage Timings

Scenario 2: 'PM OBSERVED 2016' (FG2: '2016 PM OBSERVED', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	13	15	20	6
Change Point	0	21	41	72

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	**71.3%**
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	**71.3%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	32	0	428	1702	804	70.5%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	32	-	582	2055 1915	1272	45.8%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	23	-	805	1702 1868	1129	71.3%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	362	1940	757	48.2%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	367	1940	757	48.1%
3/3	Park Rd North Right	U	N/A	N/A	C		1	17	-	254	1891	368	69.4%
4/1	Exit	U	N/A	N/A	-		-	-	-	458	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	782	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	307	Inf	Inf	0.0%

LinSig V1 style report

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	-	-	**0**	**0**	**0**	**19.7**	**4.9**	**0.0**	**24.5**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**19.7**	**4.9**	**0.0**	**24.5**	-	-	-	-
1/1	428	428	-	-	-	3.1	1.2	-	4.2	35.8	3.5	1.2	10.8
1/3+1/2	582	582	-	-	-	3.7	0.4	-	4.1	25.3	5.3	0.4	6.3
2/1+2/2	805	805	-	-	-	6.2	1.2	-	7.4	33.1	3.5	1.2	10.7
3/1	362	362	-	-	-	2.2	0.5	-	2.8	28.1	7.0	0.5	7.5
3/2	361	361	-	-	-	2.2	0.5	-	2.8	28.1	7.0	0.5	7.5
3/3	254	254	-	-	-	2.5	1.1	-	3.6	50.7	8.1	1.1	7.2
4/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	782	782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	680	680	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0	PRC for Signalled Lanes (%):	26.3	Total Delay for Signalled Lanes (pcuHr):	24.53	Cycle Time (s): 88
	PRC Over All Lanes (%):	26.3	Total Delay Over All Lanes(pcuHr):	24.53	

LinSig V1 style report

Stage Timings

Scenario 3: 'SAT OBSERVED 2016' (FG3: '2016 SAT OBSERVED', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	17	15	11	6
Change Point	0	25	45	67

LinSig V1 style report

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	-	-		-	-	-	-	-	-	87.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	87.2%
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	33	0	617	1702	713	86.4%
1/3+1/2	Park Rd South Ahead	U	N/A	N/A	A		1	33	-	588	2055 1915	1485	40.8%
2/1+2/2	Solent Road Right Left	U	N/A	N/A	D		1	22	-	743	1702 1868	852	87.2%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	33	-	273	1940	882	31.0%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	33	-	273	1940	882	31.0%
3/3	Park Rd North Right	U	N/A	N/A	C		1	17	-	332	1891	387	85.8%
4/1	Exit	U	N/A	N/A	-		-	-	-	347	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	662	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	943	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	569	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%

LinSig V1 style report

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	-	-	**0**	**0**	**0**	**18.8**	**9.5**	**0.0**	**28.3**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**18.8**	**9.5**	**0.0**	**28.3**	-	-	-	-
1/1	617	617	-	-	-	3.9	2.8	-	6.7	39.4	13.4	2.8	13.2
1/3+1/2	588	588	-	-	-	2.8	0.3	-	3.2	19.5	5.3	0.3	5.3
2/1+2/2	743	743	-	-	-	6.6	3.2	-	9.8	47.8	9.1	3.2	12.3
3/1	273	273	-	-	-	1.2	0.2	-	1.4	18.2	4.2	0.2	4.4
3/2	273	273	-	-	-	1.2	0.2	-	1.4	18.2	4.2	0.2	4.4
3/3	382	382	-	-	-	3.1	2.8	-	5.8	63.8	7.7	2.8	10.5
4/1	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	662	662	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	943	943	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	569	569	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 3.2 Total Delay for Signalled Lanes (pcuHr): 28.35 Cycle Time (s): 88
PRC Over All Lanes (%): 3.2 Total Delay Over All Lanes(pcuHr): 28.35

LinSig V1 style report

Stage Timings

Scenario 4: 'AM BASE 2021' (FG4: '2021 AM BASE', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	19	5	6
Change Point	0	27	51	67

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	**80.7%**
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	**80.7%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	609	1702	754	80.7%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	1057	2055 1915	1479	71.1%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	14	-	455	1702 1868	809	74.8%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	305	1940	1014	30.1%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	304	1940	1014	30.0%
3/3	Park Rd North Right	U	N/A	N/A	C		1	27	-	378	1891	473	79.5%
4/1	Exit	U	N/A	N/A	-		-	-	-	330	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	985	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	699	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	544	Inf	Inf	0.0%

LinSig V1 style report

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	-	-	**0**	**0**	**0**	**18.6**	**7.0**	**0.0**	**25.7**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**18.6**	**7.0**	**0.0**	**25.7**	-	-	-	-
1/1	609	609	-	-	-	3.6	2.0	-	5.6	33.3	12.9	2.0	14.9
1/3+1/2	1357	1351	-	-	-	5.4	1.2	-	6.6	22.7	10.0	1.2	11.2
2/1+2/2	455	455	-	-	-	4.4	1.5	-	5.8	48.2	5.5	1.5	6.9
3/1	305	305	-	-	-	1.0	0.2	-	1.2	14.4	4.2	0.2	4.4
3/2	304	304	-	-	-	1.0	0.2	-	1.2	14.4	4.1	0.2	4.4
3/3	378	378	-	-	-	3.2	1.9	-	5.1	48.8	8.8	1.9	10.4
4/1	330	330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	542	542	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	985	985	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	699	699	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

		PRC for Signalled Lanes (%):	11.5	Total Delay for Signalled Lanes (pcuHr):	25.65
		PRC Over All Lanes (%):	11.5	Total Delay Over All Lanes(pcuHr):	25.65

Cycle Time (s): 88

LinSig V1 style report

Stage Timings

Scenario 5: 'PM BASE 2021' (FG5: '2021 PM BASE', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	13	15	20	6
Change Point	0	21	41	72

LinSig V1 style report

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	-	-		-	-	-	-	-	-	76.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	76.9%
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	32	0	458	1702	804	76.0%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	32	-	627	2055 1915	1270	49.4%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	23	-	867	1702 1868	1128	76.9%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	390	1940	757	51.9%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	389	1940	757	51.8%
3/3	Park Rd North Right	U	N/A	N/A	C		1	17	-	274	1891	368	74.9%
4/1	Exit	U	N/A	N/A	-		-	-	-	494	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	733	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	325	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**21.6**	**6.2**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**21.6**	**6.2**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
1/1	458	458	-	-	-	3.4	1.6	-	4.9	38.7	10.5	1.8	12.0
1/3+1/2	627	627	-	-	-	4.0	0.5	-	4.5	25.8	8.4	0.5	6.9
2/1+2/2	867	867	-	-	-	6.8	1.6	-	8.4	35.0	10.5	1.8	12.1
3/1	390	390	-	-	-	2.4	0.5	-	2.9	28.8	7.7	0.5	6.2
3/2	389	389	-	-	-	2.4	0.5	-	2.9	28.8	7.7	0.5	6.2
3/3	274	274	-	-	-	2.7	1.4	-	4.1	54.3	8.8	1.4	8.1
4/1	494	494	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	843	843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	733	733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	17.1	Total Delay for Signalled Lanes (pcuHr):	27.79	Cycle Time (s): 88
	PRC Over All Lanes (%):	17.1	Total Delay Over All Lanes(pcuHr):	27.79	

Stage Timings

Scenario 6: 'SAT BASE 2021' (FG6: '2021 SAT BASE', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	16	13	6
Change Point	0	27	48	72

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**	-	-		-	-	-	-	-	-	**92.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.7%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	659	1702	714	92.3%
1/3+1/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	632	2055:1915	1400	45.2%
2/1+2/2	Solent Road Right Left	U	N/A	N/A	D		1	22	-	801	1702:1868	883	90.7%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	42	-	295	1940	897	32.9%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	42	-	294	1940	897	32.8%
3/3	Park Rd North Right	U	N/A	N/A	C		1	18	-	358	1891	386	92.7%
4/1	Exit	U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	1017	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	327	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**21.7**	**15.1**	**0.0**	**36.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**21.7**	**15.1**	**0.0**	**36.8**	**-**	**-**	**-**	**-**
1/1	653	653	-	-	-	4.7	5.1	-	9.8	53.3	16.1	5.1	21.2
1/3+1/2	682	682	-	-	-	3.3	0.4	-	3.7	21.0	5.8	0.4	6.2
2/1+2/2	807	807	-	-	-	7.6	4.4	-	12.0	53.8	10.5	4.4	14.9
3/1	295	295	-	-	-	1.3	0.2	-	1.5	18.8	4.8	0.2	5.0
3/2	294	294	-	-	-	1.3	0.2	-	1.5	18.8	4.7	0.2	5.0
3/3	358	358	-	-	-	3.6	4.7	-	8.3	83.9	9.0	4.7	13.8
4/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1017	1017	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-8.0	Total Delay for Signalled Lanes (pcuHr):	36.85	Cycle Time (s): 33
	PRC Over All Lanes (%):	-8.0	Total Delay Over All Lanes(pcuHr):	36.85	

LinSig V1 style report

Stage Timings

Scenario 13: 'AM BASE + COMMIT 2021' (FG7: '2021 AM BASE + COMMITTED', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	19	5	6
Change Point	0	27	51	67

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	**81.7%**
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	**81.7%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	618	1702	754	81.7%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	1057	2055 1915	1479	71.1%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	14	-	463	1702 1868	809	76.1%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	805	1940	1014	80.1%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	804	1940	1014	80.0%
3/3	Park Rd North Right	U	N/A	N/A	C		1	27	-	378	1891	473	80.2%
4/1	Exit	U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	544	Inf	Inf	0.0%

LinSig V1 style report

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	-	-	**0**	**0**	**0**	**18.8**	**7.3**	**0.0**	**26.1**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**18.8**	**7.3**	**0.0**	**26.1**	-	-	-	-
1/1	618	618	-	-	-	3.7	2.2	-	5.8	34.0	13.0	2.2	15.2
1/3+1/2	1357	1351	-	-	-	5.4	1.2	-	6.6	22.7	10.0	1.2	11.2
2/1+2/2	463	463	-	-	-	4.5	1.6	-	6.0	48.8	5.8	1.8	7.1
3/1	305	305	-	-	-	1.0	0.2	-	1.2	14.4	4.2	0.2	4.4
3/2	304	304	-	-	-	1.0	0.2	-	1.2	14.4	4.1	0.2	4.4
3/3	379	379	-	-	-	3.3	1.9	-	5.2	49.4	8.8	1.8	10.6
4/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0	PRC for Signalled Lanes (%):	100.2	Total Delay for Signalled Lanes (pcuHr):	26.13	Cycle Time (s): 88
	PRC Over All Lanes (%):	100.2	Total Delay Over All Lanes(pcuHr):	26.13	

LinSig V1 style report

Stage Timings

Scenario 14: 'PM BASE + COMMIT 2021' (FG8: '2021 PM BASE + COMMITTED', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	13	15	20	6
Change Point	0	21	41	72

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	**77.9%**
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	**77.9%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	32	0	467	1702	804	77.8%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	32	-	627	2055 1915	1270	49.4%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	23	-	873	1702 1868	1129	77.9%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	390	1940	757	51.9%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	389	1940	757	51.8%
3/3	Park Rd North Right	U	N/A	N/A	C		1	17	-	280	1891	368	76.5%
4/1	Exit	U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	325	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**21.9**	**6.5**	**0.0**	**28.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**21.9**	**6.5**	**0.0**	**28.4**	**-**	**-**	**-**	**-**
1/1	467	467	-	-	-	3.5	1.7	-	5.1	39.5	10.6	4.7	12.3
1/3+2/2	627	627	-	-	-	4.0	0.5	-	4.5	25.8	8.4	3.5	6.9
2/1+2/2	879	879	-	-	-	6.9	1.7	-	8.6	35.4	10.6	4.7	12.3
3/1	390	390	-	-	-	2.4	0.5	-	2.9	28.8	7.7	3.5	8.2
3/2	389	389	-	-	-	2.4	0.5	-	2.9	28.8	7.7	3.5	8.2
3/3	280	280	-	-	-	2.8	1.6	-	4.3	55.7	8.8	4.8	8.4
4/1	498	498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 15.8 Total Delay for Signalled Lanes (pcuHr): 28.40 Cycle Time (s): 88
PRC Over All Lanes (%): 15.8 Total Delay Over All Lanes(pcuHr): 28.40

LinSig V1 style report

Stage Timings

Scenario 15: 'SAT BASE + COMMIT 2021' (FG9: '2021 SAT BASE + COMMITTED', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	16	13	6
Change Point	0	27	48	72

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.0%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	668	1702	714	93.6%
1/3+1/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	632	2055:1915	1400	45.2%
2/1+2/2	Solent Road Right Left	U	N/A	N/A	D		1	22	-	816	1702:1868	883	92.4%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	42	-	295	1940	897	32.9%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	42	-	294	1940	897	32.8%
3/3	Park Rd North Right	U	N/A	N/A	C		1	18	-	363	1891	386	94.0%
4/1	Exit	U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	721	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	327	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**22.1**	**17.3**	**0.0**	**39.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**22.1**	**17.3**	**0.0**	**39.4**	**-**	**-**	**-**	**-**
1/1	668	668	-	-	-	4.8	5.8	-	10.6	57.2	16.8	5.8	22.1
1/3+1/2	682	682	-	-	-	3.3	0.4	-	3.7	21.3	5.8	0.4	6.2
2/1+2/2	813	813	-	-	-	7.7	5.3	-	13.0	57.4	10.7	5.3	15.9
3/1	295	295	-	-	-	1.3	0.2	-	1.5	18.8	4.8	0.2	5.0
3/2	294	294	-	-	-	1.3	0.2	-	1.5	18.8	4.7	0.2	5.0
3/3	363	363	-	-	-	3.7	5.3	-	9.0	89.4	9.2	5.3	14.5
4/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1031	1031	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -4.4 Total Delay for Signalled Lanes (pcuHr): 39.40 Cycle Time (s): 88
PRC Over All Lanes (%): -4.4 Total Delay Over All Lanes(pcuHr): 39.40

LinSig V1 style report

Stage Timings

Scenario 16: 'AM BASE + COMMIT + PRO 2021' (FG10: '2021 AM BASE+ COMMITTED + PRO', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	19	5	6
Change Point	0	27	51	67

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.1%
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	684	1702	754	84.1%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	1038	2055 1915	1479	70.2%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	14	-	492	1702 1868	809	60.9%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	307	1940	1014	29.7%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	45	-	300	1940	1014	29.6%
3/3	Park Rd North Right	U	N/A	N/A	C		1	27	-	390	1891	473	82.5%
4/1	Exit	U	N/A	N/A	-		-	-	-	325	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	1024	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	712	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**19.3**	**8.4**	**0.0**	**27.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.3**	**8.4**	**0.0**	**27.7**	**-**	**-**	**-**	**-**
1/1	684	684	-	-	-	3.8	2.5	-	6.4	33.7	13.7	2.5	13.3
1/3+1/2	1038	1038	-	-	-	5.3	1.2	-	6.5	22.5	9.8	1.2	11.3
2/1+2/2	492	492	-	-	-	4.8	2.0	-	6.8	50.1	8.3	2.3	8.0
3/1	307	307	-	-	-	1.0	0.2	-	1.2	14.4	4.1	0.2	4.3
3/2	300	300	-	-	-	1.0	0.2	-	1.2	14.4	4.1	0.2	4.3
3/3	390	390	-	-	-	3.4	2.2	-	5.6	57.8	8.3	2.2	11.2
4/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1024	1024	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 7.1 Total Delay for Signalled Lanes (pcuHr): 27.71 Cycle Time (s): 88
PRC Over All Lanes (%): 7.1 Total Delay Over All Lanes(pcuHr): 27.71

LinSig V1 style report

Stage Timings

Scenario 17: 'PM BASE + COMMIT + PRO 2021' (FG11: '2021 PM BASE + COMMITTED + PRO', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	13	15	20	6
Change Point	0	21	41	72

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	80.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	80.9%
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	32	0	479	1702	804	79.6%
1/3+2/2	Park Rd South Ahead	U	N/A	N/A	A		1	32	-	618	2055 1915	1271	48.6%
2/1+2/3	Solent Road Right Left	U	N/A	N/A	D		1	29	-	908	1702 1868	1129	80.4%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	384	1940	757	51.1%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	35	-	384	1940	757	51.1%
3/3	Park Rd North Right	U	N/A	N/A	C		1	17	-	298	1891	368	80.9%
4/1	Exit	U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	858	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	775	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	320	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**22.3**	**7.4**	**0.0**	**29.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**22.3**	**7.4**	**0.0**	**29.7**	**-**	**-**	**-**	**-**
1/1	479	479	-	-	-	3.6	1.9	-	5.4	40.9	11.0	1.9	12.9
1/3+1/2	618	618	-	-	-	3.9	0.5	-	4.4	25.7	8.3	3.5	6.8
2/1+2/2	908	908	-	-	-	7.2	2.0	-	9.2	36.8	11.1	2.0	13.1
3/1	384	384	-	-	-	2.3	0.5	-	2.8	26.7	7.8	3.5	8.1
3/2	384	384	-	-	-	2.3	0.5	-	2.8	26.7	7.8	3.5	8.1
3/3	296	296	-	-	-	2.9	2.0	-	4.9	60.2	7.2	2.0	9.2
4/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	775	775	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 11.3 Total Delay for Signalled Lanes (pcuHr): 29.73 Cycle Time (s): 88
PRC Over All Lanes (%): 11.3 Total Delay Over All Lanes(pcuHr): 29.73

LinSig V1 style report

Stage Timings

Scenario 18: 'SAT BASE + COMMIT + PRO 2021' (FG12: '2021 SAT BASE + COMMITTED + PRO', Plan 1: 'With Phase E')

Stage	1	2	3	4
Duration	19	16	13	6
Change Point	0	27	48	72

LinSig V1 style report

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**	-	-		-	-	-	-	-	-	**97.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.6%**
1/1	Park Rd South Left	U	N/A	N/A	A	E	1	38	0	683	1702	714	95.7%
1/3+1/2	Park Rd South Ahead	U	N/A	N/A	A		1	38	-	622	2055:1915	1399	44.5%
2/1+2/2	Solent Road Right Left	U	N/A	N/A	D		1	22	-	845	1702:1868	883	95.7%
3/1	Park Rd North Ahead	U	N/A	N/A	B		1	42	-	290	1940	897	32.3%
3/2	Park Rd North Ahead	U	N/A	N/A	B		1	42	-	289	1940	897	32.2%
3/3	Park Rd North Right	U	N/A	N/A	C		1	18	-	377	1891	386	97.6%
4/1	Exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
4/2	Exit	U	N/A	N/A	-		-	-	-	731	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	1060	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
6/2	Exit	U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%

LinSig V1 style report

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	**-**	**-**	**0**	**0**	**0**	**22.7**	**23.9**	**0.0**	**46.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**22.7**	**23.9**	**0.0**	**46.6**	**-**	**-**	**-**	**-**
1/1	683	683	-	-	-	5.0	7.5	-	12.4	65.3	17.1	7.5	24.5
1/3+1/2	622	622	-	-	-	3.2	0.4	-	3.6	20.9	5.7	0.4	6.1
2/1+2/2	845	845	-	-	-	8.1	7.9	-	16.0	68.1	11.2	7.9	19.0
3/1	290	290	-	-	-	1.3	0.2	-	1.5	18.8	4.7	0.2	4.9
3/2	289	289	-	-	-	1.3	0.2	-	1.5	18.8	4.7	0.2	4.9
3/3	377	377	-	-	-	3.9	7.7	-	11.5	109.8	9.3	7.7	17.3
4/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1080	1080	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C	PRC for Signalled Lanes (%):	-8.4	Total Delay for Signalled Lanes (pcuHr):	46.55	Cycle Time (s): 88
	PRC Over All Lanes (%):	-8.4	Total Delay Over All Lanes(pcuHr):	46.55	

LinSig V1 style report

LinSig V1 style report

User and Project Details

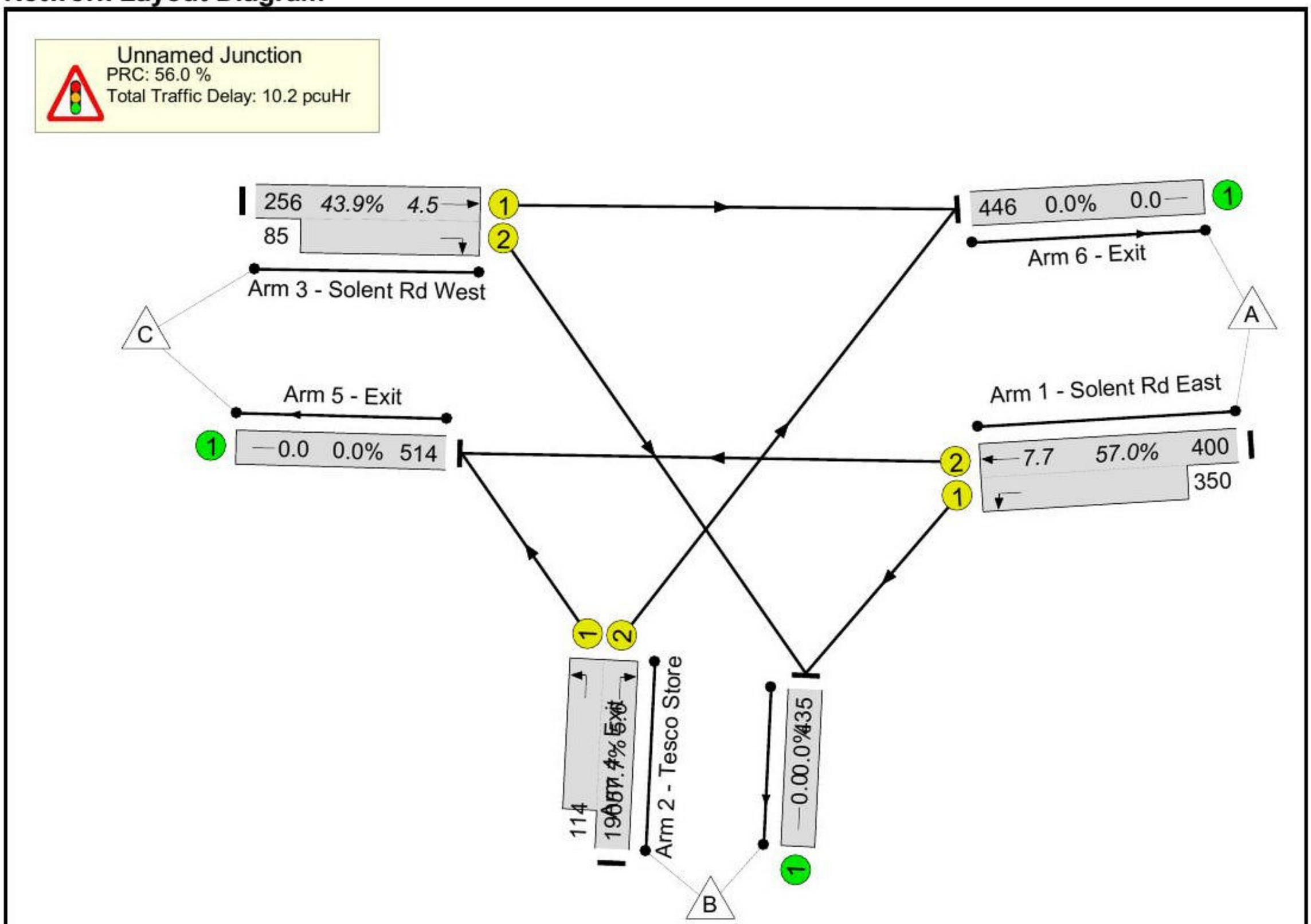
Project:	
Title:	
Location:	
File name:	Solent Rd - Tesco Access Havant.lsg3x
Author:	
Company:	
Address:	
Notes:	

Phase Input Data

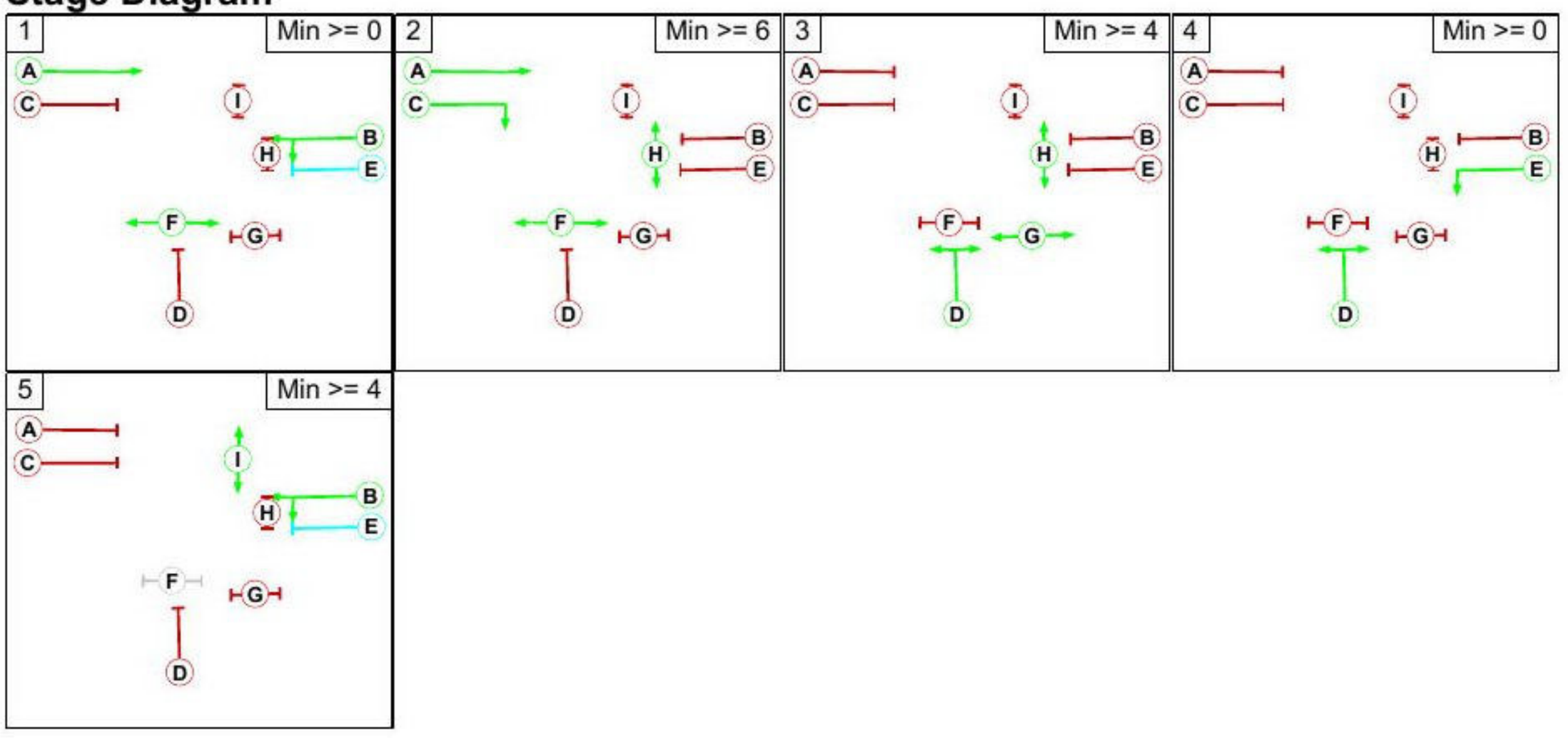
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Filter	B	4	0
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Pedestrian		4	4
I	Pedestrian		4	4

Scenario 1: 'AM OBSERVED 2016' (FG1: '2016 AM OBSERVED', Plan 1: 'With Phase G')

Network Layout Diagram

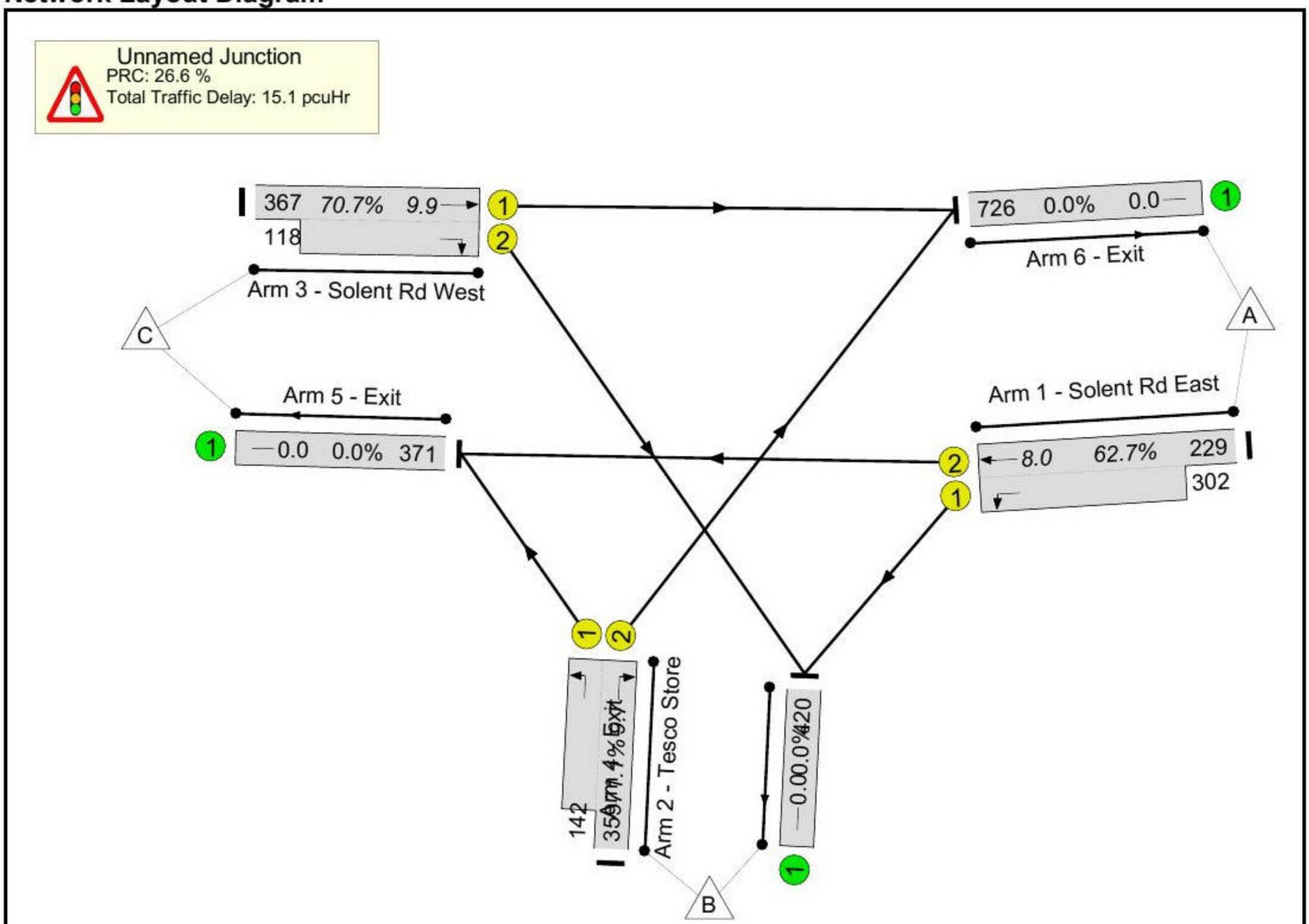


Stage Diagram

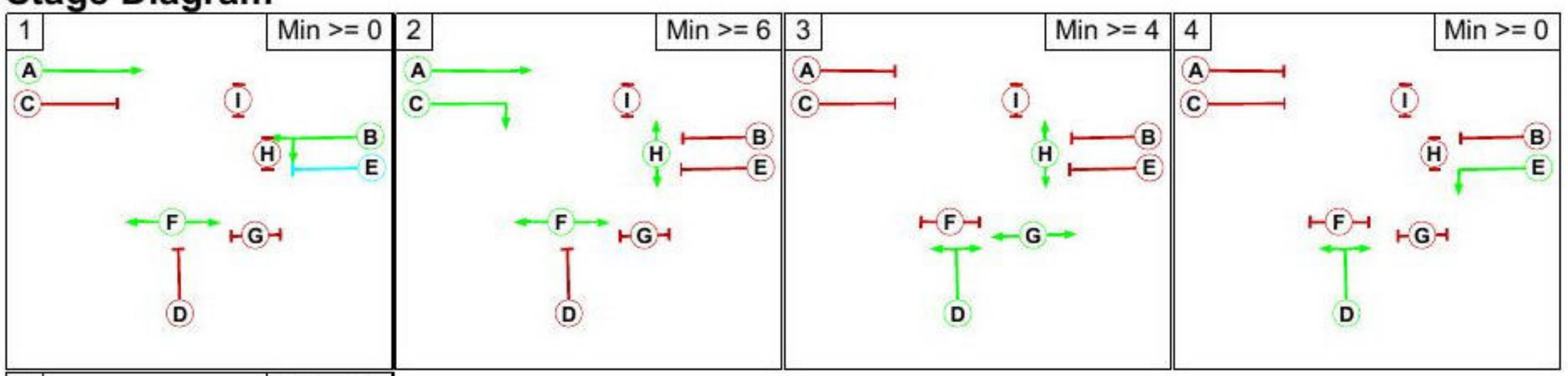


Scenario 2: 'PM OBSERVED 2016' (FG2: '2016 PM OBSERVED', Plan 1: 'With Phase G')

Network Layout Diagram

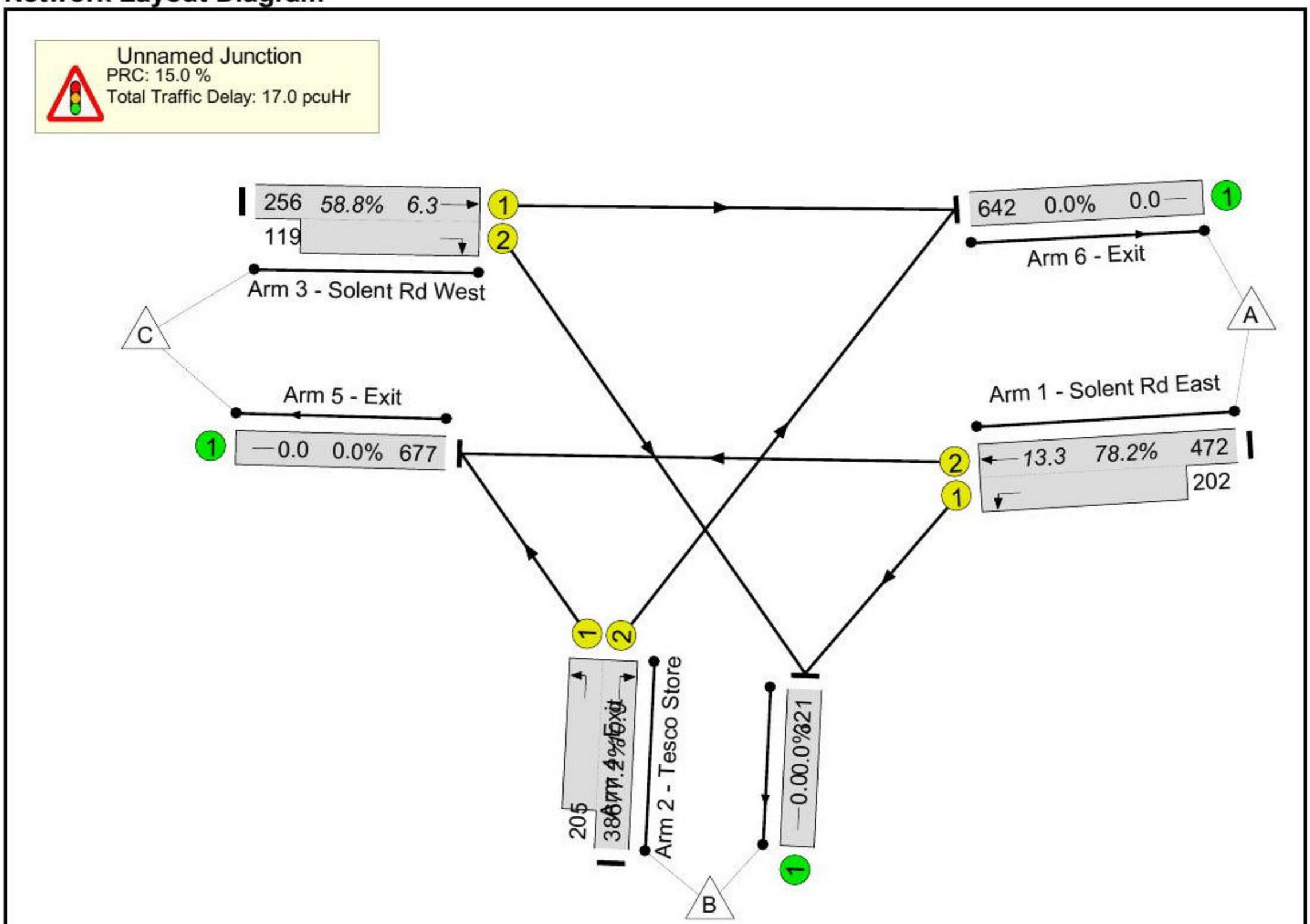


Stage Diagram

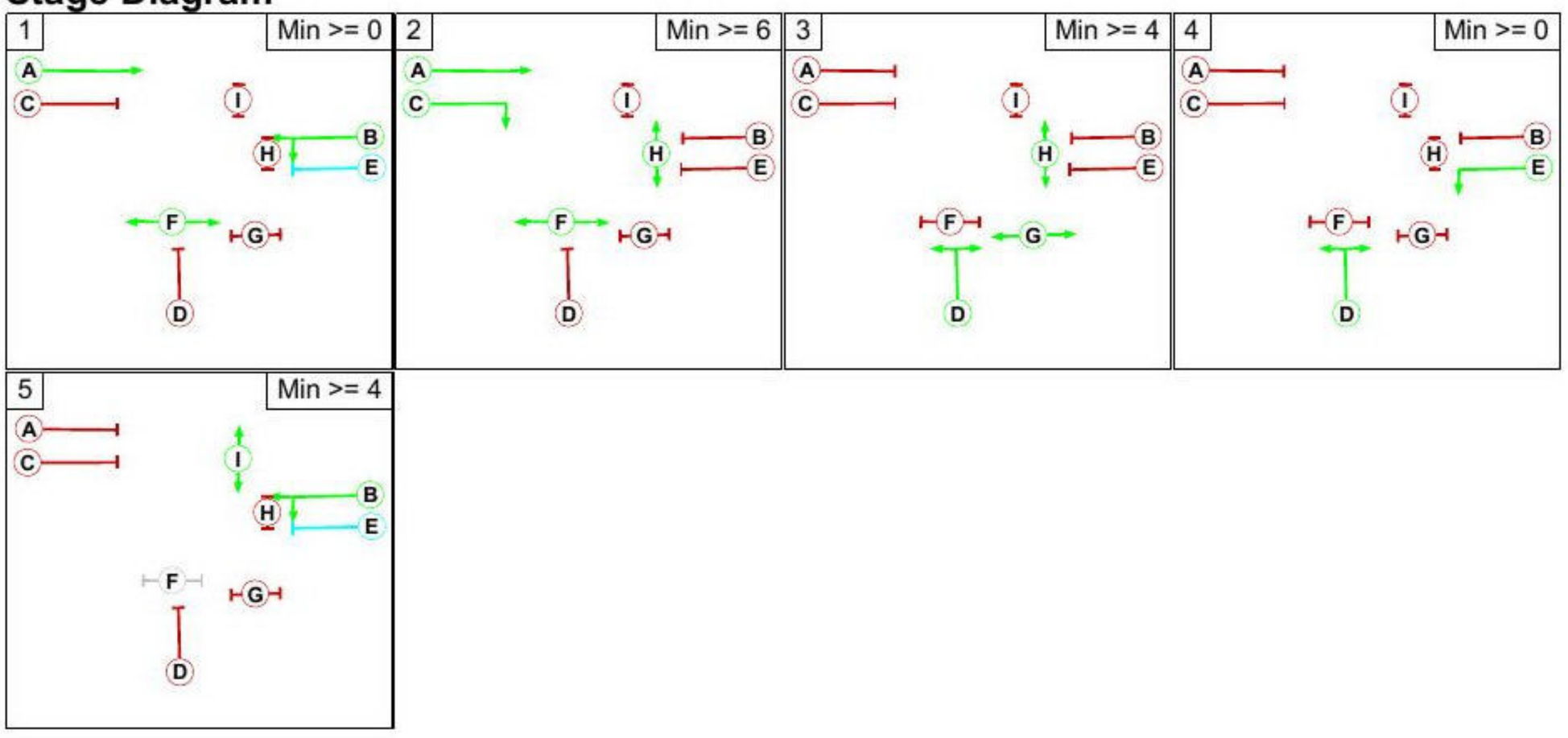


Scenario 3: 'SAT OBSERVED 2016' (FG3: '2016 SAT OBSERVED', Plan 1: 'With Phase G')

Network Layout Diagram

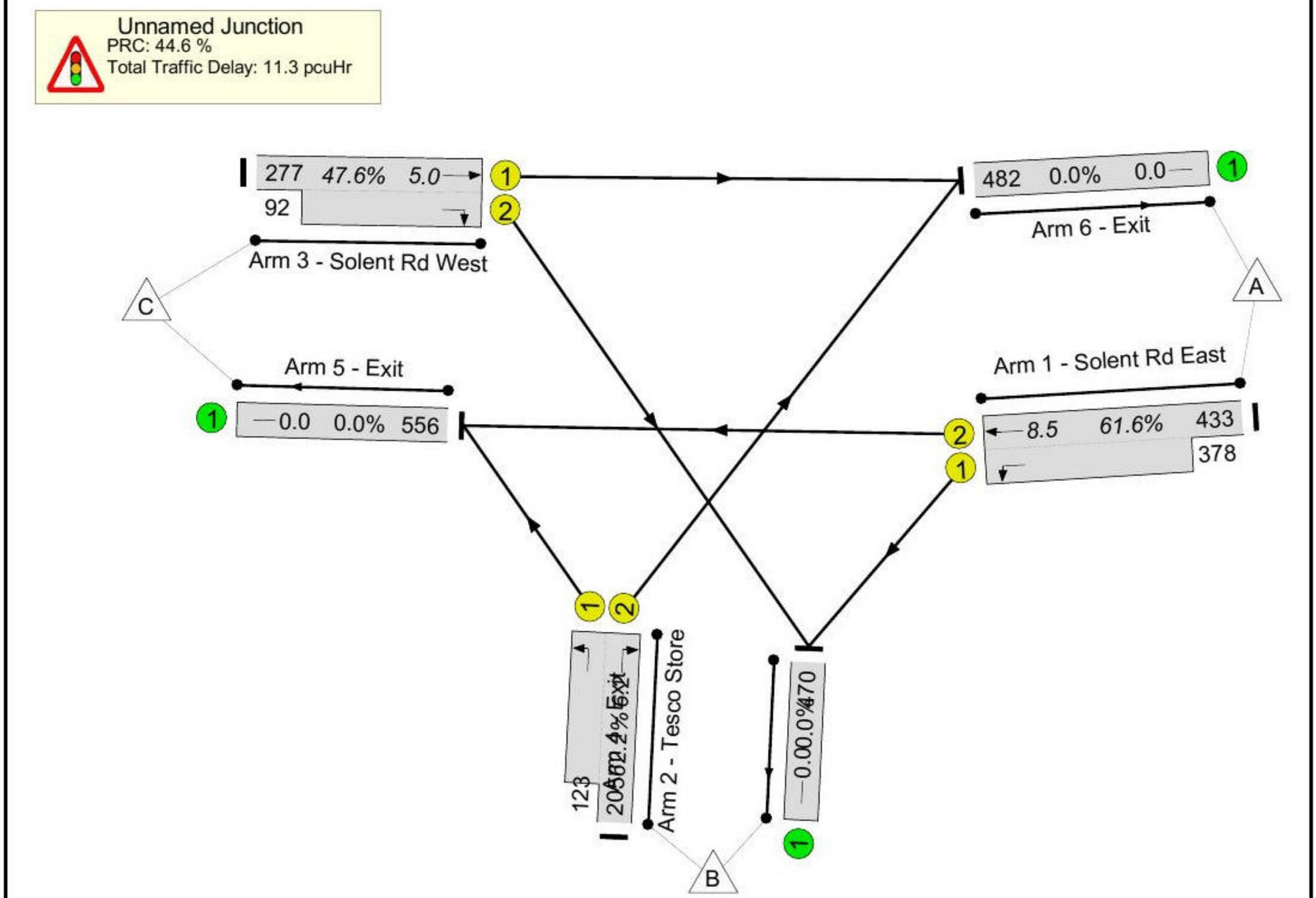


Stage Diagram

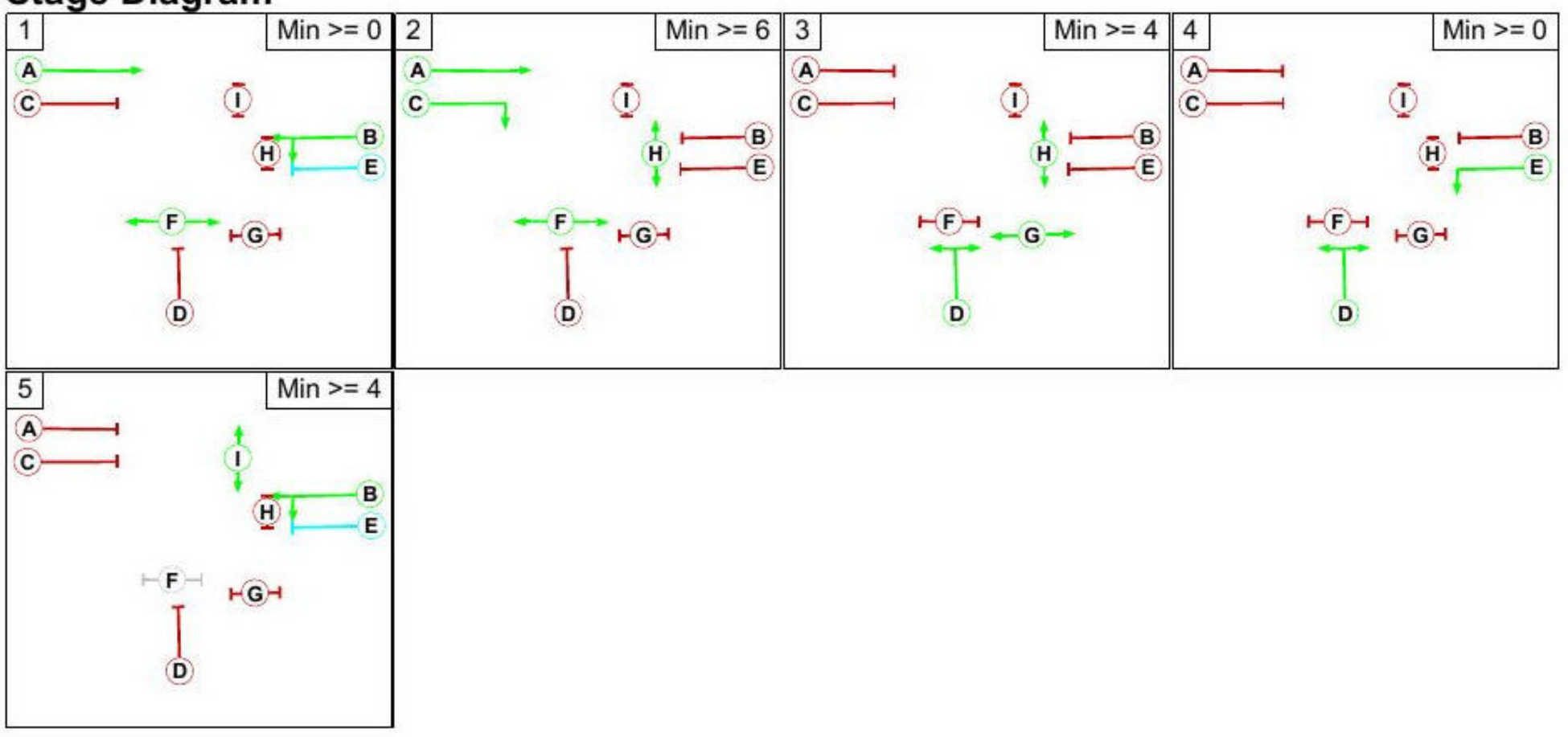


Scenario 4: 'AM BASE 2021' (FG4: '2021 AM OBSERVED', Plan 1: 'With Phase G')

Network Layout Diagram

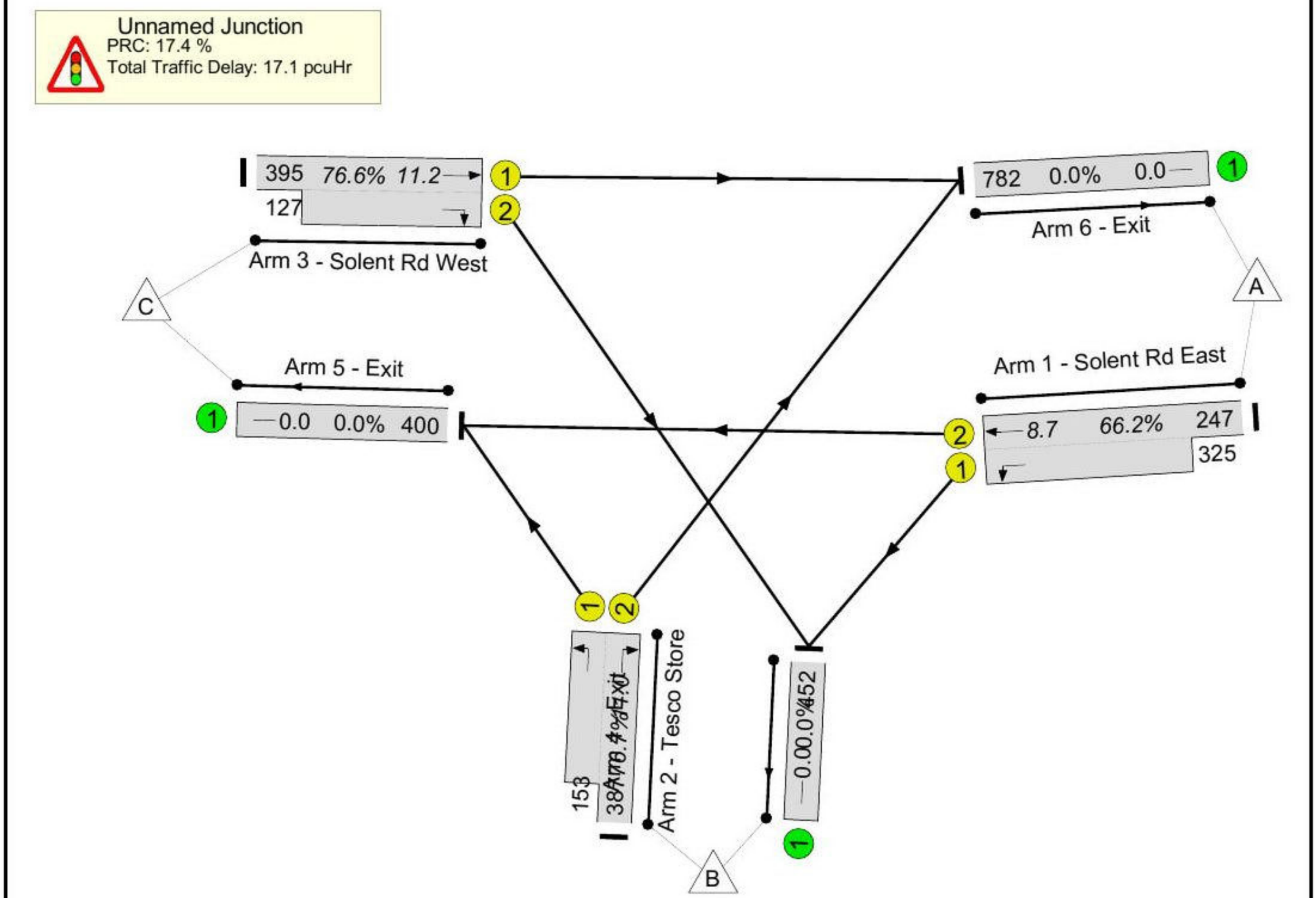


Stage Diagram

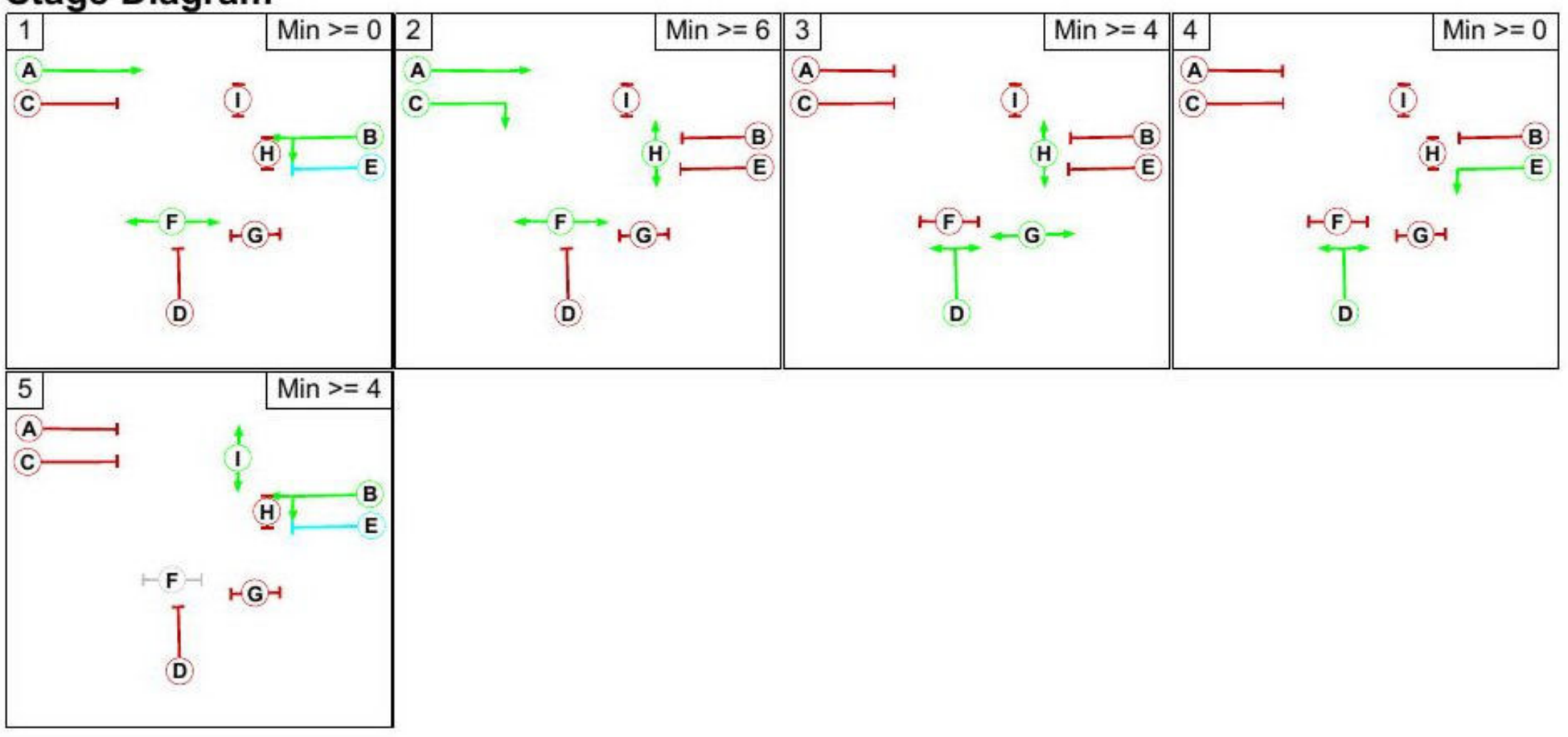


Scenario 5: 'PM BASE 2021' (FG5: '2021 PM OBSERVED', Plan 1: 'With Phase G')

Network Layout Diagram

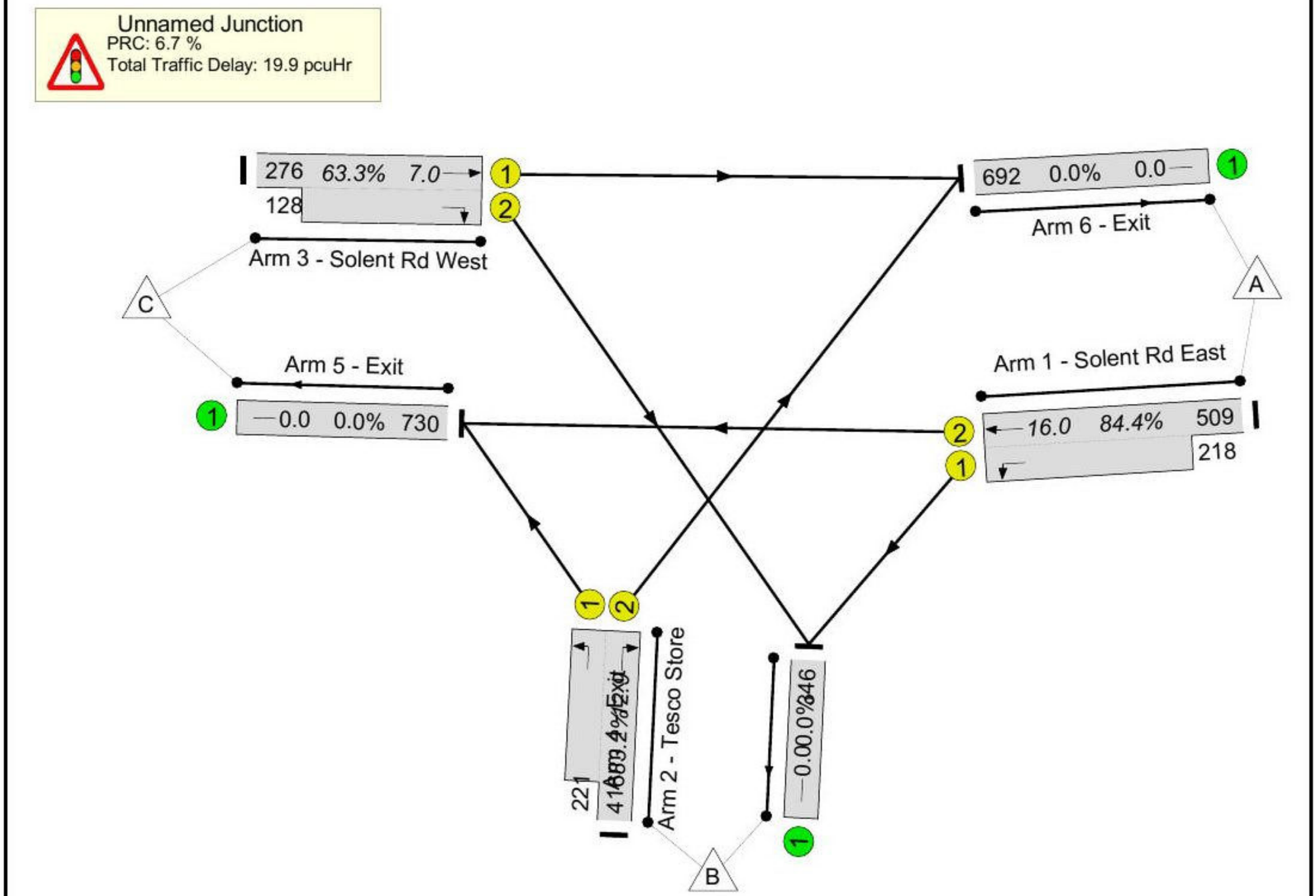


Stage Diagram

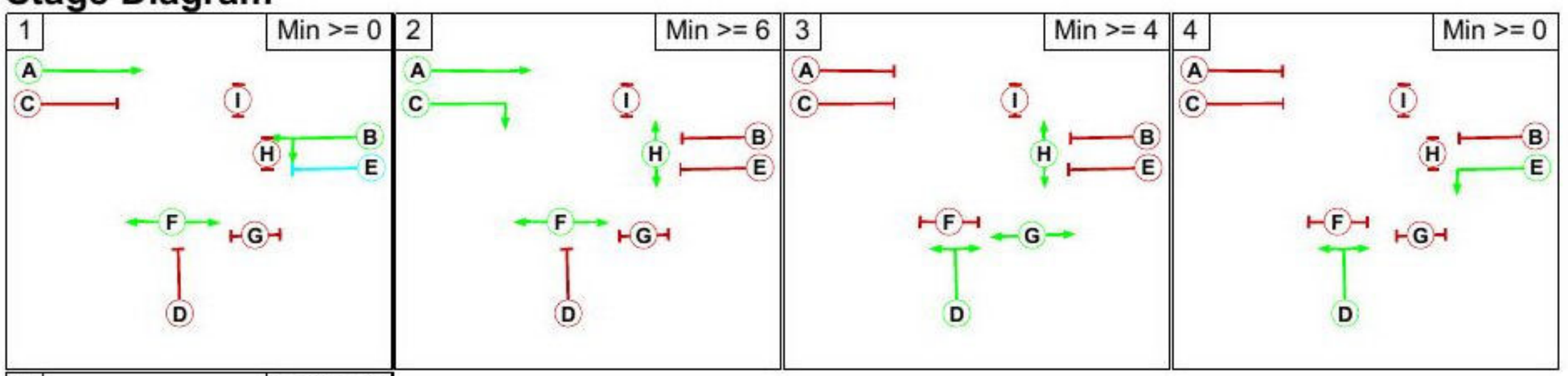


Scenario 6: 'SAT BASE 2021' (FG6: '2021 SAT OBSERVED', Plan 1: 'With Phase G')

Network Layout Diagram

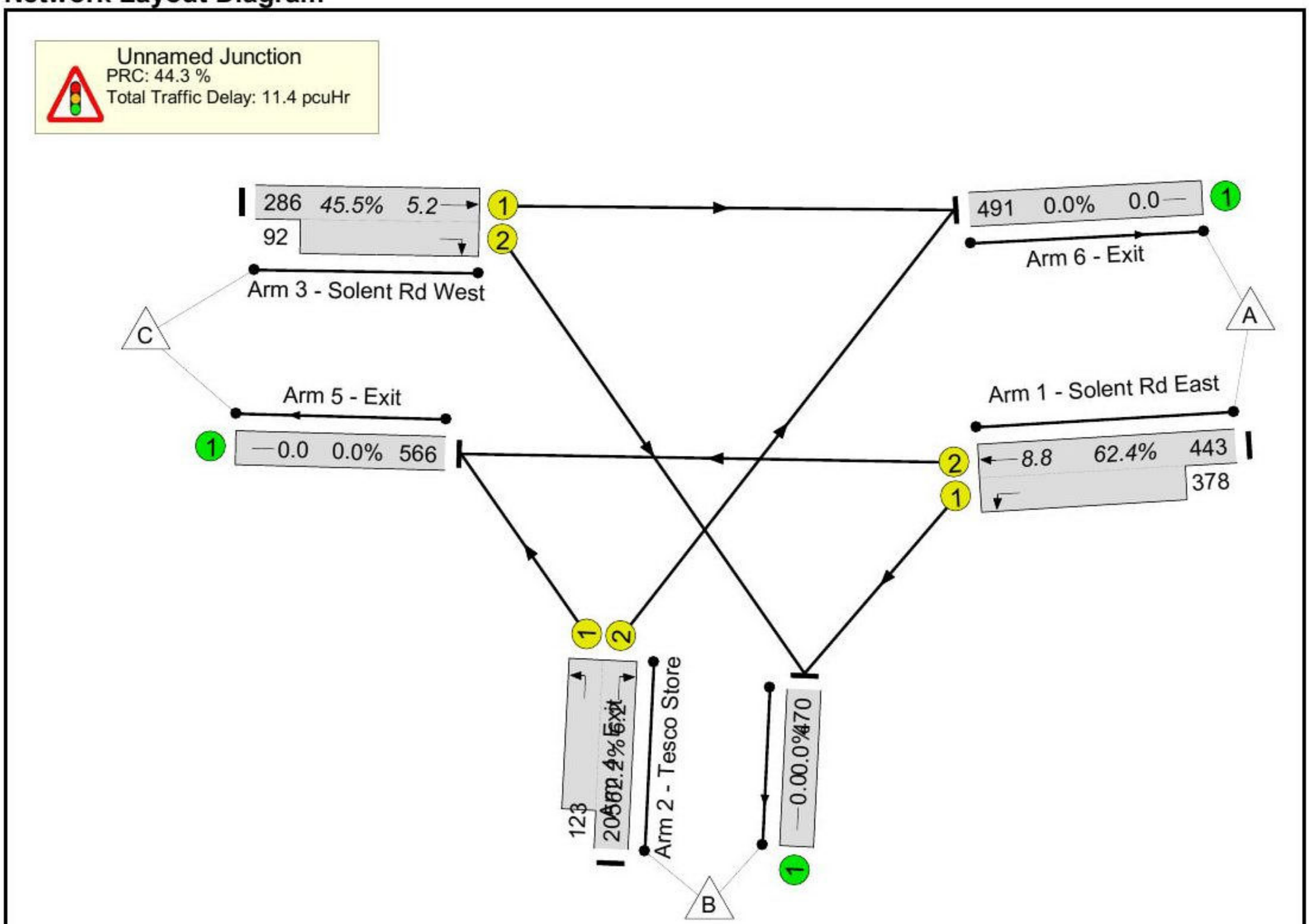


Stage Diagram

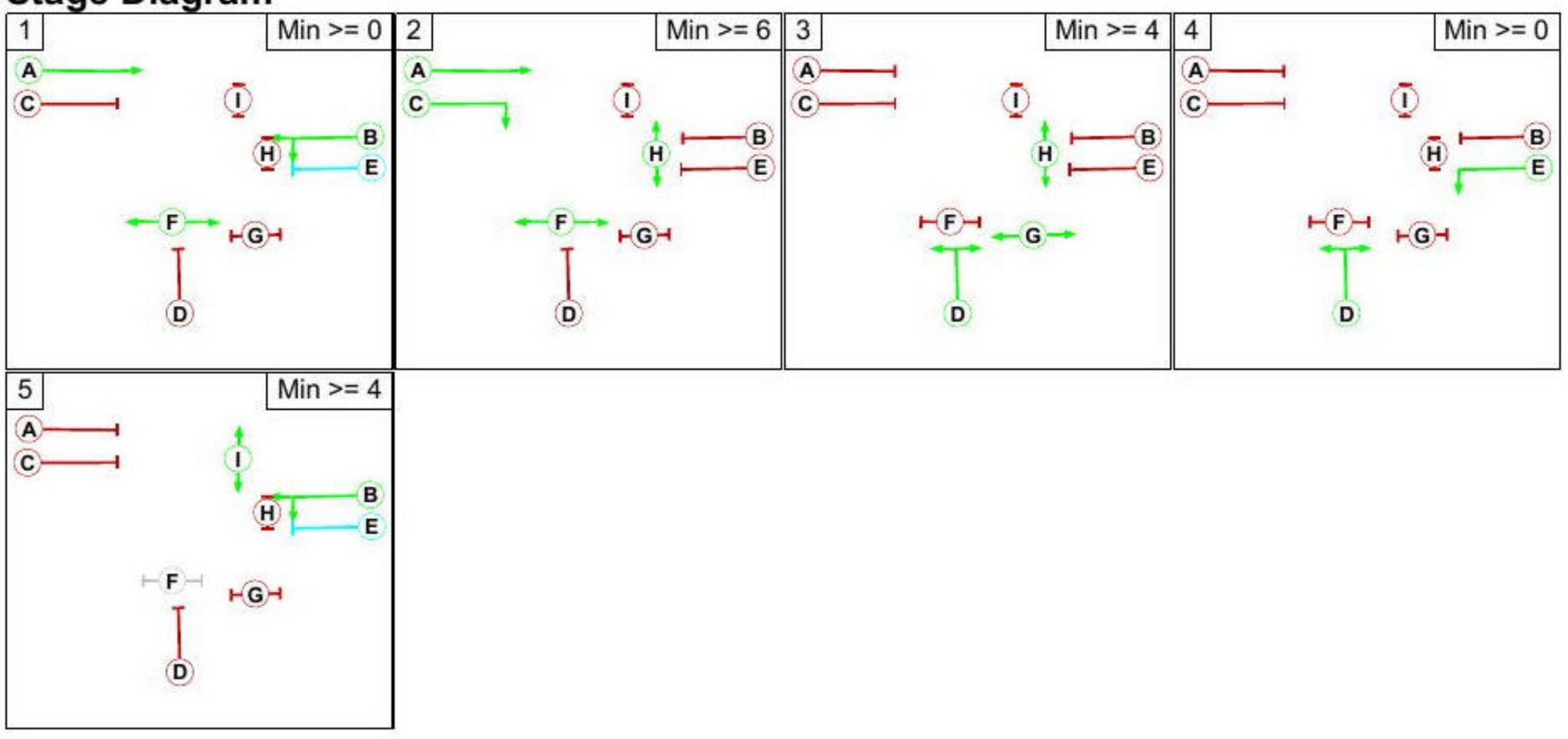


Scenario 13: 'AM BASE 2021 + COMMIT' (FG7: '2021 AM BASE + COMMITTED', Plan 1: 'With Phase G')

Network Layout Diagram

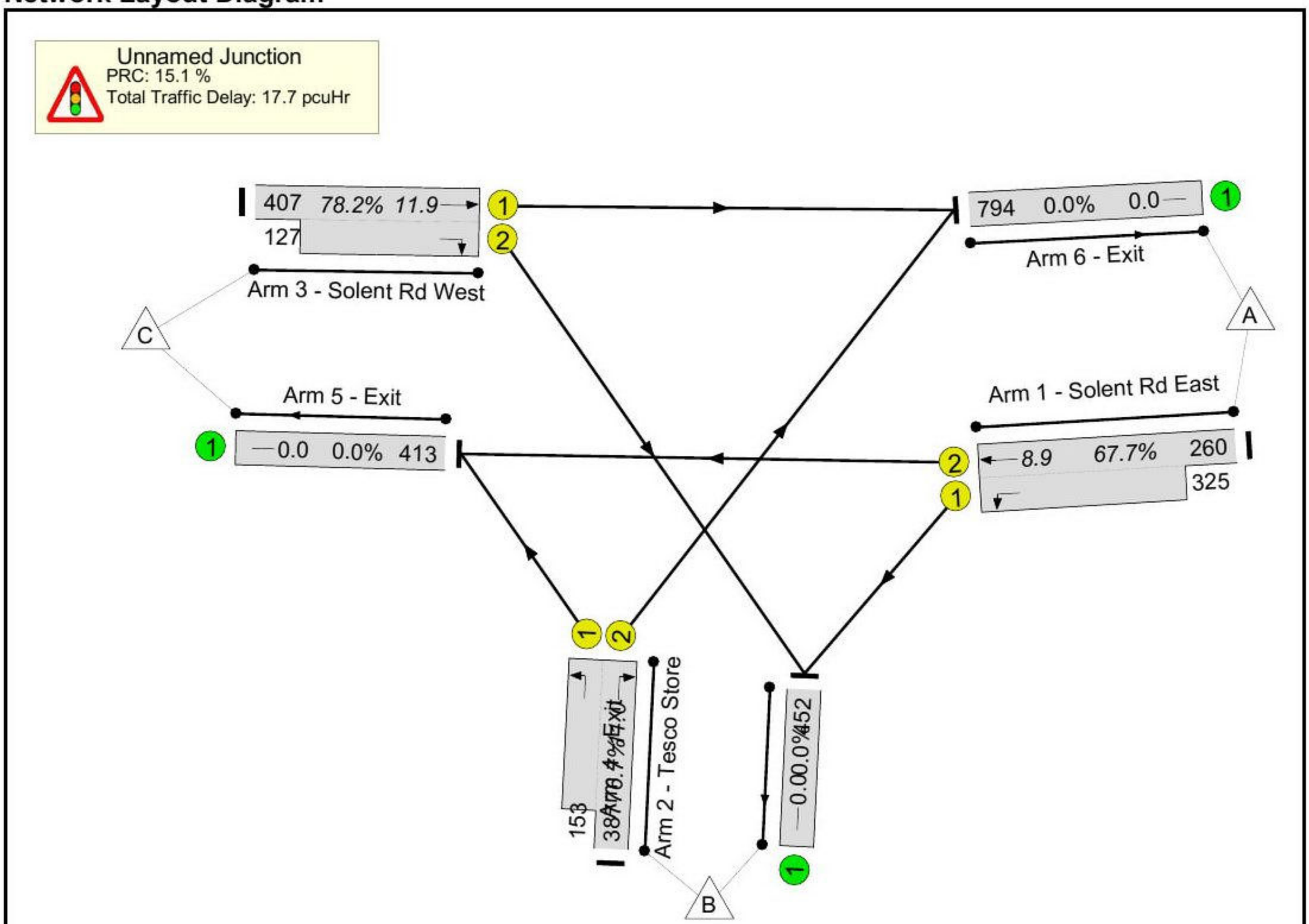


Stage Diagram

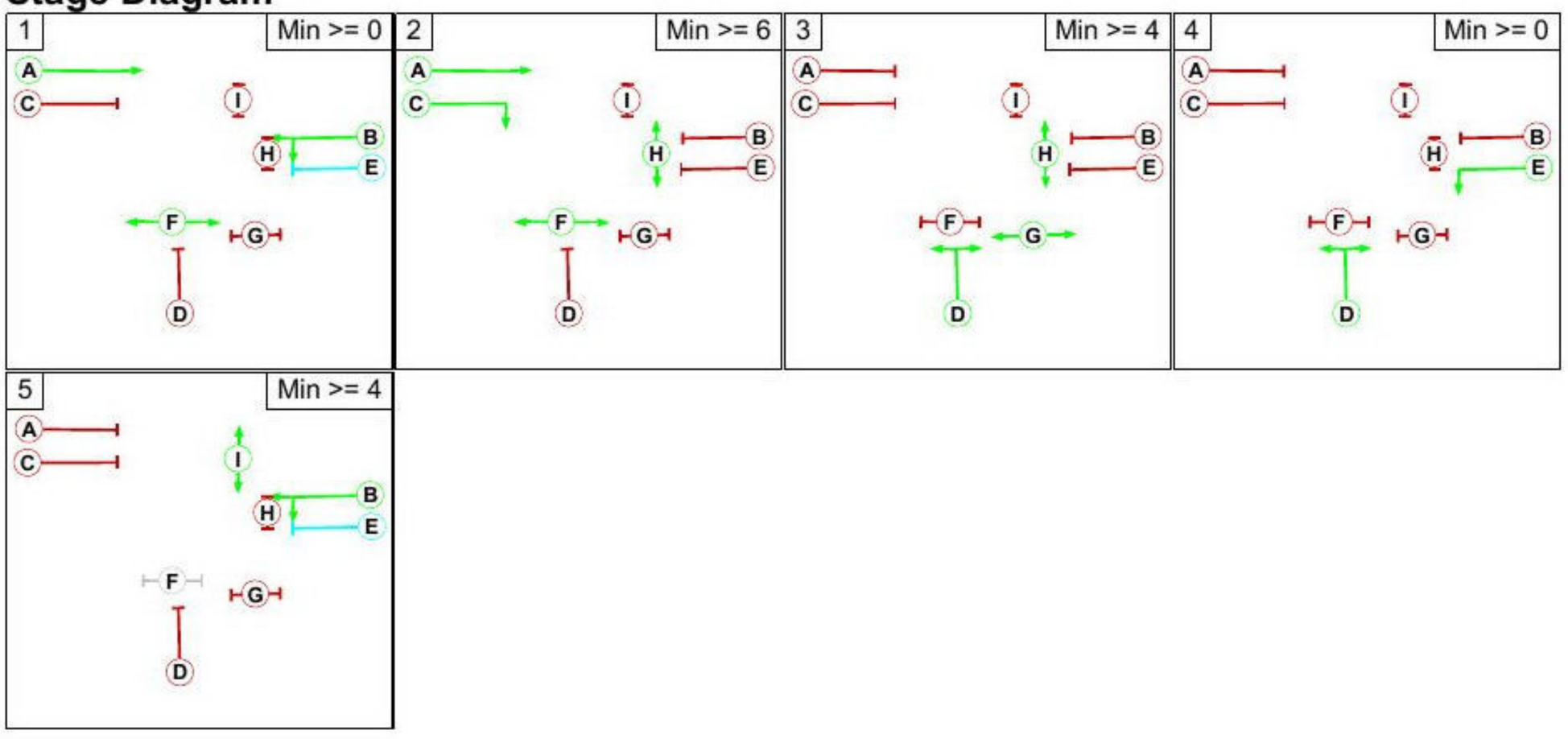


Scenario 14: 'PM BASE 2021 + COMMIT' (FG8: '2021 PM BASE + COMMITTED', Plan 1: 'With Phase G')

Network Layout Diagram

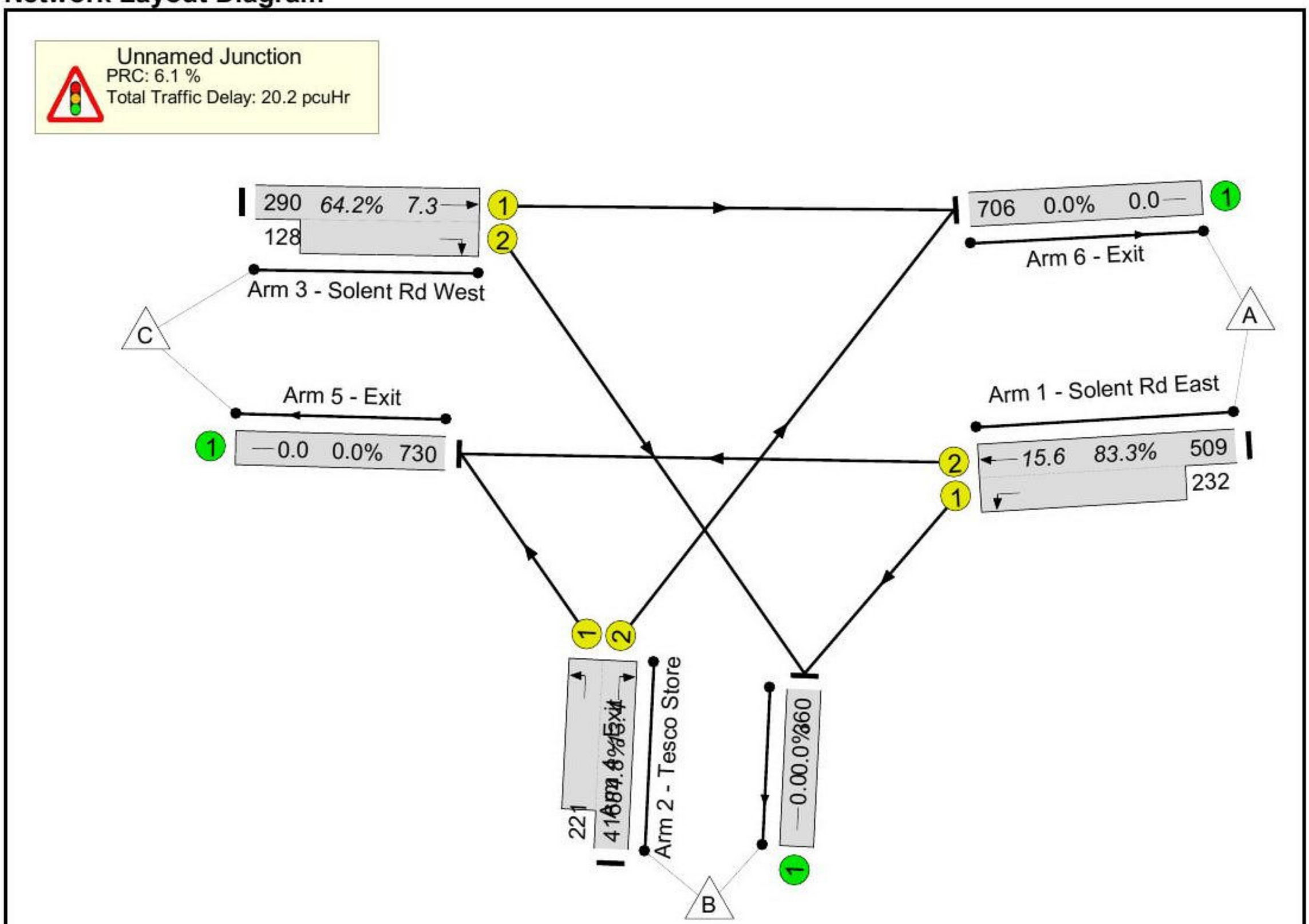


Stage Diagram

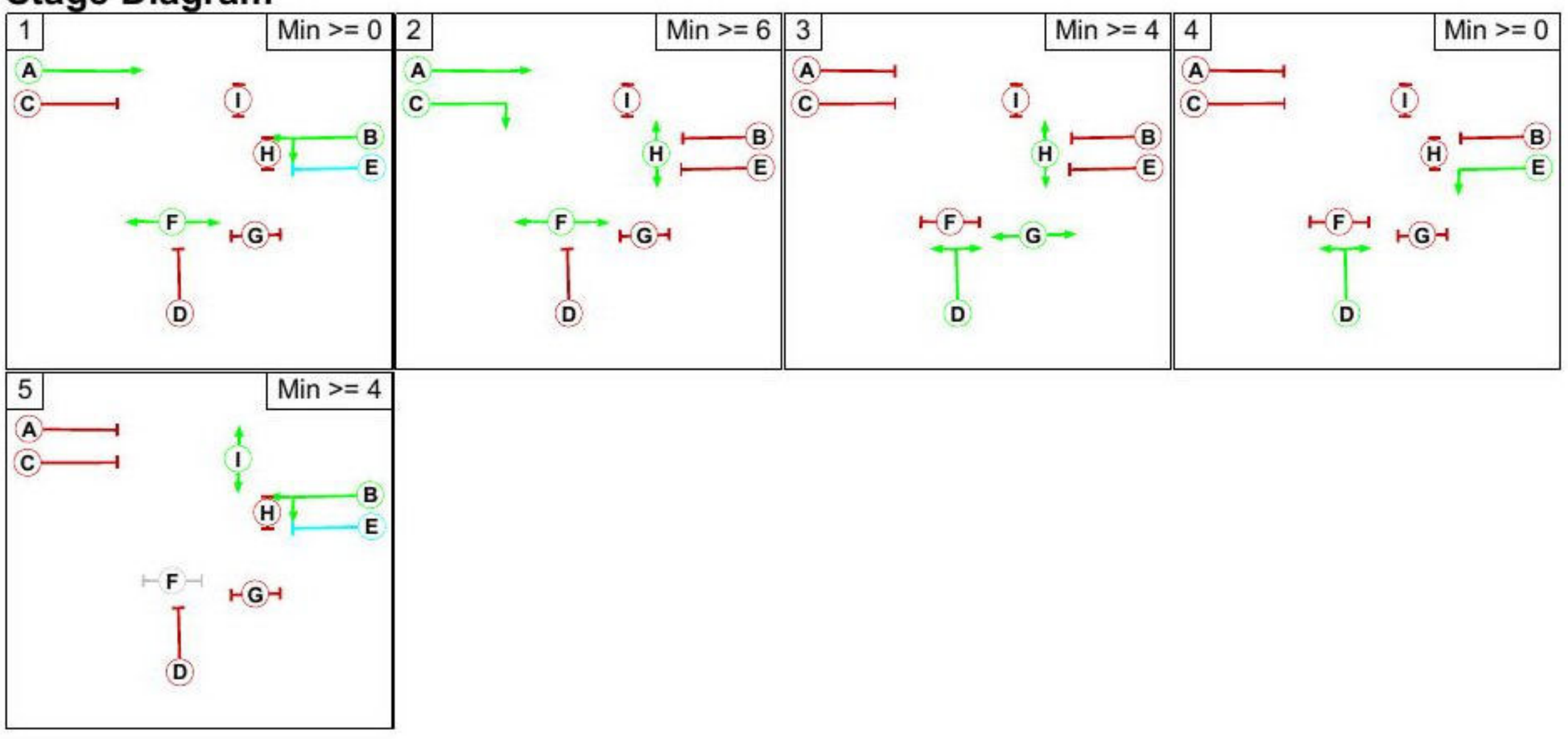


Scenario 15: 'SAT BASE 2021 + COMMIT' (FG9: '2021 SAT BASE + COMMITTED', Plan 1: 'With Phase G')

Network Layout Diagram

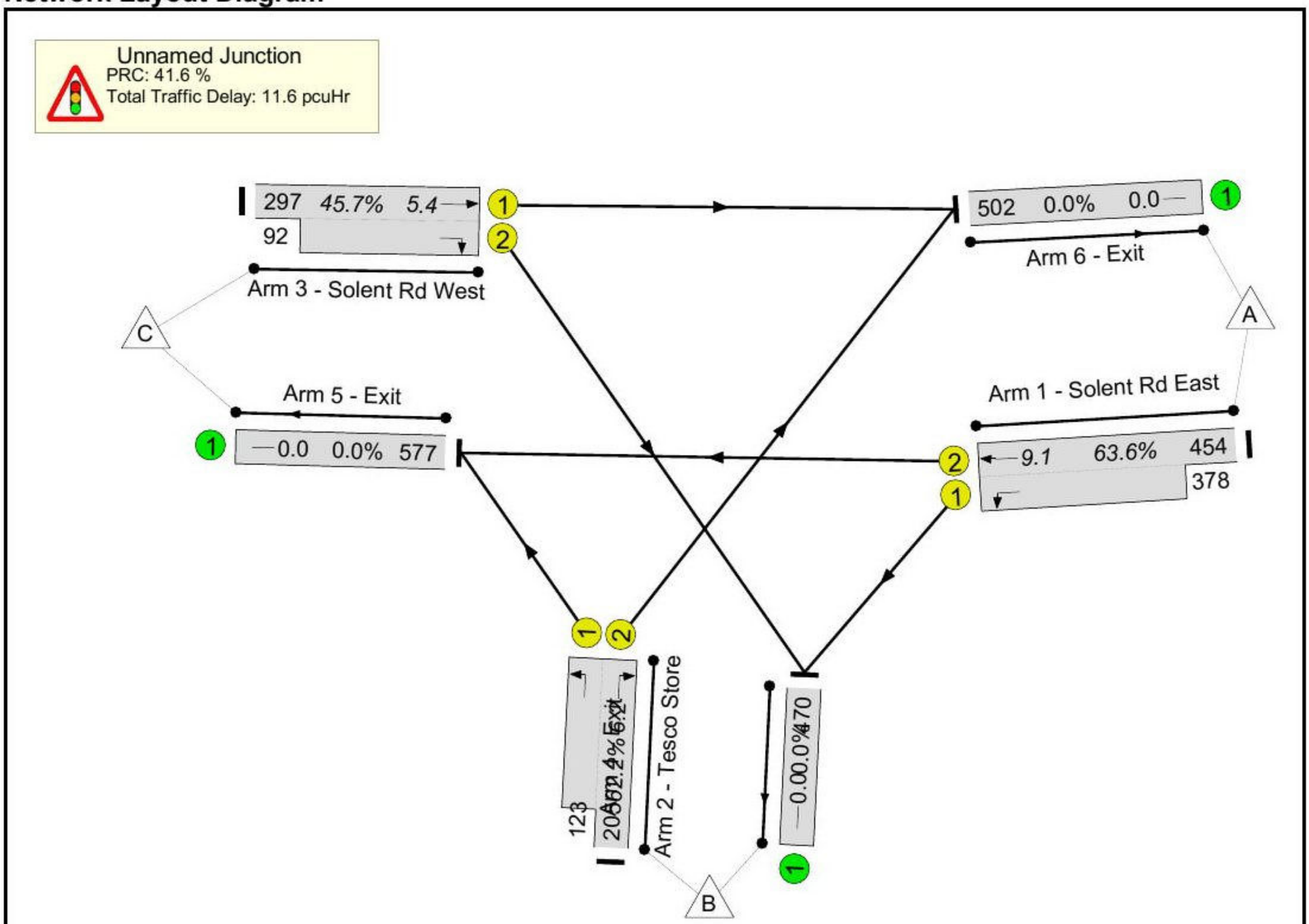


Stage Diagram



Scenario 16: 'AM BASE 2021 + COMMIT + PRO' (FG10: '2021 AM BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

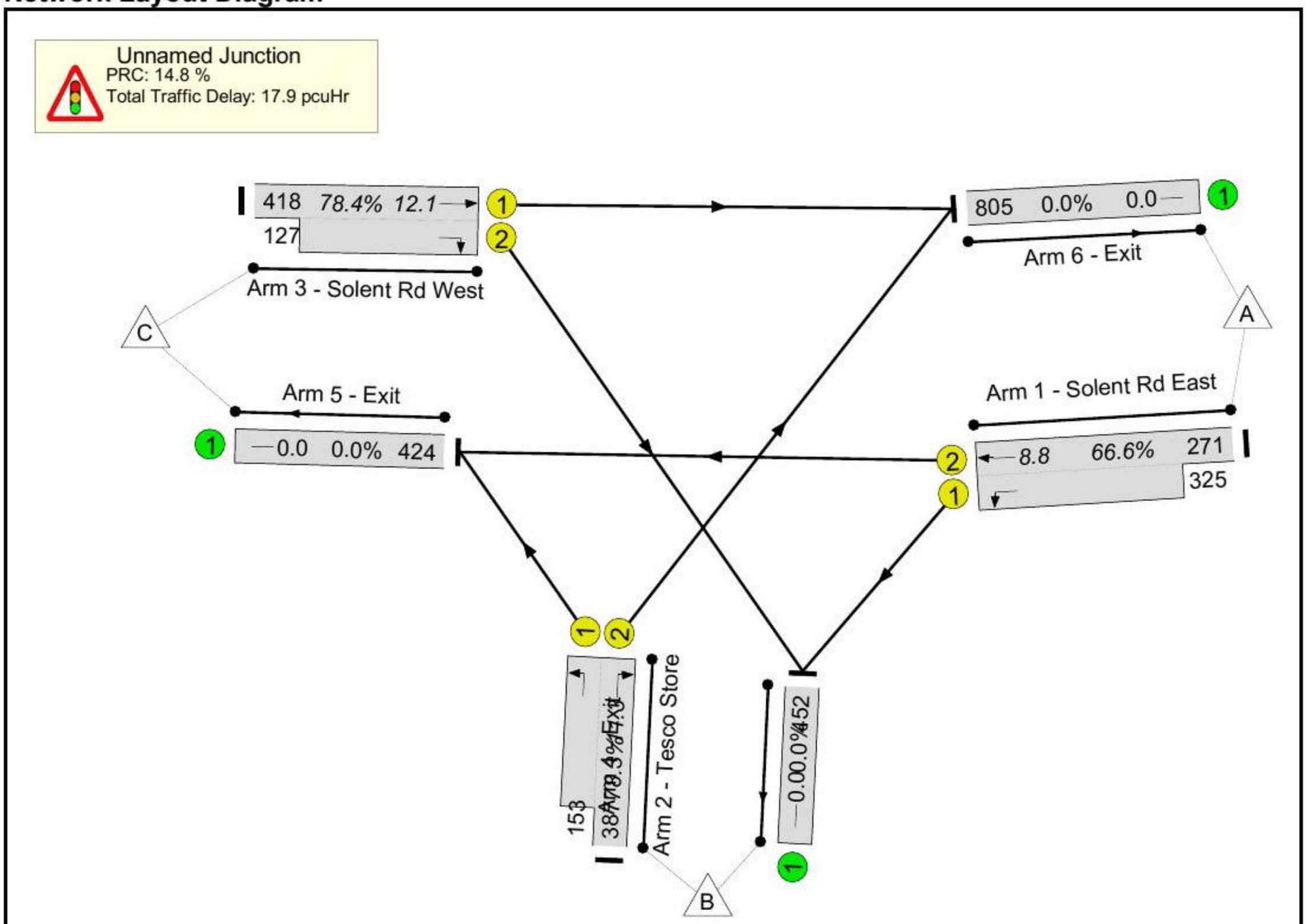
Network Layout Diagram



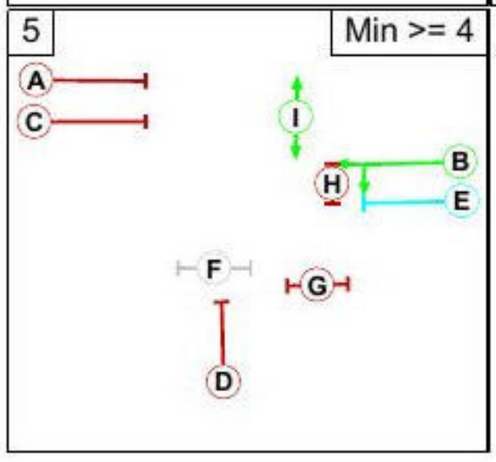
Stage Diagram

Scenario 17: 'PM BASE 2021 + COMMIT + PRO' (FG11: '2021 PM BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Network Layout Diagram

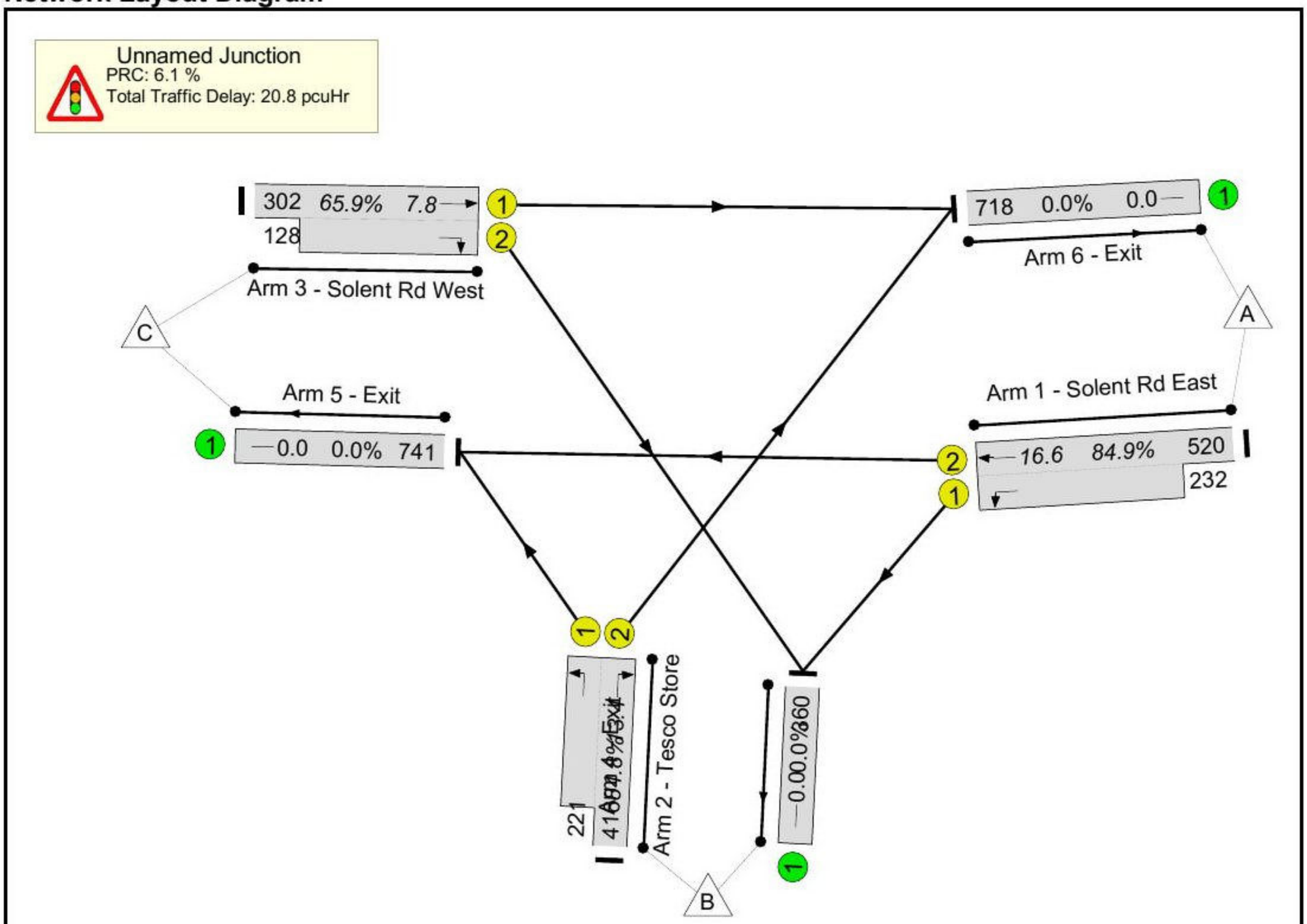


Stage Diagram

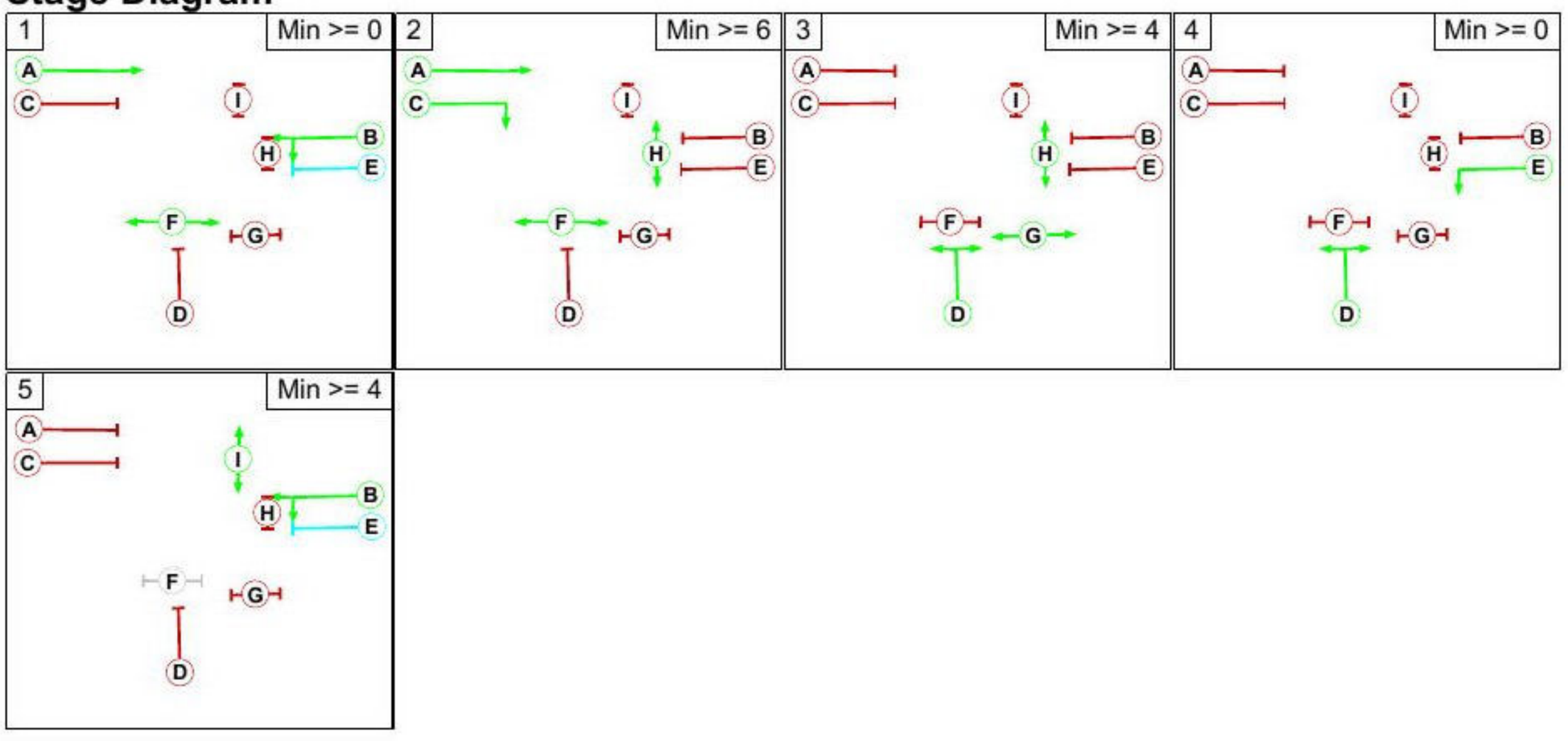


Scenario 18: 'SAT BASE 2021 + COMMIT + PRO' (FG12: '2021 SAT BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Network Layout Diagram



Stage Diagram



Phase Intergreens Matrix

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

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		6	9	9	8
2	7		9	9	8
3	9	9		9	9
4	6	X	X		9
5	7	7	9	8	

Phases in Stage

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

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Solent Rd East)	U	B E	2	3	12.0	User	1541	-	-	-	-	-
1/2 (Solent Rd East)	U	B	2	3	60.0	User	2042	-	-	-	-	-
2/1 (Tesco Store)	U	D	2	3	10.0	User	1484	-	-	-	-	-
2/2 (Tesco Store)	U	D	2	3	60.0	User	1557	-	-	-	-	-
3/1 (Solent Rd West)	U	A	2	3	60.0	User	1514	-	-	-	-	-
3/2 (Solent Rd West)	U	C	2	3	10.0	User	1868	-	-	-	-	-
4/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows

Scenario 1: 'AM OBSERVED 2016' (FG1: '2016 AM OBSERVED', Plan 1: 'With Phase G')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM OBSERVED 2016' (FG2: '2016 PM OBSERVED', Plan 1: 'With Phase G')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'SAT OBSERVED 2016' (FG3: '2016 SAT OBSERVED', Plan 1: 'With Phase G')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'AM BASE 2021' (FG4: '2021 AM OBSERVED', Plan 1: 'With Phase G')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'PM BASE 2021' (FG5: '2021 PM OBSERVED', Plan 1: 'With Phase G')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'SAT BASE 2021' (FG6: '2021 SAT OBSERVED', Plan 1: 'With Phase G')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 13: 'AM BASE 2021 + COMMIT' (FG7: '2021 AM BASE + COMMITTED', Plan 1: 'With Phase G')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 14: 'PM BASE 2021 + COMMIT' (FG8: '2021 PM BASE + COMMITTED', Plan 1: 'With Phase G')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 15: 'SAT BASE 2021 + COMMIT' (FG9: '2021 SAT BASE + COMMITTED', Plan 1: 'With Phase G')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 16: 'AM BASE 2021 + COMMIT + PRO' (FG10: '2021 AM BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 17: 'PM BASE 2021 + COMMIT + PRO' (FG11: '2021 PM BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 18: 'SAT BASE 2021 + COMMIT + PRO' (FG12: '2021 SAT BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Solent Rd East Lane 1)	This lane uses a directly entered Saturation Flow						1541	1541
1/2 (Solent Rd East Lane 2)	This lane uses a directly entered Saturation Flow						2042	2042
2/1 (Tesco Store Lane 1)	This lane uses a directly entered Saturation Flow						1484	1484
2/2 (Tesco Store Lane 2)	This lane uses a directly entered Saturation Flow						1557	1557
3/1 (Solent Rd West Lane 1)	This lane uses a directly entered Saturation Flow						1514	1514
3/2 (Solent Rd West Lane 2)	This lane uses a directly entered Saturation Flow						1868	1868
4/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2016 AM OBSERVED'	08:00	09:00	01:00	
2: '2016 PM OBSERVED'	17:00	18:00	01:00	
3: '2016 SAT OBSERVED'	12:00	13:00	01:00	
4: '2021 AM OBSERVED'	08:00	09:00	01:00	
5: '2021 PM OBSERVED'	17:00	18:00	01:00	
6: '2021 SAT OBSERVED'	12:00	13:00	01:00	
7: '2021 AM BASE + COMMITTED'	08:00	09:00	01:00	
8: '2021 PM BASE + COMMITTED'	17:00	18:00	01:00	
9: '2021 SAT BASE + COMMITTED'	12:00	13:00	01:00	
10: '2021 AM BASE + COMMITTED + PRO'	08:00	09:00	01:00	
11: '2021 PM BASE + COMMITTED + PRO'	17:00	18:00	01:00	
12: '2021 SAT BASE + COMMITTED + PRO'	12:00	13:00	01:00	

Traffic Flows, Desired

FG1: '2016 AM OBSERVED'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	350	400	750
	B	190	0	114	304
	C	256	85	0	341
	Tot.	446	435	514	1395

FG2: '2016 PM OBSERVED'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	302	229	531
	B	359	0	142	501
	C	387	418	0	485
	Tot.	728	420	371	1517

FG3: '2016 SAT OBSERVED'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	202	472	674
	B	386	0	205	591
	C	256	419	0	675
	Tot.	642	621	677	1940

FG4: '2021 AM OBSERVED'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	378	433	811
	B	205	0	123	328
	C	277	92	0	369
	Tot.	482	470	556	1508

FG5: '2021 PM OBSERVED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	325	247	572
	B	387	0	153	540
	C	395	127	0	522
	Tot.	782	452	400	1634

FG6: '2021 SAT OBSERVED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	218	509	727
	B	418	0	221	639
	C	278	128	0	406
	Tot.	696	346	730	1772

FG7: '2021 AM BASE + COMMITTED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	378	443	821
	B	205	0	123	328
	C	288	92	0	378
	Tot.	493	470	566	1527

FG8: '2021 PM BASE + COMMITTED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	325	260	585
	B	387	0	153	540
	C	407	127	0	534
	Tot.	794	452	413	1659

FG9: '2021 SAT BASE + COMMITTED'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	282	509	741
	B	418	0	221	639
	C	290	128	0	418
	Tot.	708	360	730	1798

FG10: '2021 AM BASE + COMMITTED + PRO'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	378	454	832
	B	205	0	123	328
	C	297	92	0	389
	Tot.	502	470	577	1549

FG11: '2021 PM BASE + COMMITTED + PRO'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	325	271	596
	B	387	0	153	540
	C	418	127	0	545
	Tot.	805	452	424	1681

FG12: '2021 SAT BASE + COMMITTED + PRO'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	232	520	752
	B	418	0	221	639
	C	302	178	0	480
	Tot.	718	360	741	1819

Stage Timings

Scenario 1: 'AM OBSERVED 2016' (FG1: '2016 AM OBSERVED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	41	7	21	4
Change Point	0	48	61	91

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	-	-		-	-	-	-	-	-	57.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	57.7%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	52	0	750	2042 1547	1318	57.0%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	21	-	304	1557 1484	527	57.7%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	54.7	-	341	1514 1868	776	43.9%
4/1	Exit	U	N/A	N/A	-		-	-	-	435	Int	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	514	Int	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	446	Int	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	8.4	1.7	0.0	10.2	-	-	-	-
Unnamed Junction	-	-	0	0	0	8.4	1.7	0.0	10.2	-	-	-	-
1/2+1/1	750	750	-	-	-	3.3	0.7	-	4.0	19.0	7.3	0.7	7.7
2/2+2/1	304	304	-	-	-	3.1	0.7	-	3.7	44.2	4.3	0.7	5.3
3/1+3/2	341	341	-	-	-	2.1	0.4	-	2.5	26.1	4.1	0.4	4.5
4/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

	0	PRC for Signalled Lanes (%):	66.0	Total Delay for Signalled Lanes (pcuHr):	10.17
		PRC Over All Lanes (%):	66.0	Total Delay Over All Lanes(pcuHr):	10.17

Cycle Time (s): 134

LinSig V1 style report

Stage Timings

Scenario 2: 'PM OBSERVED 2016' (FG2: '2016 PM OBSERVED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	23	9	37	4
Change Point	0	30	45	91

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	71.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	71.1%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	34	0	531	2042 [541]	846	62.7%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	37	-	501	[557] [484]	705	71.1%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A,C		1	38.9	-	485	[514] [888]	686	70.7%
4/1	Exit	U	N/A	N/A	-		-	-	-	420	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	371	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	726	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	11.9	3.2	0.0	15.1	-	-	-	-
Unnamed Junction	-	-	0	0	0	11.9	3.2	0.0	15.1	-	-	-	-
1/2+1/1	531	531	-	-	-	4.0	0.8	-	4.8	33.0	7.1	0.8	8.0
2/2+2/1	501	501	-	-	-	3.6	1.2	-	4.8	34.8	8.5	1.2	9.7
3/1+3/2	485	485	-	-	-	4.2	1.2	-	5.4	40.2	8.7	1.2	9.9
4/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	726	726	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Cr

PRC for Signalled Lanes (%): 26.8 Total Delay for Signalled Lanes (pcuHr): 15.12 Cycle Time (s): 134

PRC Over All Lanes (%): 26.8 Total Delay Over All Lanes(pcuHr): 15.12

LinSig V1 style report

Stage Timings

Scenario 3: 'SAT OBSERVED 2016' (FG3: '2016 SAT OBSERVED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	24	7	38	4
Change Point	0	31	44	91

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.2%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	35	0	874	2042 1547	882	78.2%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	38	-	591	1557 1484	736	77.2%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	37.7	-	375	1514 1868	638	58.8%
4/1	Exit	U	N/A	N/A	-		-	-	-	321	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	12.8	4.1	0.0	17.0	-	-	-	-
Unnamed Junction	-	-	0	0	0	12.8	4.1	0.0	17.0	-	-	-	-
1/2+1/1	874	874	-	-	-	5.2	1.8	-	7.0	37.3	11.5	1.8	13.3
2/2+2/1	591	591	-	-	-	4.2	1.7	-	5.9	35.9	8.2	1.7	10.9
3/1+3/2	375	375	-	-	-	3.4	0.7	-	4.1	39.0	5.8	0.7	6.3
4/1	321	321	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0

PRC for Signalled Lanes (%): 18.0 Total Delay for Signalled Lanes (pcuHr): 16.96 Cycle Time (s): 134
PRC Over All Lanes (%): 18.0 Total Delay Over All Lanes(pcuHr): 16.96

LinSig V1 style report

Stage Timings

Scenario 4: 'AM BASE 2021' (FG4: '2021 AM OBSERVED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	41	7	21	4
Change Point	0	48	61	91

LinSig V1 style report

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	-	-		-	-	-	-	-	-	62.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	62.2%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	52	0	811	2042 1547	1317	61.6%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	21	-	328	1557 1484	527	62.2%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	54.7	-	369	1514 1888	776	47.6%
4/1	Exit	U	N/A	N/A	-		-	-	-	470	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	556	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	482	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**9.3**	**2.1**	**0.0**	**11.3**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.3**	**2.1**	**0.0**	**11.3**	-	-	-	-
1/2+1/1	817	811	-	-	-	3.6	0.8	-	4.4	19.7	7.7	0.8	8.5
2/2+2/1	328	328	-	-	-	3.3	0.8	-	4.1	45.5	5.4	0.8	8.2
3/1+3/2	368	369	-	-	-	2.3	0.5	-	2.7	26.6	4.5	0.5	5.0
4/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0

PRC for Signalled Lanes (%): 44.8 Total Delay for Signalled Lanes (pcuHr): 11.32 Cycle Time (s): 134
PRC Over All Lanes (%): 44.8 Total Delay Over All Lanes(pcuHr): 11.32

LinSig V1 style report

Stage Timings

Scenario 5: 'PM BASE 2021' (FG5: '2021 PM OBSERVED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	24	8	37	4
Change Point	0	31	45	91

LinSig V1 style report

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	-	-		-	-	-	-	-	-	76.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	76.7%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	35	0	572	2042 1547	884	86.2%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	37	-	540	1557 1484	704	76.7%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	38.8	-	522	1514 1888	681	76.6%
4/1	Exit	U	N/A	N/A	-		-	-	-	452	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	400	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	782	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	12.9	4.2	0.0	17.1	-	-	-	-
Unnamed Junction	-	-	0	0	0	12.9	4.2	0.0	17.1	-	-	-	-
1/2+1/1	572	572	-	-	-	4.8	1.0	-	5.8	36.1	7.8	1.0	8.7
2/2+2/1	540	540	-	-	-	4.0	1.8	-	5.8	37.8	8.4	1.6	11.3
3/1+3/2	522	522	-	-	-	4.7	1.8	-	6.5	45.2	9.5	1.6	11.2
4/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	782	782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0

PRC for Signalled Lanes (%): 17.4 Total Delay for Signalled Lanes (pcuHr): 17.12 Cycle Time (s): 134

PRC Over All Lanes (%): 17.4 Total Delay Over All Lanes(pcuHr): 17.12

LinSig V1 style report

Stage Timings

Scenario 6: 'SAT BASE 2021' (FG6: '2021 SAT OBSERVED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	24	7	38	4
Change Point	0	31	44	91

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.4%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	35	0	727	2042 1547	862	84.4%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	38	-	837	1557 1484	736	88.2%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	37.7	-	404	1514 1868	638	88.3%
4/1	Exit	U	N/A	N/A	-		-	-	-	346	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	730	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	892	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**14.1**	**5.8**	**0.0**	**19.9**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**14.1**	**5.8**	**0.0**	**19.9**	-	-	-	-
1/2+1/1	727	727	-	-	-	5.8	2.6	-	8.4	41.4	13.4	2.6	13.3
2/2+2/1	837	837	-	-	-	4.7	2.4	-	7.1	39.9	10.5	2.4	12.3
3/1+3/2	404	404	-	-	-	3.7	0.9	-	4.5	40.2	8.1	0.9	7.3
4/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	892	892	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0

PRC for Signalled Lanes (%): 8.7 | Total Delay for Signalled Lanes (pcuHr): 19.94 | Cycle Time (s): 134

PRC Over All Lanes (%): 8.7 | Total Delay Over All Lanes(pcuHr): 19.94

LinSig V1 style report

Stage Timings

Scenario 13: 'AM BASE 2021 + COMMIT' (FG7: '2021 AM BASE + COMMITTED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	41	7	21	4
Change Point	0	48	61	91

LinSig V1 style report

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	-	-		-	-	-	-	-	-	62.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	62.4%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	52	0	821	2042 1547	1318	62.4%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	21	-	328	1557 1484	527	62.2%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	54.7	-	378	1514 1868	830	45.5%
4/1	Exit	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	566	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**9.4**	**2.1**	**0.0**	**11.4**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.4**	**2.1**	**0.0**	**11.4**	-	-	-	-
1/2+1/1	821	821	-	-	-	8.7	0.8	-	9.5	19.9	8.3	0.8	8.8
2/2+2/1	328	328	-	-	-	0.8	0.8	-	1.7	45.6	5.4	0.8	6.2
3/1+3/2	378	378	-	-	-	2.8	0.4	-	3.2	28.1	4.8	0.4	5.2
4/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

	0	PRC for Signalled Lanes (%):	44.3	Total Delay for Signalled Lanes (pcuHr):	11.41
		PRC Over All Lanes (%):	44.3	Total Delay Over All Lanes(pcuHr):	11.41

Cycle Time (s): 134

LinSig V1 style report

Stage Timings

Scenario 14: 'PM BASE 2021 + COMMIT' (FG8: '2021 PM BASE + COMMITTED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	23	9	37	4
Change Point	0	30	45	91

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.2%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	34	0	585	2042 1547	884	87.7%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	37	-	540	1557 1484	704	76.7%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	38.9	-	534	1514 1868	688	78.2%
4/1	Exit	U	N/A	N/A	-		-	-	-	452	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	413	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	794	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	13.3	4.4	0.0	17.7	-	-	-	-
Unnamed Junction	-	-	0	0	0	13.3	4.4	0.0	17.7	-	-	-	-
1/2+1/1	585	585	-	-	-	4.5	1.0	-	5.6	34.2	7.9	1.0	8.9
2/2+2/1	540	540	-	-	-	4.0	1.8	-	5.8	37.8	9.4	1.6	11.3
3/1+3/2	534	534	-	-	-	4.7	1.8	-	6.5	43.8	10.1	1.8	11.9
4/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0

PRC for Signalled Lanes (%): 16.1 Total Delay for Signalled Lanes (pcuHr): 17.65 Cycle Time (s): 134
PRC Over All Lanes (%): 16.1 Total Delay Over All Lanes(pcuHr): 17.65

LinSig V1 style report

Stage Timings

Scenario 15: 'SAT BASE 2021 + COMMIT' (FG9: '2021 SAT BASE + COMMITTED', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	25	7	37	4
Change Point	0	32	45	91

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.8%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	33	0	741	2042 [541]	890	83.3%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	37	-	837	[557 1484]	751	84.8%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	38.7	-	418	[514 1888]	651	84.2%
4/1	Exit	U	N/A	N/A	-		-	-	-	360	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	730	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	706	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	14.2	6.0	0.0	20.2	-	-	-	-
Unnamed Junction	-	-	0	0	0	14.2	6.0	0.0	20.2	-	-	-	-
1/2+1/1	741	741	-	-	-	5.7	2.4	-	8.1	39.4	13.2	2.4	15.6
2/2+2/1	837	837	-	-	-	4.8	2.7	-	7.5	32.8	10.7	2.7	13.4
3/1+3/2	418	418	-	-	-	3.7	0.3	-	4.0	39.7	8.4	0.9	7.3
4/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	706	706	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

	0	PRC for Signalled Lanes (%):	6.1	Total Delay for Signalled Lanes (pcuHr):	20.22
		PRC Over All Lanes (%):	6.1	Total Delay Over All Lanes(pcuHr):	20.22

Cycle Time (s): 134

LinSig V1 style report

Stage Timings

Scenario 16: 'AM BASE 2021 + COMMIT + PRO' (FG10: '2021 AM BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	41	7	21	4
Change Point	0	48	61	91

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	-	-		-	-	-	-	-	-	63.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	63.6%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	52	0	832	2042 1547	1309	63.6%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	21	-	328	1557 1484	527	62.2%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A C		1	54.7	-	389	1514 1868	851	45.7%
4/1	Exit	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**0**	**0**	**0**	**9.5**	**2.1**	**0.0**	**11.6**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.5**	**2.1**	**0.0**	**11.6**	-	-	-	-
1/2+1/1	832	832	-	-	-	8.8	0.9	-	9.8	20.1	8.2	0.9	9.1
2/2+2/1	328	328	-	-	-	3.8	0.8	-	4.7	45.5	5.4	0.8	6.2
3/1+3/2	389	389	-	-	-	2.4	0.4	-	2.8	25.9	5.0	0.4	5.4
4/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0

PRC for Signalled Lanes (%): 41.8 Total Delay for Signalled Lanes (pcuHr): 11.58 Cycle Time (s): 134
PRC Over All Lanes (%): 41.8 Total Delay Over All Lanes(pcuHr): 11.58

LinSig V1 style report

Stage Timings

Scenario 17: 'PM BASE 2021 + COMMIT + PRO' (FG11: '2021 PM BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	24	9	36	4
Change Point	0	31	46	91

LinSig V1 style report

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	-	-		-	-	-	-	-	-	78.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.4%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	35	0	596	2042 [541]	895	66.6%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	33	-	540	[557 1484]	690	78.3%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A,C		1	39.9	-	545	[514 1383]	695	78.4%
4/1	Exit	U	N/A	N/A	-		-	-	-	452	Inf	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	424	Inf	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	805	Inf	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	13.4	4.5	0.0	17.9	-	-	-	-
Unnamed Junction	-	-	0	0	0	13.4	4.5	0.0	17.9	-	-	-	-
1/2+1/1	596	596	-	-	-	4.5	1.0	-	5.5	33.0	7.8	1.0	8.8
2/2+2/1	540	540	-	-	-	4.1	1.8	-	5.9	39.2	9.8	1.8	11.3
3/1+3/2	545	545	-	-	-	4.8	1.8	-	6.5	43.2	10.8	1.8	12.7
4/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	805	805	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

0 PRC for Signalled Lanes (%): 14.3 Total Delay for Signalled Lanes (pcuHr): 17.88 Cycle Time (s): 104
PRC Over All Lanes (%): 14.3 Total Delay Over All Lanes(pcuHr): 17.88

LinSig V1 style report

Stage Timings

Scenario 18: 'SAT BASE 2021 + COMMIT + PRO' (FG12: '2021 SAT BASE + COMMITTED + PRO', Plan 1: 'With Phase G')

Stage	1	2	3	5
Duration	25	7	37	4
Change Point	0	32	45	91

LinSig V1 style report

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.9%
1/2+1/1	Solent Rd East Left Ahead	U	N/A	N/A	B	E	1	33	0	752	2042 1547	886	84.9%
2/2+2/1	Tesco Store Left Right	U	N/A	N/A	D		1	37	-	837	1557 1484	751	84.8%
3/1+3/2	Solent Rd West Right Ahead	U	N/A	N/A	A,C		1	38.7	-	430	1514 1868	652	85.9%
4/1	Exit	U	N/A	N/A	-		-	-	-	360	Int	**	0.0%
5/1	Exit	U	N/A	N/A	-		-	-	-	741	Int	**	0.0%
6/1	Exit	U	N/A	N/A	-		-	-	-	718	Int	**	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	14.5	6.3	0.0	20.8	-	-	-	-
Unnamed Junction	-	-	0	0	0	14.5	6.3	0.0	20.8	-	-	-	-
1/2+1/1	752	752	-	-	-	5.8	2.7	-	8.5	40.8	13.9	2.7	13.8
2/2+2/1	837	837	-	-	-	4.8	2.7	-	7.5	32.8	10.7	2.7	13.4
3/1+3/2	430	430	-	-	-	3.8	1.0	-	4.8	40.0	8.8	1.0	7.8
4/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

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PRC for Signalled Lanes (%): 8.1 Total Delay for Signalled Lanes (pcuHr): 20.80 Cycle Time (s): 134
PRC Over All Lanes (%): 8.1 Total Delay Over All Lanes(pcuHr): 20.80

LinSig V1 style report

Solent Rd - Tesco Access Havant.lsg3x