Proposed Residential Development,
Ash Lane, Mancot

October 2023

TRANSPORT ASSESSMENT

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REPORT

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1 INTRODUCTION

1.1 Introduction

1.1.1 Eddisons has been instructed by Castle Green Homes to advise on the traffic and transport matters relating to a planning application for a proposed residential development on land off Ash Lane, Mancot, Flintshire.

1.1.2 This report provides information on the traffic and transport planning aspects of the development proposals to assist the local planning authority in the positive determination of the forthcoming planning application.

1.1.3 The application site is located just south of Mancot centre. Its location is shown in **Plan 1**.

1.1.4 The site occupies an area of undeveloped land. Further details regarding the site's existing use will be provided in **Section 2** of this report.

1.1.5 The proposed development would comprise 280 two, three and four-bedroom dwellings, with new residential vehicular and pedestrian accesses off Ash Lane and Gladstone Way. The Site would also provide additional connections to the surrounding area for active travel users. Further detail on the proposed development layout is provided within **Section 3**.

1.1.6 The planning policy relevant to the proposed development site is discussed in **Section 4** of the report.

1.1.7 **Section 5** provides an assessment of the existing accessibility of the site by non-car travel, before **Section 6** discusses the Travel Plan Framework.

1.1.8 The traffic impact of the proposed development on the local highway network is considered at **Section 7**. **Section 8** draws together the conclusions to this report.

2 EXISTING CONDITIONS

2.1 Existing Site Information

2.1.1 The site area is approximately 8 hectares and is located to the south of Mancot. The site lies to the west of Ash Lane and to the east of the Gladstone Way (A550).

2.1.2 The site's northern boundary is formed by existing uses that front on to Mancot Lane. They include residential dwellings, Mancot Library, and Mancot Village Hall.

2.1.3 The site's eastern boundary is formed by Ash Lane and the existing properties that front on to it. The site's southern boundary is formed by undeveloped land, with the western boundary formed by Gladstone Way and existing residential properties fronting on to Park Avenue.

2.2 Local Highway Network

2.2.1 Ash Lane runs in a north-south direction connecting with Mancot to the north and Hawarden to the south via Crosstree Lane. It is a single carriageway road with street lighting and a footway along one side of the road when in the vicinity of the site boundary.

2.2.2 The A550 also has a north-south alignment and connects with Hawarden to the south via a priority controlled junction with The Highway. It continues south from Hawarden via a priority junction with the B5125.

2.2.3 To the north, the A550 connects with the A494 (Alston Road) via a grade separated roundabout. The A494 forms part of the Strategic Road Network, which routes north to connect with the M56 motorway, and south towards the North Wales Expressway.

2.2.4 In the vicinity of the site the A550 is a single carriageway road with street lighting and a footway on one side of the road.

2.3 Baseline Transport Data

2.3.1 The site currently comprises undeveloped land and does not generate any traffic movements onto the local highway network.

3 DEVELOPMENT PROPOSALS

3.1.1 This section of the report provides detail on the development proposals, including the proposed access arrangements and car parking.

3.1.2 The Site has been the subject of a Transport Assessment previously, when reviewed as part of the Flintshire Local Development Plan. That review, undertaken August 2018, concluded that the proposed residential development would be acceptable in transport terms. The principle of residential development on the site was subsequently established by the allocation of the Site for residential development by the Flintshire Local Development Plan 2015 to 2030.

3.1.3 Pre-application discussions were undertaken with Flintshire County Council (FCC) as part of the development proposal. With regards to transport inputs, it was agreed that the application would include updated Transport Assessment and Travel Plan documents. Both of those inputs are covered by this document, as discussed below.

3.2 Proposed Development

3.2.1 The proposal would deliver a residential development that would be accessed via Ash Lane and Gladstone Way. The development would consist of 280 dwellings comprising:

- 159no. two-bedroom units,
- 41no. three-bedroom units; and
- 80No. four-bedroom units.

3.2.2 The development would be accessed via two new three-arm priority junctions; one taking access from Ash Lane, with the other from Gladstone Way. The location of the Site access points are shown in **Plan 2**.

3.3 Pedestrian and Cycle Access

3.3.1 The Site would provide access for pedestrians and cyclists via the vehicular access points off Ash Lane and Gladstone Way. Additional dedicated active travel routes would also be provided towards the north of the site which would provide access to Ash Lane, Park Avenue and Mancot Lane.

3.3.2 The site's internal layout has been designed to provide a safe environment for pedestrians and cyclists. It includes clearly defined walkways, crossing points and traffic calming features as appropriate. Secure, sheltered, cycle parking would also be provided at each dwelling in accordance with the relevant Local Authority guidance.

3.4 Car Parking and Internal Layout

3.4.1 As discussed above, the proposed development sits within the administrative boundary of FCC.

3.4.2 The proposed development will comply with the Council's current parking standards.

3.5 FCC Parking Standards

3.5.1 FCC's current maximum car parking standards specify a maximum provision of '2 parking spaces per dwelling' for two and three bedroom dwellings. Dwellings with 3 or more bedrooms should have a maximum provision 3 parking spaces per dwelling. On that basis, the site would provide a maximum of 640 parking spaces based on the housing mix currently proposed.

3.6 Vehicular Access

3.6.1 The proposed development's vehicular access points would be off Ash Lane and Gladstone Way. Both junctions would comprise a new 3-arm priority junction.

3.6.2 The Site access road would comprise a 5.5 metre wide carriageway, with 6-metre entry radii. 2.0-metre footways would be provided along both sides of the access road, which would connect with the existing pedestrian network along Ash Lane and Gladstone Way. Further information on the site's accessibility by non-car modes of transport is set out in the **Section 5**.

3.6.3 The site access junction layouts are appropriate for providing access to non-car modes of transport and for the scale of the proposed development. The operational analysis of the access junctions are discussed in more detail later in this report.

3.7 Refuse Vehicle Access

3.7.1 Refuse vehicles would access the site via the proposed vehicle access junctions. As shown in **Plan 3**, refuse vehicles would be able to access all parts of the residential development and would also be able to leave the site in a forward gear.

3.8 Emergency Vehicle Access

3.8.1 Emergency vehicles would also access the site via the proposed vehicle access junction. These vehicle movements would all be suitably accommodated, as shown in **Plan 4.**

4 RELEVANT PLANNING POLICY

4.1 Introduction

4.1.1 This section of the TA reviews the relevant national and local transport planning policy and guidance documents in the context of the proposed development.

4.1.2 The proposed development has been developed to accord with the aims these policies, this section provides a review of the following documents and summarises the strategies therein:

- Planning Policy Wales, Edition 11 – Section 4.1, Transport
- Planning Policy Wales – Technical Advice Note 18: Transport
- The Wales Transport Strategy 2021
- North Wales Joint Local Transport Plan (2015-2020)
- Flintshire Local Development Plan 2015 – 2030
- Flintshire Local Development Plan Topic Paper 16 - Transport

4.2 Planning Policy Wales, Edition 11 - Transport

4.2.1 The aims of the Policy are to ensure that the Planning system support sustainable development that "*increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution*". It seeks to achieve this by:

- Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;
- Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and

- Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles.

4.2.2 This document identifies that the Welsh Government "*is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the Well-being of Future Generations Act*."

4.2.3 With regards to active travel, the document states that "*Walking and cycling are good for our health and well-being. They support valuable social and recreational opportunities and are integral to placemaking, creating life and activity in public places and providing the opportunity to meet people. Sustainable places invite people to walk and cycle as part of their everyday routine*" and also that "*The Active Travel (Wales) Act 201323 makes walking and cycling the preferred option for shorter journeys, particularly everyday journeys, such as to and from a workplace or education establishment, or in order to access health, leisure or other services or facilities*"

4.3 Planning Policy Wales – Technical Advice Note 18: Transport

4.3.1 This document identifies the aims of undertaking a Transport Assessment as part of a planning application. This includes to:

- "*understand the transport impacts of the development;*
- *clearly communicate the impacts to assist the decision making process;*
- *demonstrate the development is sited in a location that will produce a desired and predicted output (for example in terms of target modal split);*
- *mitigate negative transport impacts through the design process and secured through planning conditions or obligations;*

- *maximise the accessibility of the development by non-car modes;*
- *contribute to relevant development plan and RTP objectives relating to accessibility of services and modal share.*"

4.4 The Wales Transport Strategy 2021

4.4.1 This strategy sets out how the transport system can help deliver a more prosperous, green and equal society.

4.4.2 It seeks to bring services to people in order to reduce the need to travel. By providing "*better physical and digital connectivity to support access to more local services, more home and remote working. If more people can walk and cycle for everyday trips, we will reduce our dependency on cars*"

4.4.3 The strategy also seeks "*to allow people and goods to move easily from door-to-door by accessible, sustainable and efficient transport services and infrastructure*". This will be achieved by making sure that "*transport infrastructure is safe, accessible, well-maintained and future-proofed, to adapt to climate change*"

4.4.4 The approach of the strategy is to adopt a Transport Hierarchy to "*give priority to meeting the demand for travel by walking, cycling and public transport ahead of private motor vehicles*"

4.4.5 These measures seek to make "*low-carbon sustainable transport more attractive and more affordable, and seek to adopt innovations that make it easier to use*"

4.4.6 The design of the proposed development has been considered on the basis of the user hierarchy and the site's Travel Plan document will seek to maximise travel by sustainable modes of transport.

4.5 North Wales Joint Local Transport Plan (2015-2020)

4.5.1 The North Wales Joint Local Transport Plan (January 2015) has been produced by the six North Wales Local Authorities to create a detailed programme from 2015 to 2020, with a further framework scheme continuing to 2030.

4.5.2 The Plan aims to "*improve connections to key destinations and markets, enhance access to employment and services, increase levels of walking and cycling, bring improved safety and security and at the same time bring benefits and minimised impacts on the environment*."

4.5.3 FCC have included within the plan a number of infrastructure improvements to facilitate greater levels of walking and cycling. Those measures connect existing routes and provide higher quality active travel routes to key local destinations.

4.5.4 The proposed development has been designed to connect with the surrounding active travel network.

4.6 Flintshire Local Development Plan 2015-2030

4.6.1 The LDP seeks to "*achieve a sustainable and lasting balance between the economic, social, and environmental needs of Flintshire and its residents*".

4.6.2 Policy STR5 discusses Transport and Accessibility. It states that: "*Sustainable economic growth and development can only be delivered by the maintenance and enhancement of an integrated, accessible, usable, safe and reliable transport network."*

4.6.3 It also identifies features that sustainable new development should incorporate where appropriate, these include:

- "Facilitate accessibility to employment, homes, services, and facilities by locating development in places with access to integrated transport infrastructure, thereby reducing the need to travel"

- "Facilitate improvements to the quality, attractiveness and availability of public transport options";
- "Provide walking and cycling routes, linking in with active travel networks and green infrastructure networks"; and
- "Adopt a sustainable approach to the design, function and layout of new development, including providing appropriate levels of parking";

4.6.4 As discussed above, the site was allocated for residential development as part of this LDP.

4.7 Flintshire LPD Topic Paper 16 - Transport

4.7.1 This paper identifies that improvements to the existing transport system can facilitate new development and also bring benefit to existing residents, tourists and businesses. It states that: "*Some of the key aspects of a modern, efficient and integrated transport system will include:*

- *Accessibility to jobs, services and facilities for all aspects of society*
- *Improved efficiency for businesses including the movement of staff, goods and services*
- *Engaging in healthier and lower cost alternatives to the private car*
- *Reduction in carbon emissions to assist in addressing climate change".*

4.8 Planning Policy Summary

4.8.1 This Transport Assessment has been prepared following liaison with the Local Planning Authority to ensure that its content suitably addresses their requirements and is in accordance with local and national policy.

4.8.2 The proposed development will reduce the need to travel by car in part due to its location close to a range of services and amenities. Further details on the

accessibility of the proposed development by non-car modes is provided in **Section 5** of this Transport Assessment.

4.8.3 The site has been designed to promote the use of active travel, it also provides connections to the public transport network, which will also facilitate non-car travel to and from the proposed development.

4.8.4 This planning application is also supported by a Travel Plan document, which seeks to maximise travel by sustainable means and reduce car travel, particularly single occupancy journeys. The Travel Plan is discussed in more detail in **Section 6**.

5 ACCESSIBILITY BY NON-CAR MODES

5.1 Introduction

5.1.1 In order to accord with the aspirations of the Planning Policy for Wales (PPW), any new proposals should extend the choice in transport and secure mobility in a way that supports sustainable development.

5.1.2 As set out in the above section, the principle of the PWW policy is to encourage sustainable travel. This includes:

- "*Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;*
- *Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and*
- *Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles*."

5.1.3 New development should therefore seek to influence the predominant mode of travel in order to achieve a shift in mode split towards non-car modes, thus assisting in meeting the aspirations of current national and local planning policy.

5.1.4 The accessibility of the proposed site has been considered by the following modes of transport:

- accessibility on foot;
- accessibility by cycle;
- accessibility by bus;
- accessibility by rail.

5.2 Access on Foot

5.2.1 It is important to create a choice of direct, safe and attractive routes between where people live and where they need to travel in their day-to-day life. This philosophy clearly encourages the opportunity to walk whatever the journey purpose and also helps to create more active streets and a more vibrant neighbourhood.

5.2.2 Existing footways are provided along the A550 Gladstone Way, Park Avenue and Ash Lane. These link to the wider pedestrian network.

5.2.3 FCC are developing their Active Travel Integrated Network. The aim of the network is to encourage people to walk or cycle for short journeys to access a workplace or educational establishment or to access health, leisure or other services or facilities and to ultimately make Wales a walking and cycling nation.

5.2.4 Included in the Integrated Walking Network are Active Travel Routes MA2/12 and MA2/14, which are located to the north of the development site. These routes run along Park Avenue and Mancot Lane and provide links with Ewloe, Hawarden and through to Deeside as shown in **Figure 5.1** below.

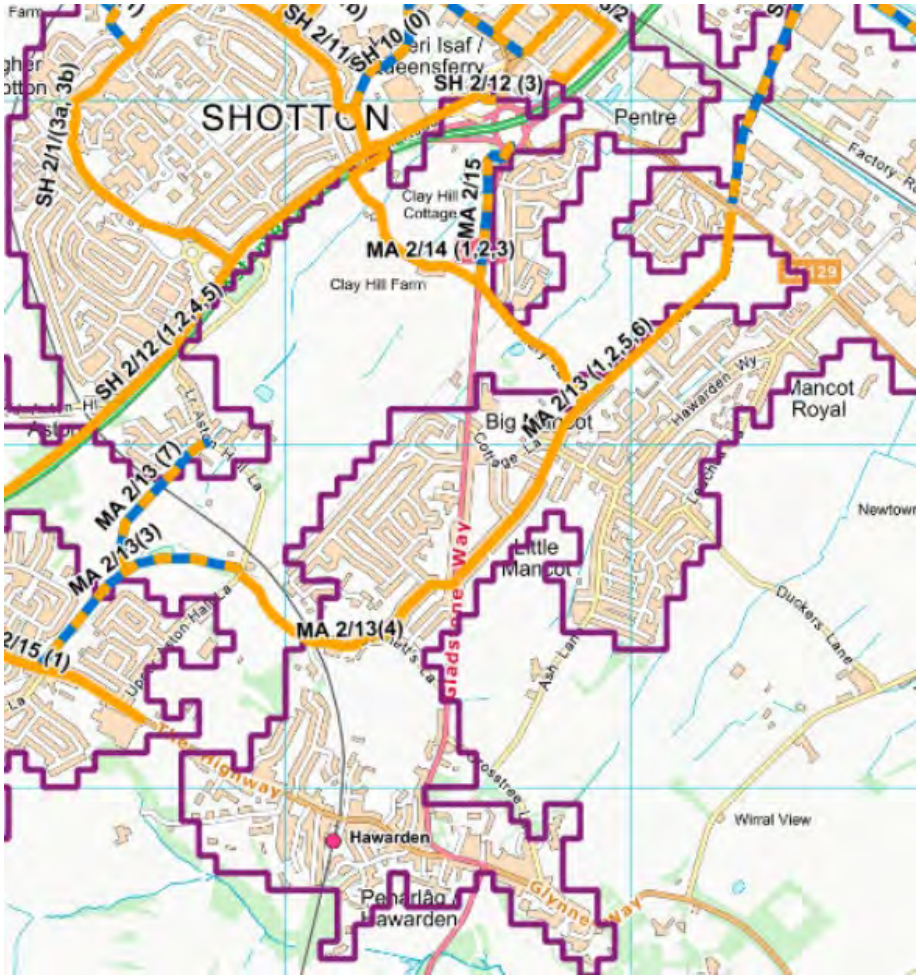


Figure 5.1 – Map of Integrated Walking Network

5.2.5 The above figure shows that the site is well placed to connect with the Integrated Walking Network surrounding the site. This will promote the use of active travel between the site and the leisure, health and employment facilities within the town centre. It will also provide access to the surrounding countryside areas for leisure and well-being purposes.

5.2.6 The Institute of Highways and Transportation (IHT) document 'Guidelines for Providing for Journeys on Foot', provides information on acceptable walking distances. **Table 5.1** suggests distances for desirable, acceptable and

preferred maximum walks to 'town centres', 'commuting/schools' and 'elsewhere'.

Suggested Preferred Maximum Walk		
Town Centre	**Commuting/School**	**Elsewhere**
800m	2,000m	1,200m

Table 5.1 IHT 'Providing for Journeys on Foot' Walk Distances

5.2.7 Manual for Streets (MfS) continues the theme of the acceptability of the 2,000 metre distance in paragraph 4.4.1. This states that '*walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPS13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km*'.

5.2.8 **Table 5.2** below summarises this guidance in tabular form.

'Comfortable' Walk	'Preferred Maximum' Walk
800m	2,000m

Table 5.2 Manual for Streets Walk Distances

5.2.9 Further evidence that people will walk further than the suggested 'preferred maximum' distances in the IHT 'Providing for Journeys on Foot' is contained in a WYG Report entitled 'Accessibility – How Far Do People Walk and Cycle'. This report refers to National Travel Survey (NTS) data for the UK as a whole, excluding London, and confirms the following 85th percentile walk distances:

- All journey purposes – 1,930 metres;
- Commuting – 2,400 metres;
- Shopping – 1,600 metres;
- Education – 3,200 or 4,800 metres;
- Personal business – 1,600 metres.

5.2.10 Overall, in its Table 5.1, the document states that 1,950 square metres is the 85th percentile distance for walking as the main mode of travel. **Table 5.3** below summarises the various 85th percentile walk distances suggested as guidelines in the WYG Study below.

85th Percentile Walk Distances				Overall Recommended Preferred Max
All Journeys	Commuting	Shopping	Personal	
1,950m	2,100m	1,600m	1,600m	1,950m

Table 5.3 WYG Report/NTS Data Walk Distances

5.2.11 In summary, the distance of 1,950 metres, or around 2 kilometres, represents an acceptable maximum walking distance for the majority of land uses.

5.2.12 Section 3.1 of the CIHT guidance 'Planning for Walking' mentioned earlier in this report provides a useful reminder of the health benefits of walking. This states that:

'A brisk *20 minute walk each day could be enough to reduce an individual's risk of* an *early death.'*

5.2.13 A 20-minute walk equates to a walking distance of around 1,600 metres.

5.2.14 In light of the above, a pedestrian catchment of 2 kilometres from the centre of the site, using all usable pedestrian routes, has been provided in **Plan 5**.

5.2.15 The 2,000-metre pedestrian catchment illustrates that almost the entirety of the Mancot town centre boundary, including the primary shopping area, falls within the 2km catchment. Clearly, this represents a key destination for potential employment, retail and leisure trips.

5.2.16 In a recent 2023 YouGov poll, respondents were asked to identify the local amenities they valued the most within a 15 minute walk of their home. The poll results highlight amenities that people consider essential for their day to day lives, such as, grocery stores, healthcare facilities and public transportation. The results of the YouGov Poll are displayed in **Table 5.4** below:

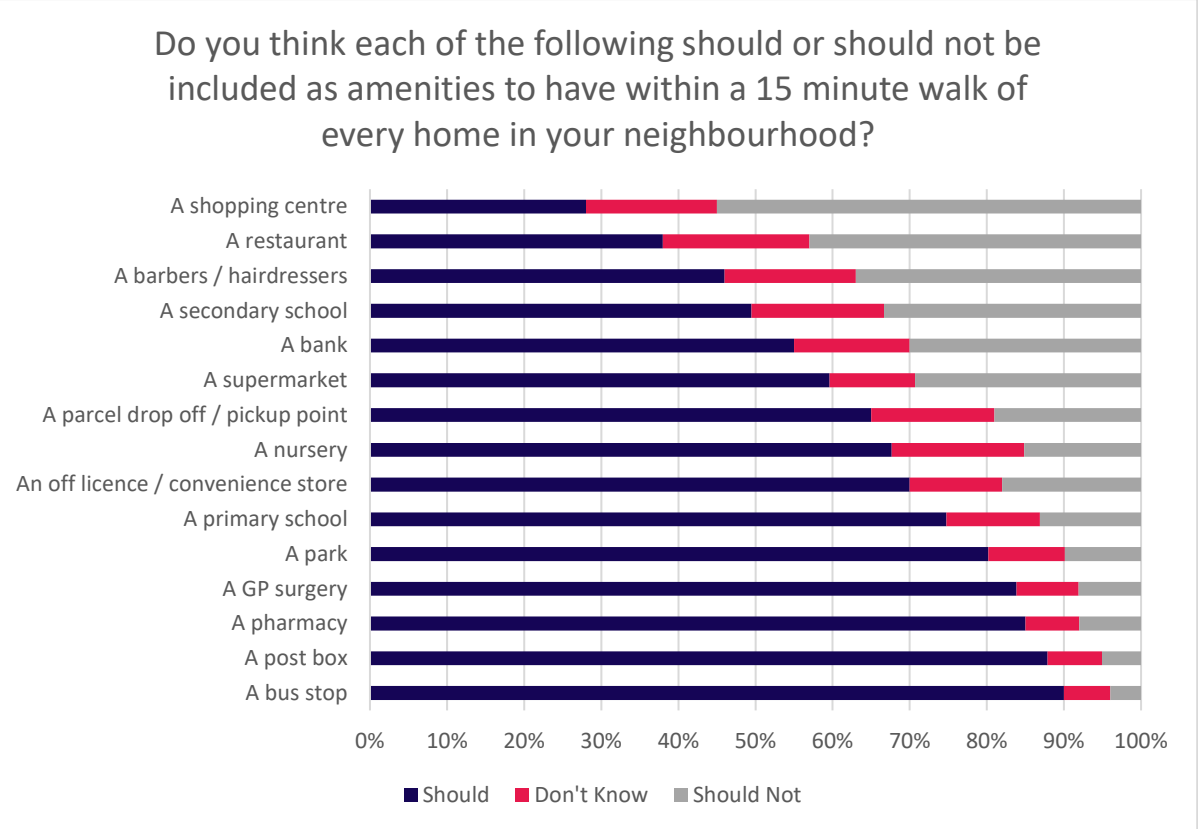


Table 5.4 YouGov Poll Results (Source YouGov)

5.2.17 The above table shows that the majority of respondents, approximately nine in ten, believe that having a bus stop (90%) and a post box (87%) within a short walk of their home is most important. Similarly, a significant proportion think that

medical facilities like a pharmacy (85%) and a GP surgery (83%) should be easily accessible. Less than half of the respondents see the need for a shopping centre (28%), restaurant (38%), or hairdressers (46%) to be located nearby.

5.2.18 **Plan 5** provides an illustrative indication of the areas that can be reached based on a leisurely walk from the site. The plan also displays nearby local amenities, as per those identified within the findings of the YouGov poll.

5.2.19 As can be seen in **Plan 5**, the site is located in close proximity to a number of a local amenities, including a bus stop, a post box, a pharmacy / GP surgery and a local convenience store.

5.2.20 **Table 5.5** below, shows the walking distance from the centre of the site to several of the local key amenities in the immediate vicinity of the site. The table also confirms whether the particular amenity is within the 'preferred maximum' walk distances using the above guideline criteria.

Local Amenity	Distance	Guidance Criteria	Meets with Guidance?
Mancot Bowling Club	300m	1,600m	**YES**
The Village Store	500m	1,600m	**YES**
The White Bear	635m	1,600m	**YES**
The Old Orchard Tavern	670m	1,600m	**YES**
Hawarden Village Church School	700m	3,200m	**YES**
Knights Hawarden Pharmacy	770m	1,600m	**YES**
Hawarden Old Park	850m	1,600m	**YES**
The Stables Medical Practice	880m	1,600m	**YES**
Flintshire Childrens Centre	960m	1,600m	**YES**
Sandycroft County Primary School	1,225m	3,200m	**YES**

Table 5.5 Distance from Site to Local Facilities

5.2.21 Based on the review, it is considered that the existing pedestrian infrastructure will facilitate safe and direct pedestrian linkages between the site and numerous local services and amenities.

5.3 Access by Cycle

5.3.1 Cycling represents a realistic alternative mode to car travel for some site journeys.

5.3.2 Clearly, the new advice contained within the Highway Code, which was updated on 29th January 2022, will improve the safety of vulnerable road users including cyclists, pedestrians, and horse-riders. Most of the new advice relates to where cyclists should position themselves within the lane in various traffic conditions and motorists being required to give cyclists priority in slow moving traffic and

locations where there is insufficient room for vehicles to overtake cyclists safely, allowing 1.5-metres for cyclists when overtaking them.

5.3.3 A distance of 5 kilometres is generally accepted as a distance where cycling has the potential to replace short car journeys. This distance equates to a journey of around 25 minutes based on a leisurely cycle speed of 12 kilometres per hour. The site's cycle catchment would encompass Hawarden, Sansycroft, Broughton, Breton, Ewloe, Deeside, Sealand and Connah's Quay.

5.3.4 National Cycle Route 5 is located north of the site. It provides access from Chester where it then runs west via Garden City and Connah's Quay. It is both an on and off-road cycle route and is located approximately 1.5km from the centre of the site.

5.3.5 National Cycle Route 568 is also located north of the site. This cycle route runs from the north of Chester via Chester city centre then west via Garden City and hen back up north. It is both an on and off-road cycle route and is located approximately 2.1km from the centre of the site.

5.3.6 Also, as part of the Active Travel Integrated Network there are numerous cycle networks located in the vicinity of the site. As can be seen in **Figure 5.2** below, the orange and blue striped line represents a shared cycle and walking network which provides access to Chester and nearby areas.

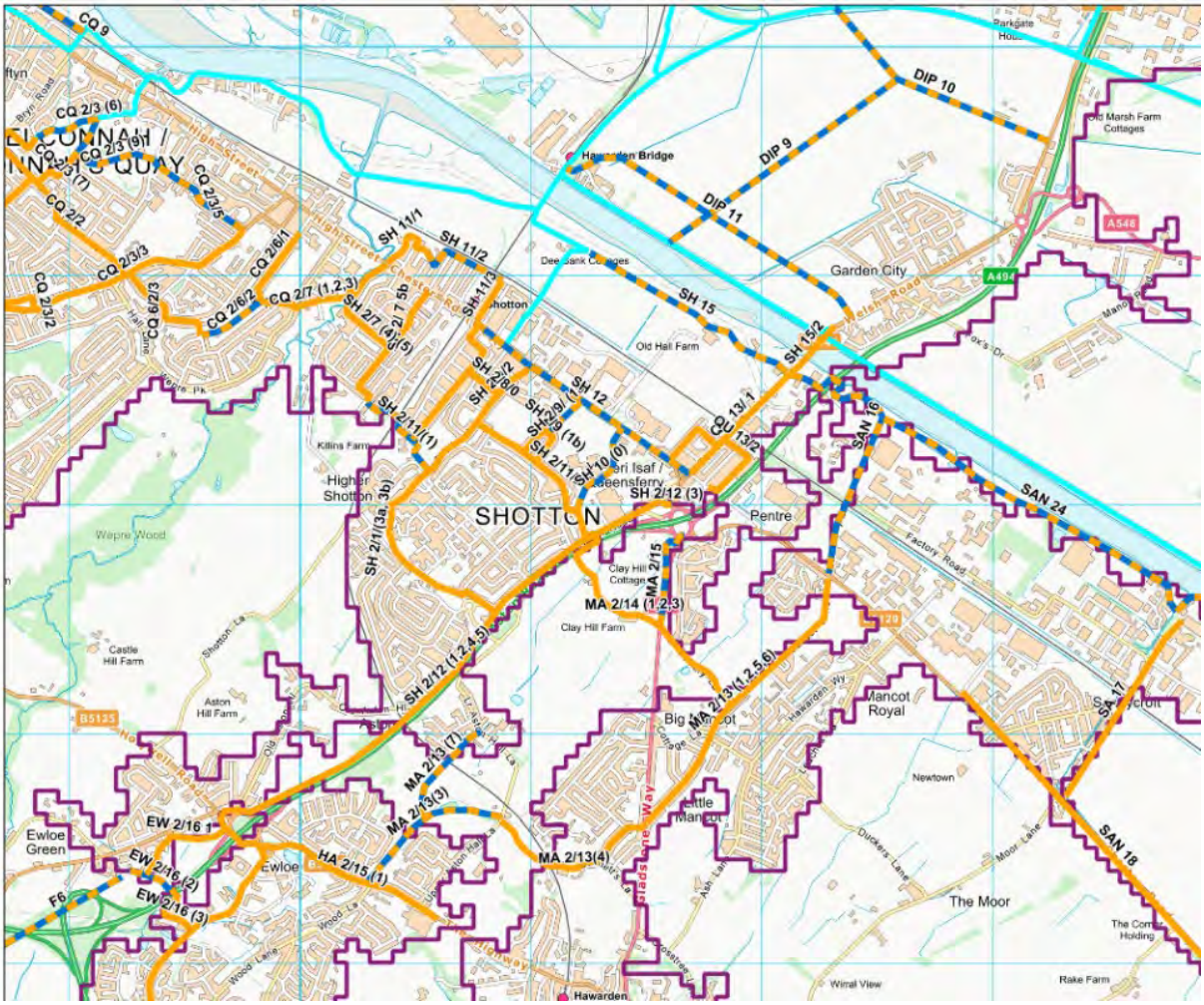


Figure 5.2 – Map of nearby cycle routes

5.3.7 The site can, therefore, be considered as being accessible by cycle.

5.4 Access by Bus

5.4.1 An effective public transport system is essential in providing good accessibility for large parts of the population to opportunities for work, education, shopping, leisure, and healthcare in the town and beyond.

5.4.2 The nearest bus stop to the site is located along Gladstone Way immediately to the west of the development site. This stop consists of a bus stop pole, shelter

and timetable. Additional bus stops are located further along Gladstone Way and on the A550 The Highway. All the nearest bus stops to the site are shown on **Plan 5**.

5.4.3 A summary of the services available from the nearest bus stops from the development site is provided in **Table 5.6** below.

Servic No	Route	Monday - Friday			Saturday			Sun
		Pre 08:00	08:00-17:00	Post 17:00	Pre 08:00	08:00-17:00	Post 17:00	
11	Chester Bus Interchange, Stand F - Holywell Bus Station	5 services	30 mins	6 services	5 services	30 mins	6 services	120 mins

Table 5.6 Existing Bus Services Operating in the Vicinity of the Site

5.4.4 As can be seen from Table 5.7, the nearest bus stops to the site provides various services throughout the day to destinations such as Chester and Broughton.

5.4.5 It is noted that the above services provide a choice of how people travel with the bus services operating from around 6:00am to around 21:10pm, making travel by public transport a real alternative to travelling by car for commuting trips.

5.4.6 In order to demonstrate the level of accessibility some example journey times by bus are presented below **Table 5.7** below.

Destination	Duration
Chester	27 mins
Broughton	8 mins

Table 5.7 Example Bus Journey Times from the Site

5.4.7 The above table demonstrates that Chester is just a 27-minute bus journey from the site and Broughton is just an 8-minute bus journey.

5.4.8 It is therefore concluded that the proposed development site is accessible by bus.

5.5 Accessibility by Rail

5.5.1 The closest rail station to the site is Hawarden, which is located 800 metres to the south. The station can be accessed by a 12-minute walk or a 6-minute cycle. The station is managed by Transport for Wales and has 2 platforms, offering 2 services per hour to destinations such as Wrexham and Bidston.

5.5.2 This provides opportunities for commuting/leisure opportunities from the site via rail.

5.6 Accessibility Summary

5.6.1 The proposals have been considered in terms of accessibility by non-car modes of transport.

5.6.2 The following conclusions can be drawn from this section of the report:

- the site is well located to cater for trips on foot and provides potential for a high degree of pedestrian trips between the development and the surrounding area, including Mancot centre;
- it has been demonstrated that the site is accessible by cycle, with a number of national cycle routes being located within close proximity of the site;

- the services from the bus stops on Gladstone Way, travelling to destinations such as Chester and Broughton, show that the proposed development can be considered as accessible by bus;
- The site is accessible via rail with Hawarden station located just over 800m from the site.

5.6.3 In light of the above, it is considered that the site is accessible by non-car modes of transport and that it caters for the needs of the development's residents and visitors. As such, this will assist in promoting a choice of travel modes other than the private car, as set out in PPW.

6 PROMOTING SMARTER CHOICES VIA TRAVEL PLANS

6.1 Introduction

6.1.1 In order to promote sustainable trip making amongst residents and visitors of the proposed development, a Travel Plan Framework has been produced as part of this application.

6.2 Travel Planning Guidance

6.2.1 A Framework Travel Plan is included at **Appendix 1**. The aim of the Travel Plan is to deliver the objectives of National and Local Planning Policy, namely, to encourage residents to travel by non-car modes of travel. The Travel Plan outlines physical and management measures that are designed to achieve these objectives.

6.2.2 The ability of a Travel Plan to support and promote sustainable trip making is intrinsically linked to a site's accessibility by non-car modes of transport. The above has demonstrated that the proposed development would benefit from good non-car accessibility; the Travel Plan is therefore expected to be particularly effective from this strong starting point.

7 TRAFFIC IMPACT ANALYSIS

7.1 Introduction

7.1.1 The above demonstrates that the proposed development would be accessible by modes of travel other than the private car and would also be in general accordance with local and national transport policies. The following section considers the implications of the proposed development on the local highway network.

7.2 Periods of Assessment

7.2.1 Given the proposed residential land use, it is reasonable to consider the AM and PM weekday peak hours as being the periods when the highway network is most sensitive to trips generated by the proposed development.

7.3 Existing Traffic Flows

7.3.1 To establish existing levels of traffic on the surrounding highway network, traffic surveys were undertaken on Thursday 21th September 2023. The morning surveys were undertaken between the hours of 07:00 and 09:00 and evening surveys between the hours of 15:00 and 18:00. The traffic survey data is provided in **Appendix 2**.

7.3.2 The survey data has been analysed to determine the periods of peak activity on the local highway network. The peak activity at each individual junction has been used to assess its operation, rather than considering an overall network peak hour. This represents a robust approach to assessment. Flow diagrams showing the existing peak hour traffic flows on the local highway network are shown in **Figures 1 and 2**.

7.4 Factored Traffic Flows

7.4.1 For the purposes of this TA, assessments have been undertaken for the application year of 2023 and a future year 2028. Those time periods represent the year of application and five years after the application registration respectively. The only exception is the junction of the A550 with the A494, which is a junction with the Strategic Road Network. Its future assessment year is therefore '10 years after application year' accordingly.

7.4.2 The surveyed flows have been growthed using the Department for Transport's National Traffic Model (NTM) factors adjusted by using the Trip End Model Program (TEMPro) local growth factors.

7.4.3 The resultant growthed AM and PM peak hour traffic flows are shown in **Figures 3 and 4**.

7.5 Committed Development

7.5.1 It has been confirmed that traffic flows from the 'Northern Gateway' committed development should be included within the traffic assessment. That proposal comprises the following components:

- B1, B2 and B8 Employment uses up to 223,347 sqm;
- up to of 7,779 sqm of Car Dealership use;
- up to 4,646 sqm of local retail space; and
- up to 689 residential units.

7.5.2 A proportion of thew above residential component has already been constructed and is operational. There will therefore be an element of 'double counting' of trips from that component, with trips included in both the Committed Development and the traffic survey data. The assessment in this TA does not apply any traffic reduction to account for that double counting, which represents a robust approach to assessment.

7.5.3 The Committed Development trip making is shown in **Figures 5 and 6** for the morning and evening peak hours respectively.

7.6 Base Flows

7.6.1 The Future Year Base traffic flow scenarios have been produced by combining the total Committed Development trips (**Figures 5 and 6**) with the future year traffic count data (**Figures 3 and 4**). The Future Year Base flows are shown in **Figures 7 and 8** for the AM and PM peak hour respectively.

7.7 Trip Distribution

7.7.1 The trips from the proposed development have been assigned to the local highway network following reference to local Census data. Information from the National Travel Survey has been reviewed to obtain 'Travel to Work' data for the local area.

The Site is located within the census 'Middle layer Super Output Area Flintshire 011. The Travel to Work information has been used from 'Flintshire 011' and also the adjacent 'Flintshire 013' area to represent a broad area of trip destinations that would be representative of the trips generated by the proposed development.

7.7.2 The site's trip distribution is shown in **Figure 9**.

7.8 Proposed Development Trips

7.8.1 As discussed above, the proposed development comprises for 280 two, three and four-bedroom dwellings.

7.8.2 The TRICS database has been used to obtain trip information from existing sites that have similar characteristics to those of the proposed development. The TRICS category 'Residential - Houses Privately Owned' has been used forecast the number of person trips generated by the proposed development. The following parameters have applied to the database:

- Range between 150 and 300 units;
- Weekday surveys only; and
- Greater London and Eire sites excluded.

7.8.3 A summary of the resulting person trip rates is shown in **Table 7.1**, below, with the TRICS output provided at **Appendix 3**.

Time	Trip Rates		Trip Generation		
	Arrival	Departure	Arrival	Departure	2-Way
08:00-09:00	0.141	0.370	42	111	153
17:00-18:00	0.325	0.174	98	52	150

Table 7.1 Proposed Development Person-Trip Rates and Trips

7.8.4 The above table shows that the proposed development is predicted to result in 153 two-way person trips during the weekday AM peak and 150 two-way person trips during the weekday PM peak. Application of the site trip distribution information (**Figure 9**) to the above trip generation data distributes the site vehicle trip over the local highway network. These are shown in **Figures 10 and 11** for the AM and PM peak respectively.

7.9 Scope of Junction Assessment

7.9.1 This TA's scope of junction assessment has been agreed with FCC. The junctions to be assessed are as follows:

- The Site Access onto Ash Lane;
- The Site Access onto Gladstone way;
- Gladstone Way / Mossley Court / The Highway crossroads junction;
- B5125 / A550 / Rectory Lane crossroads junction; and

- A550 / A494 partially signalised roundabout junction.

7.10 Assessment Flows

7.10.1 In order to calculate the 'Base with Development' flows, the development flows (**Figures 10 and 11**) have been added to the Future Year Base Flows **(Figures 7 and 8**). The resulting 'Future Year Base with Development' flows are shown in **Figures 12 and 13** for the AM and PM Peak Hour respectively.

7.11 Capacity Assessments

7.11.1 The implication of vehicle trips from the proposed development have been considered by undertaking operational assessments of the local junctions identified above. The results from that analysis are summarised for each junction below.

Site Access / Ash Lane Junction

7.11.2 As discussed above, the site would have an access to the east of the site, via a new priority-controlled three-arm junction off Ash Lane.

7.11.3 This junction has been assessed using TRL's PICADY software. A summary of the junction's ''Future Year Base with Development' results are shown in **Table 7.2** below, with the full PICADY output included at **Appendix 4**.

Approach	Future Year With Development Flows			
	Weekday AM		Weekday PM	
	RFC	Queue	RFC	Queue
Site Access	0.059	0.1	0.027	0
Ash Lane (S)	0.005	0.0	0.012	0

Table 7.2 PICADY Results Summary: Site Access / Ash Lane Junction – Future Year with Development Scenario

7.11.4 The above shows that the proposed junction would operate within capacity during both assessment peak hours during the future year scenario.

Site Access / Gladstone Way Junction

7.11.5 As discussed above, the site would also provide an access to the west of the site via a new junction off Gladstone Way.

7.11.6 This junction has been assessed using TRL's PICADY software. A summary of the junction's 'Future Year Base with Development' results are shown in **Table 7.3** below, with the full PICADY output included at **Appendix 5**.

Approach	Future Year With Development Flows			
	Weekday AM		Weekday PM	
	RFC	Queue	RFC	Queue
Site Access	0.218	0.027	0.106	0.1
Gladstone Way (S)	0.3	0	0.065	0.1

Table 7.3 PICADY Results Summary: Site Access / Gladstone Way Junction – Future Year with Development Scenario

7.11.7 The above shows that the proposed junction would operate within capacity during both assessment peak hours during the future year scenario.

Gladstone Way / Mossley Court / The Highway Crossroads Junction

7.11.8 This four arm priority junction has been assessed using TRL's PICADY software. A summary of the junction's 2023 results is shown in **Table 7.4** below, with the full PICADY output included at **Appendix 6**.

Approach	2023 Peak Hour Flows			
	Weekday AM		Weekday PM	
	RFC	Queue	RFC	Queue
The Highway (E)	0.293	0.5	0.198	0.3
Mossley Court	0.037	0	0.022	0
The Highway (W)	0.645	0	0.006	0
Gladstone Way	0.002	1.8	0.635	1.7

Table 7.4 PICADY Results Summary: Gladstone Way / Mossley Court / The Highway Crossroads Junction – 2023 Peak Hour Scenario

7.11.9 The above results show that the junction is currently operating within capacity and with minimal queuing occurring during both highway peak hours. That operation is consistent with the findings of the on-site queue observations.

7.11.10 The below table summarises the future year operation of the junction.

Approach	Future Year Base Flows				Future Year With Development Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
The Highway (E)	0.312	0.5	0.023	0.3	0.360	0.7	0.232	0.3
Mossley Court	0.037	0	0.213	0	0.038	0	0.023	0
The Highway (W)	0.002	0	0.007	0.0	0.002	0	0.007	0
Gladstone Way	0.676	2.0	0.661	1.9	0.787	3.4	0.708	2.3

Table 7.5 PICADY Results Summary: Gladstone Way / Mossley Court / The Highway Crossroads Junction – Future Year Scenarios

7.11.11 The above results show that the junction would continue to operate within capacity during the future year scenario. The addition of trips from the proposed development would have a minimal effect on the operation of the junction, which would likely be imperceptible in reality.

B5125 / A550 / Rectory Lane Crossroads Junction

7.11.12 This four arm priority junction has been assessed using TRL's PICADY software. A summary of the junction's 2023 results is shown in **Table 7.6** below, with the full PICADY output included at **Appendix 7**.

Approach	2023 Peak Hour Flows			
	Weekday AM		Weekday PM	
	RFC	Queue	RFC	Queue
B5125	0.002	0	0.006	0
A550South	0.637	1.7	0.629	1.6
A550 West	0.354	0.6	0.201	0.3
Rectory Lane	0.035	0	0.021	0

Table 7.6 PICADY Results Summary: B5125 / A550 / Rectory Lane Crossroads Junction – 2023 Peak Hour Scenario

7.11.13 The above results show that the junction is currently operating within capacity and with minimal queuing during both highway peak hours. This operation is consistent with the findings of the on-site queue observations.

7.11.14 The below table summarises the future year operation of the junction.

Approach	Future Year Base Flows				Future Year With Development Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
B5125	0.002	0	0.006	0	0.002	0	0.006	0
A550South	0.505	1.9	0.653	1.8	0.676	2.0	0.656	1.8
A550 West	0.289	0.7	0.208	0.3	0.411	0.8	0.228	0.3
Rectory Lane	0.027	0	0.022	0	0.036	0	0.022	0

Table 7.7 PICADY Results Summary: B5125 / A550 / Rectory Lane Crossroads Junction – Future Year Assessment

7.11.15 The above results shows that the junction would continue to operate within capacity during the future year scenario. The addition of trips from the proposed development would have a minimal effect on the operation of the junction, which would likely be imperceptible in reality.

A550 / A494 / B5129 Partially Signalised Roundabout Junction

7.11.16 This junction has been assessed using JCT's LINSIG software. The summary results are provided in **Table 7.8** below, with the full output provided in **Appendix 8.**

Approach	2023 Surveyed Flows					
	Weekday AM			Weekday PM		
	DoS (%)	MMQ (pcu)	Delay (pcu/hr)	DoS (%)	MMQ (pcu)	Delay (pcu/hr)
A494 (w) Off-slip Left	32.5	2.3	0.9	33.5	2.1	0.9
A494 (w) Off-slip Ahead Left	36.9	2.8	1.1	41.9	2.9	1.3
A494 (w) Off-slip Ahead	33.9	2.5	1.0	31.7	2.1	0.9
Circulatory (W) Ahead	36.4	3.1	1.3	41.0	5.0	1.8
Circulatory (W) Right Ahead	36.0	3.0	1.2	35.6	3.7	1.3
Circulatory (W) Right	36.0	3.1	1.1	29.8	2.3	0.7
BB5129 (N) Left	29.7	0.3	0.2	25.5	0.2	0.2
BB5129 (N) Ahead	47.1	0.6	0.5	55.7	1.0	0.6
A494 (E) Off-slip Ahead Left	36.7	2.9	1.9	33.2	2.2	1.6
A494 (E) Off-slip Ahead	34.2	2.7	1.0	62.0	4.8	2.3
Circulatory (E) Ahead	33.2	3.2	1.3	26.5	1.8	0.6
Circulatory (E) Right Ahead	32.5	2.8	1.0	33.7	2.8	0.9
Circulatory (E) Right	19.8	1.8	0.7	28.5	2.2	0.7
B5129 (S) Ahead Left	49.7	1.6	0.6	65.9	3.0	1.2
A550 Ahead Left	30.6	0.3	0.2	34.0	0.3	0.3

Table 7.8 LINSIG Summary: A550 / A494 / B5129 Partially Signalised Roundabout Junction - 2023

7.11.17 The above results show that the junction is currently operating within capacity and with minimal queuing during both highway peak hours. This operation is consistent with the findings of the on-site queue observations.

7.11.18 The below table summarises the future year operation of the junction.

Approach	Future Year Base Flows						Future Year With Development Flows					
	Weekday AM			Weekday PM			Weekday AM			Weekday PM		
	DoS (%)	MMQ	Delay	DoS (%)	MMQ	Delay	DoS (%)	MMQ	Delay	DoS (%)	MMQ	Delay
A494 (w) Off-slip Left	45.8	2.9	1.3	57.5	3.0	1.6	45.6	2.9	1.3	28.9	2.0	0.8
A494 (w) Off-slip Ahead Left	51.7	3.6	1.7	71.1	4.3	2.5	51.7	3.6	1.7	35.5	2.7	1.1
A494 (w) Off-slip Ahead	46.9	3.1	1.5	53.7	2.8	1.5	47.6	3.2	1.5	27.8	2.0	0.8
Circulatory (W) Ahead	32.5	3.5	1.2	36.6	4.4	1.4	33.8	3.7	1.3	50.0	5.0	2.3
Circulatory (W) Right Ahead	32.5	3.3	1.1	31.0	3.1	0.9	34.1	3.4	1.1	44.9	4.2	1.7
Circulatory (W) Right	32.5	2.8	0.8	25.7	1.8	0.4	33.9	2.9	0.8	36.2	2.8	1.0
BB5129 (N) Left	31.8	0.2	0.2	27.2	0.2	0.2	32.5	0.2	0.2	27.5	0.2	0.2
BB5129 (N) Ahead	51.3	1.0	0.5	58.5	1.3	0.7	50.9	1.0	0.5	60.1	1.8	0.8
A494 (E) Off-slip Ahead Left	47.2	3.5	2.5	38.6	2.5	1.9	48.3	3.6	2.6	29.4	2.2	1.4
A494 (E) Off-slip Ahead	45.2	3.4	1.4	71.8	5.7	2.9	45.2	3.4	1.4	50.7	4.3	1.7
Circulatory (E) Ahead	30.3	2.6	1.0	26.2	2.3	0.8	32.3	2.8	1.0	34.3	2.9	1.1
Circulatory (E) Right Ahead	29.9	2.5	0.8	34.2	3.0	0.9	30.5	2.6	0.9	44.3	3.9	1.5
Circulatory (E) Right	17.6	1.4	0.5	28.7	2.4	0.8	19.0	1.5	0.6	35.9	3.0	1.1
B5129 (S) Ahead Left	53.7	2.2	0.7	72.2	3.6	1.6	54.1	2.2	0.7	74.1	4.0	1.8
A550 Ahead Left	34.8	0.5	0.3	38.4	0.3	0.3	42.7	0.7	0.4	42.1	0.4	0.4

Table 7.9 LINSIG Summary: A550 / A494 / B5129 Partially Signalised Roundabout Junction – Future Year Assessment

7.11.19 The above results shows that the junction would continue to operate within capacity during the future year scenarios.

7.11.20 The Base Scenario shows a minimal increase in queuing compared to the survey year operation. The greatest increase in the Mean Maximum Queue is less than 1.5 pcus.

7.11.21 The results of the 'future year with development' assessment show that the junction would continue to operate within capacity. There would be a minimal change in queuing compared to the Base scenario. The greatest increase in queue would be just over 1 PCU.

7.12 Capacity Assessments Summary

7.12.1 This section of the Report has considered the vehicle trip implications of the proposed development.

7.12.2 The operational assessments have shown that the junctions on the local highway network would operate efficiently and within their design capacity following the inclusion of proposed development trips. The proposed development would therefore not have a severe traffic impact on the local highway network.

8 CONCLUSIONS

8.1.1 Eddisions has been instructed by Castle Green Homes to advise on traffic and transport matters relating to a proposed residential development on land off Ash Lane, Mancot, Flintshire.

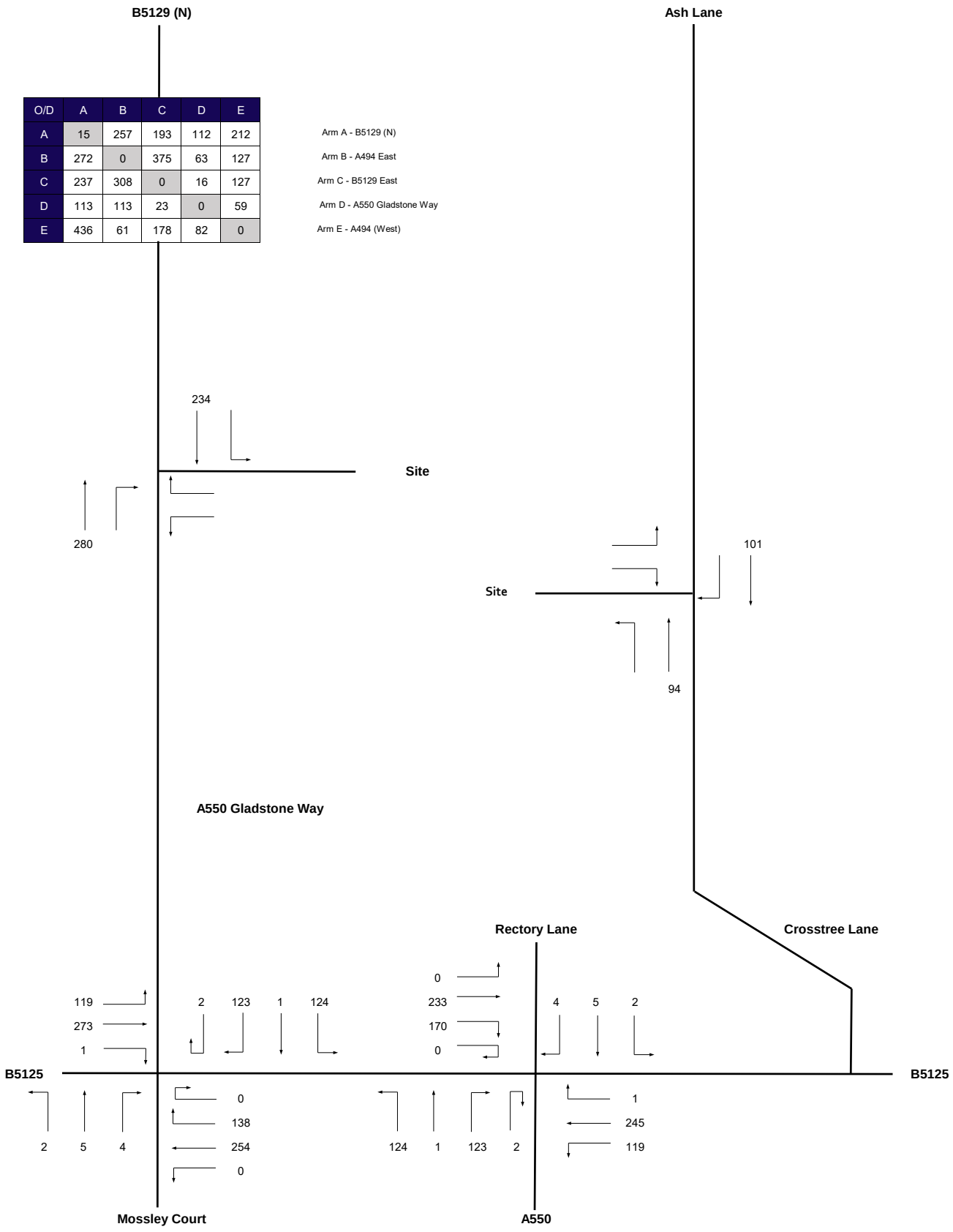
8.1.2 The proposed development would provide up to 280 dwellings. The residential development would comprise a mix of house types. The development would be served by a new access off Ash Lane and an access off Gladstone Way.

8.1.3 The information provided by this Transport Assessment enables the following conclusions to be drawn:

- The proposed development would be accessible by non-car travel modes, including walking, cycling and public transport;
- The proposed development would be well located to encourage active travel into Mancot and for bus journeys to access surrounding local destinations;
- The site's internal layout would be designed in accordance with Manual for Streets guidance and its cycle and car parking provision would comply with current local standards;
- The proposed development would be supported by a Framework Travel Plan to encourage the use of non-car modes;
- The proposed development would provide a safe and efficient vehicular access arrangement;
- The junction assessment results show that the vehicle trips generated by the proposed development would be suitably accommodated by the local highway network;

8.1.4 It can therefore be concluded that the proposed development is acceptable in highway terms.

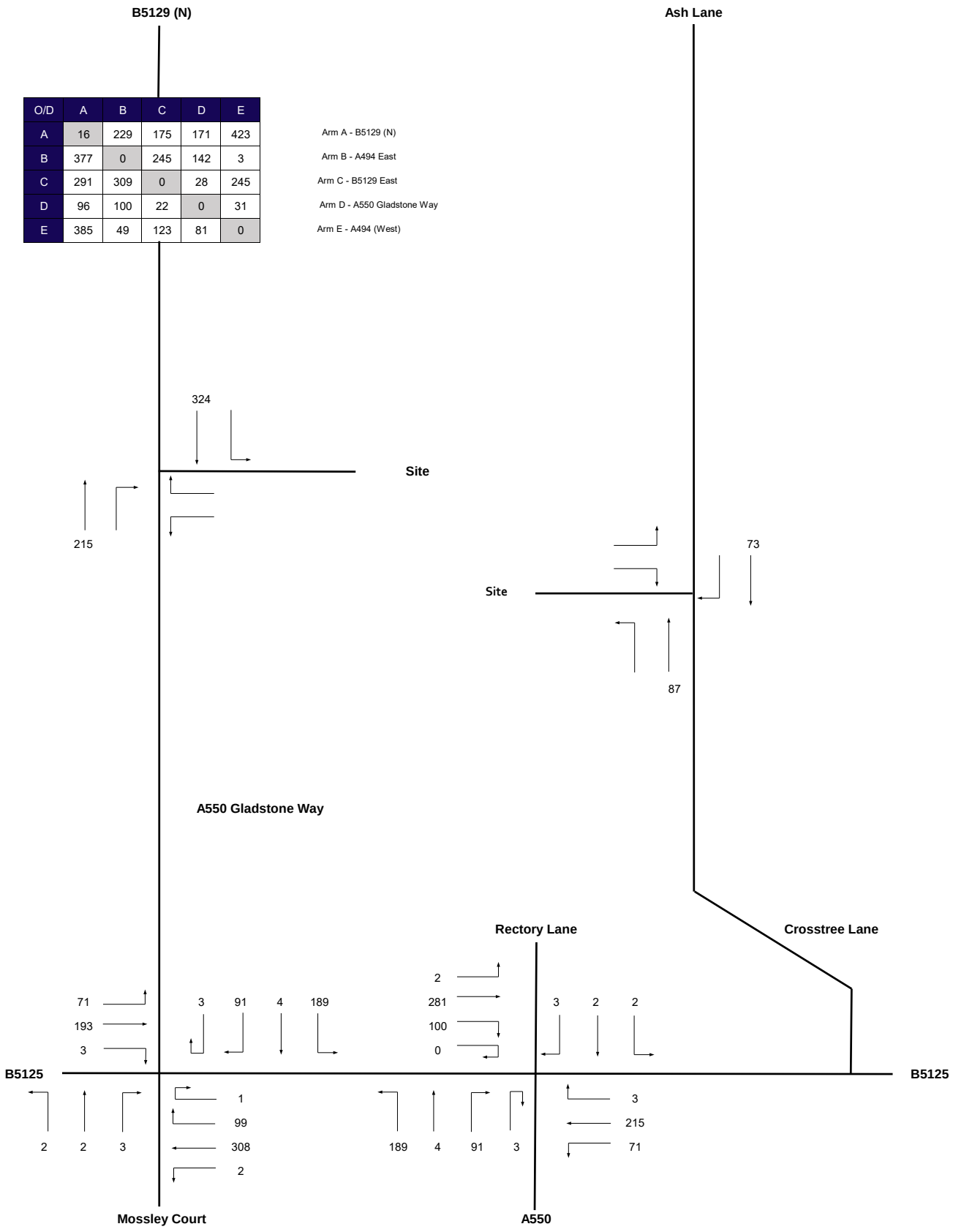
FIGURES



Flows in PCUs

Figure 1 2023 Surveyed Flows - Weekday AM Peak

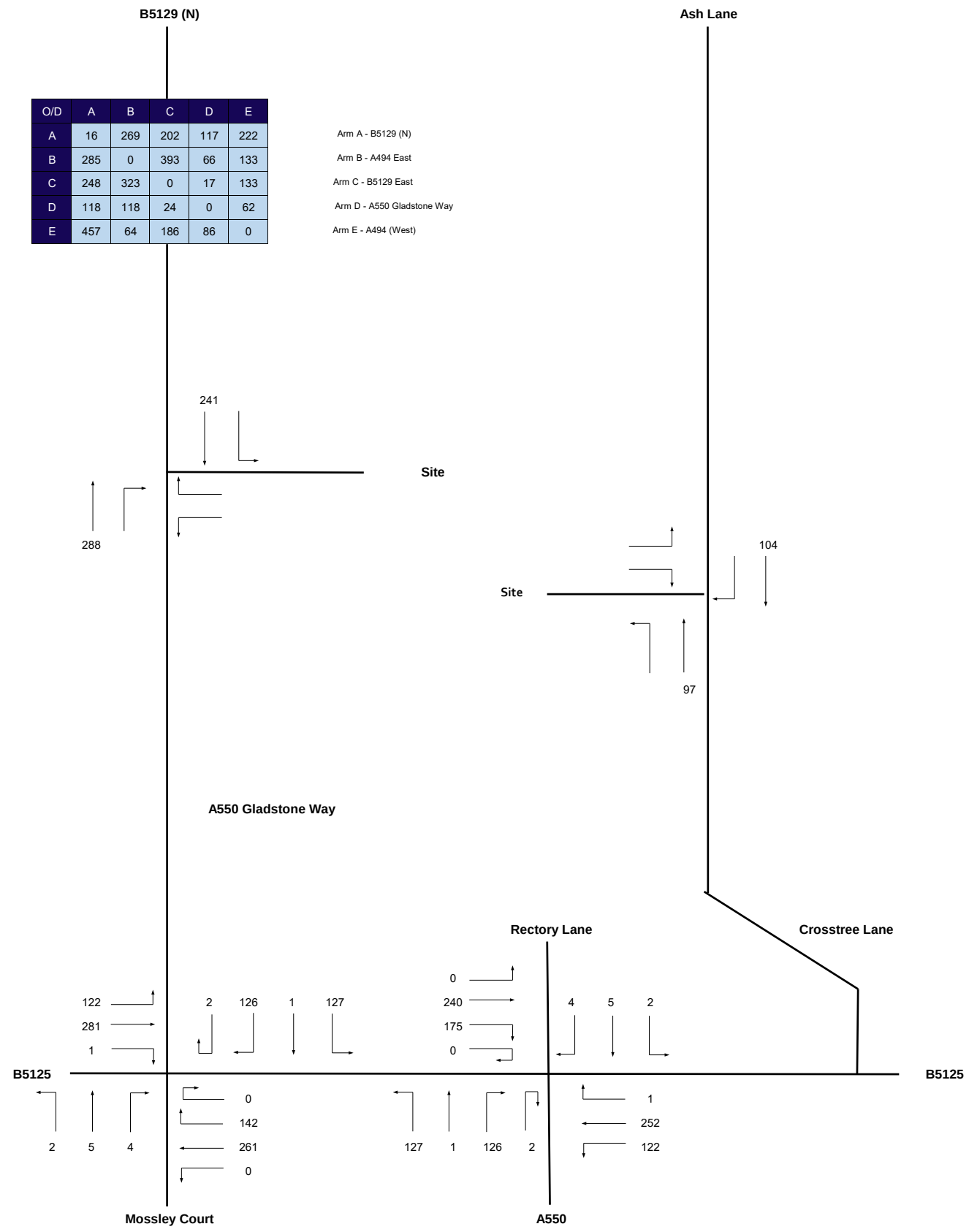
Eddisons



Flows in PCUs

Figure 2 2023 Surveyed Flows - Weekday PM Peak

Eddisons



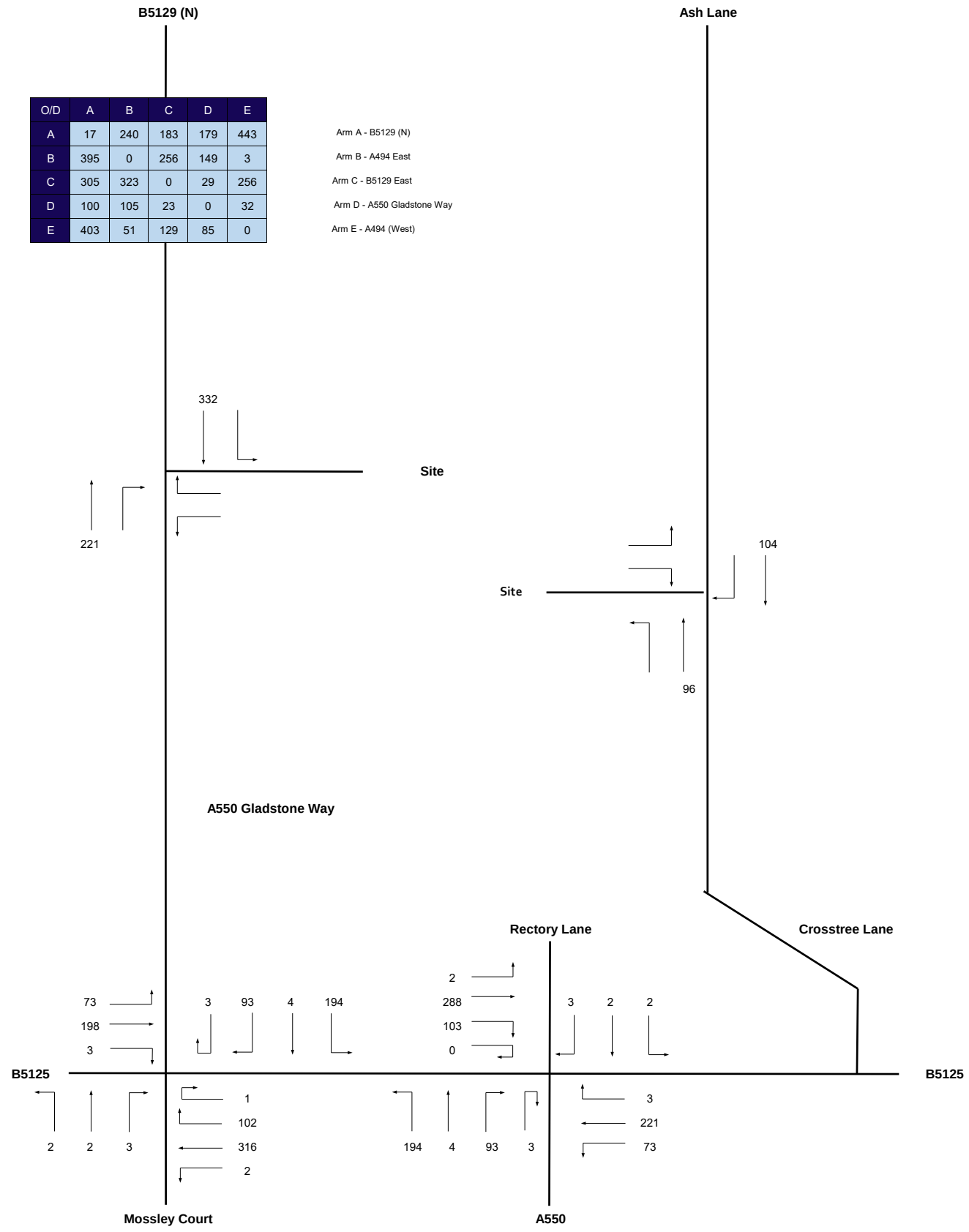
2023-2028 Growth Factor 1.02815

Flows in PCUs 2023-2033 Growth Factor 1.04750

2033 Assessment Year

Figure 3 Future Year Growthed Flows - Weekday AM Peak

Eddisons



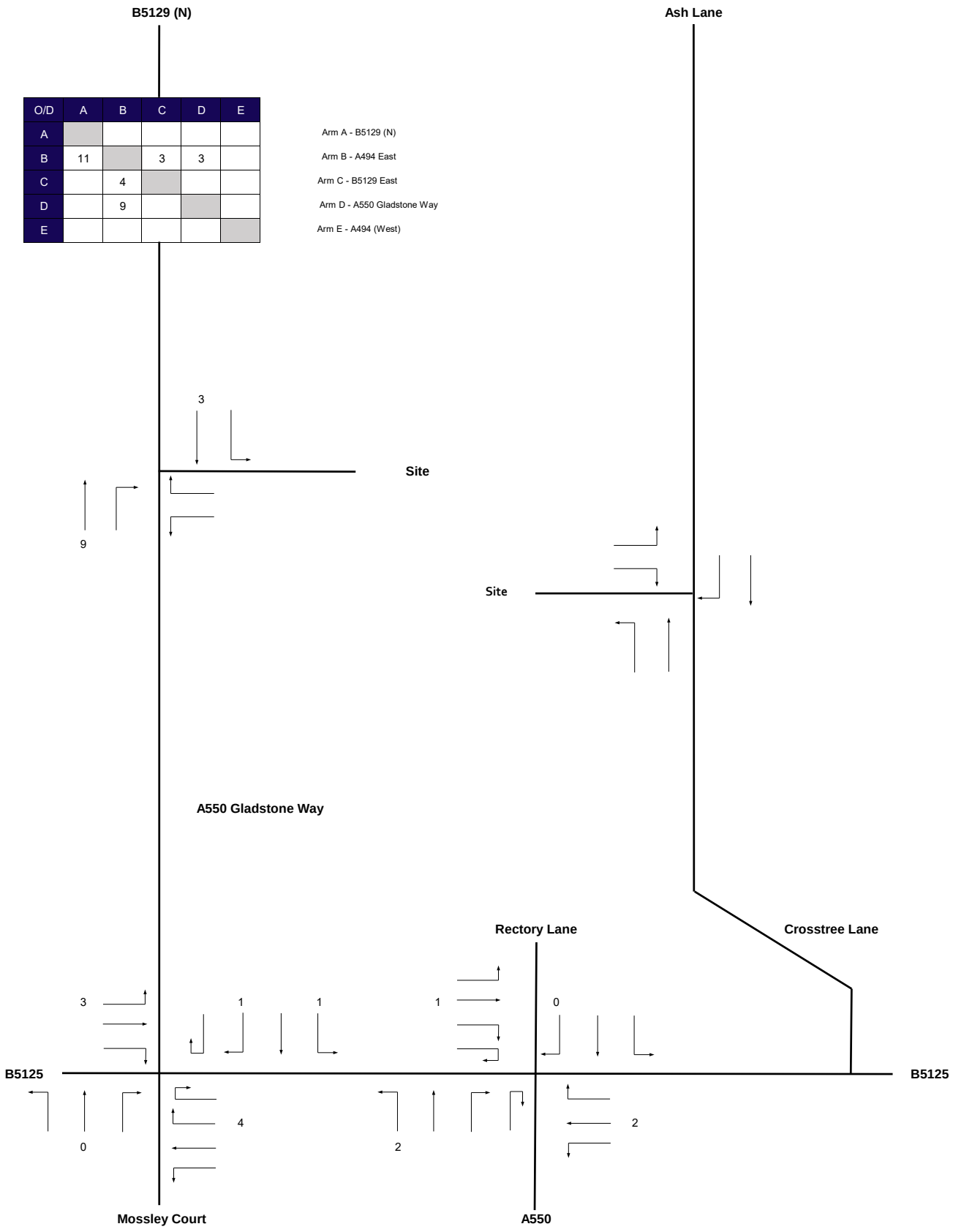
2023-2028 Growth Factor 1.02600

Flows in PCUs 2023-2033 Growth Factor 1.04675

2033 Assessment Year

Figure 4 Future Year Growthed Flows - Weekday PM Peak

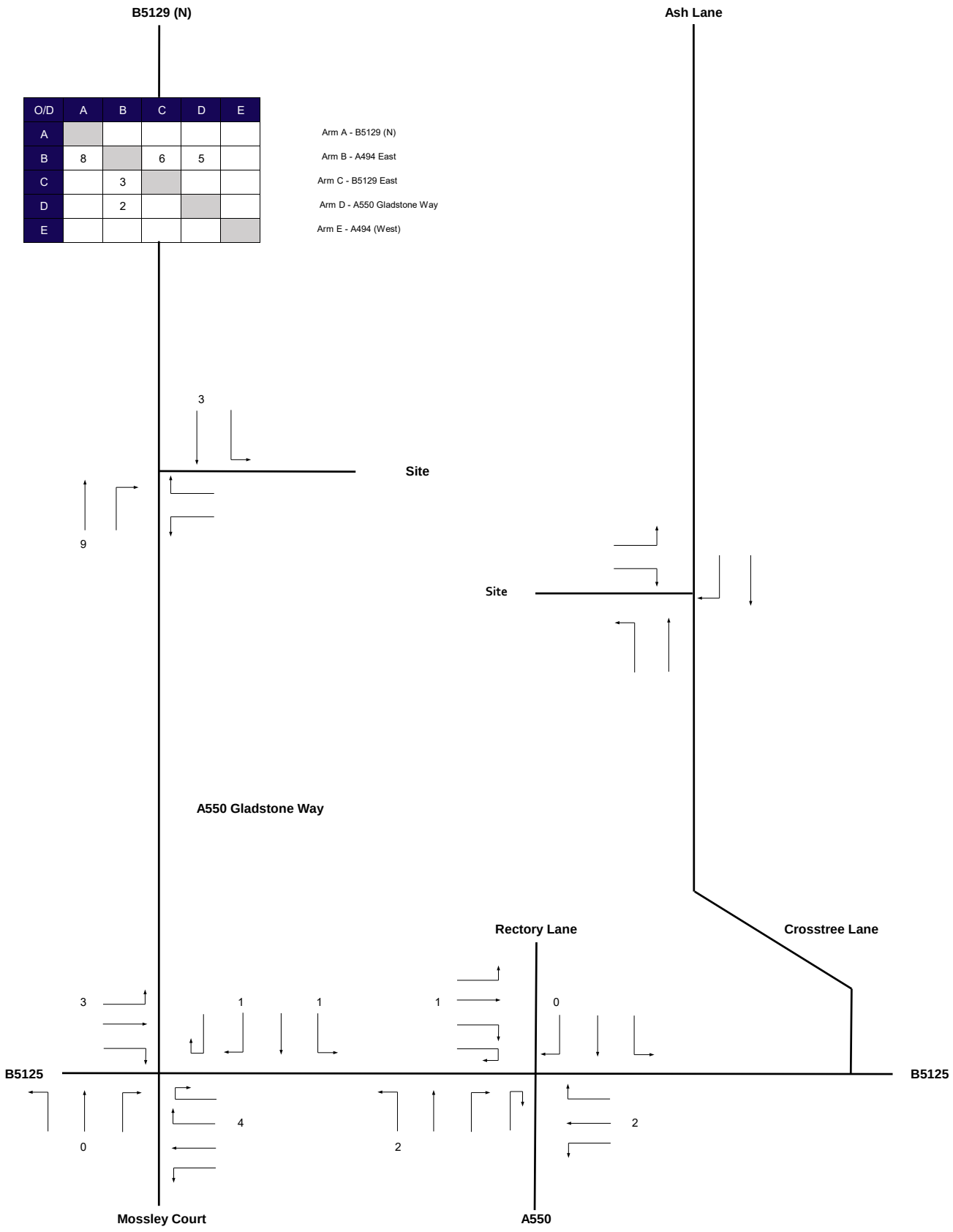
Eddisons



Flows in PCUs

Figure 5 Commited Development Flows - Weekday AM Peak

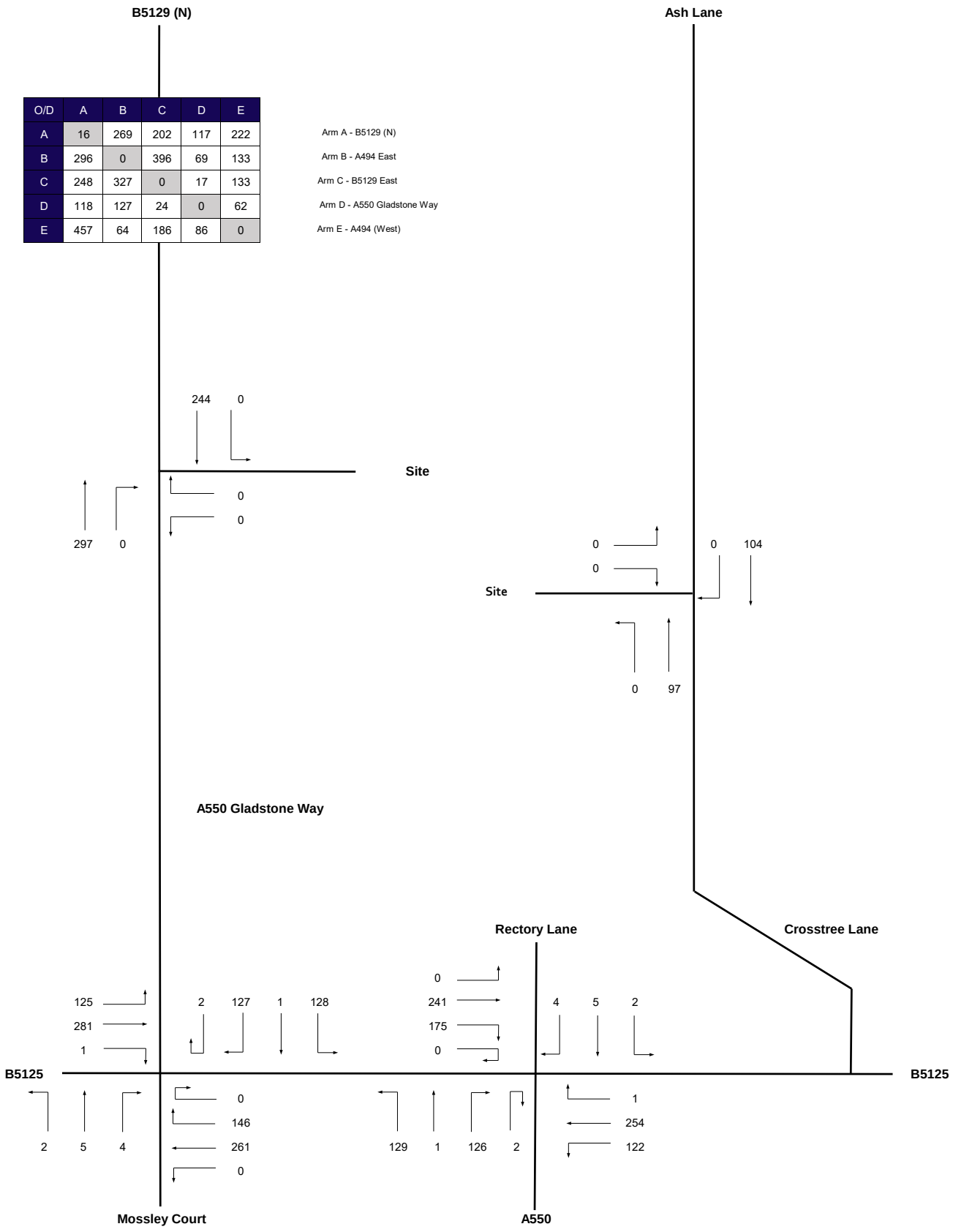
Eddisons



Flows in PCUs

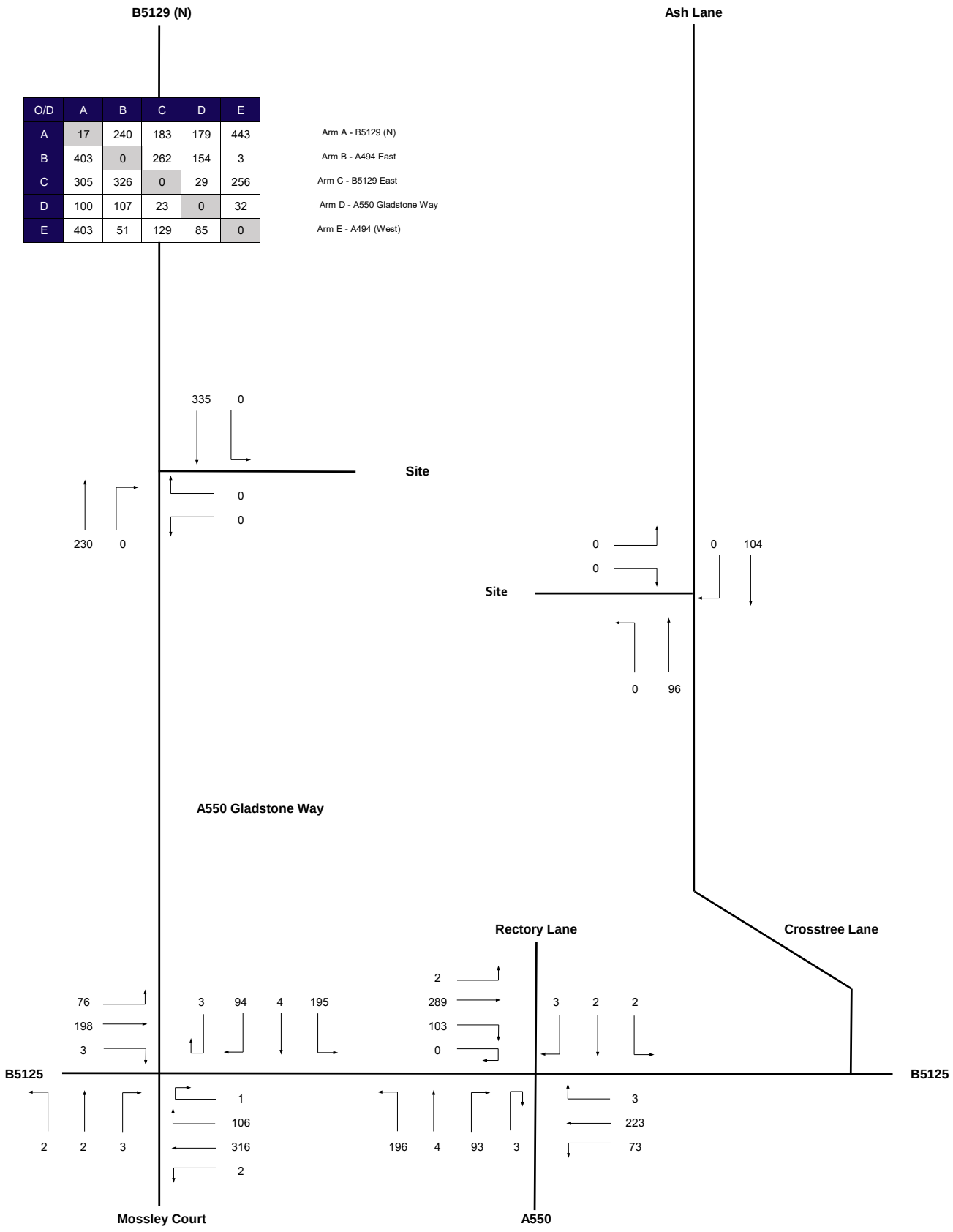
Figure 6 Commited Development Flows - Weekday PM Peak

Eddisons



Flows in PCUs

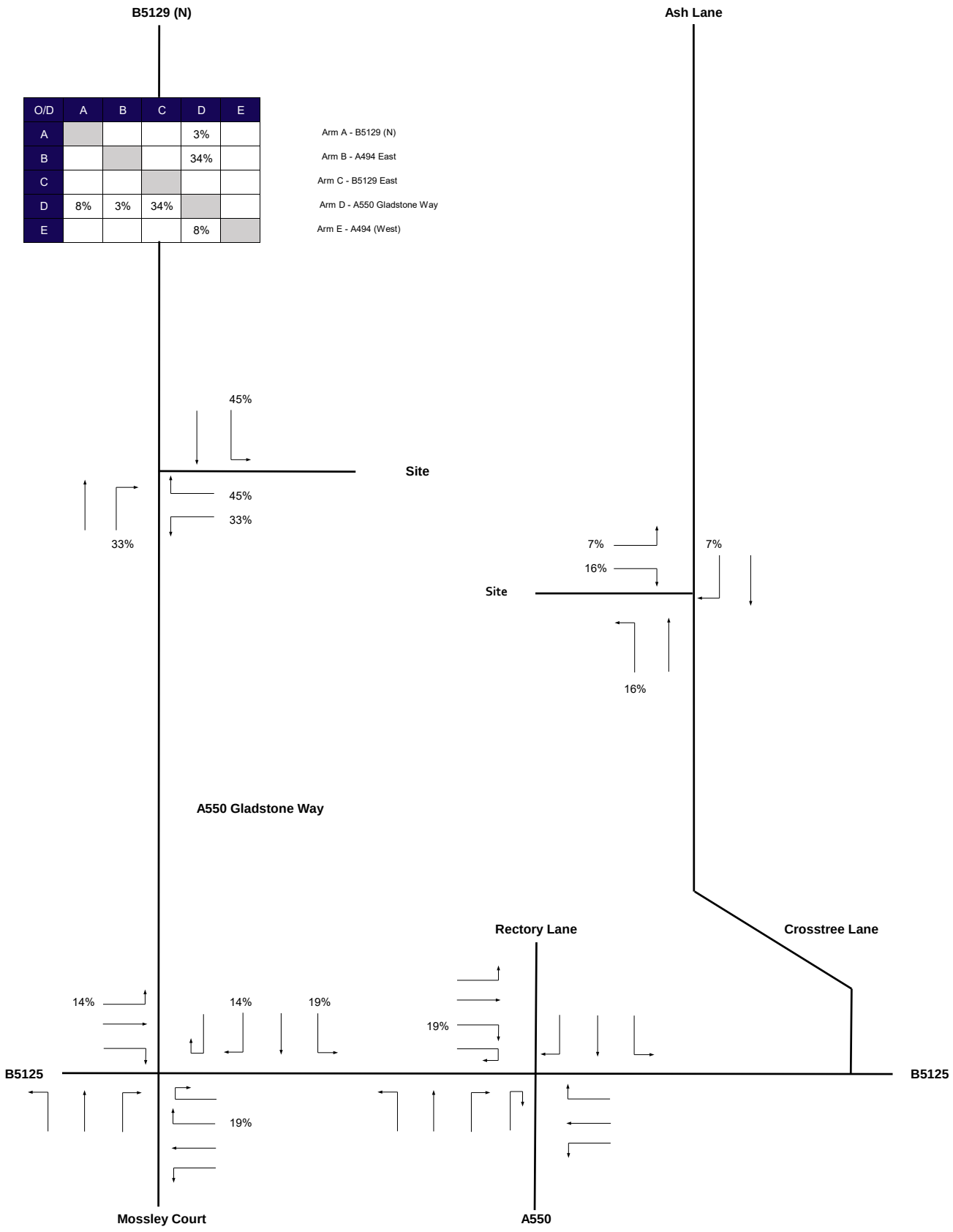
Figure 7 Future Year Base Flows - Weekday AM Peak



Flows in PCUs

Figure 8 Future Year Base Flows - Weekday PM Peak

Eddisons



Flows in PCUs

Figure 9 Proposed Development Trip Distribution

Eddisons

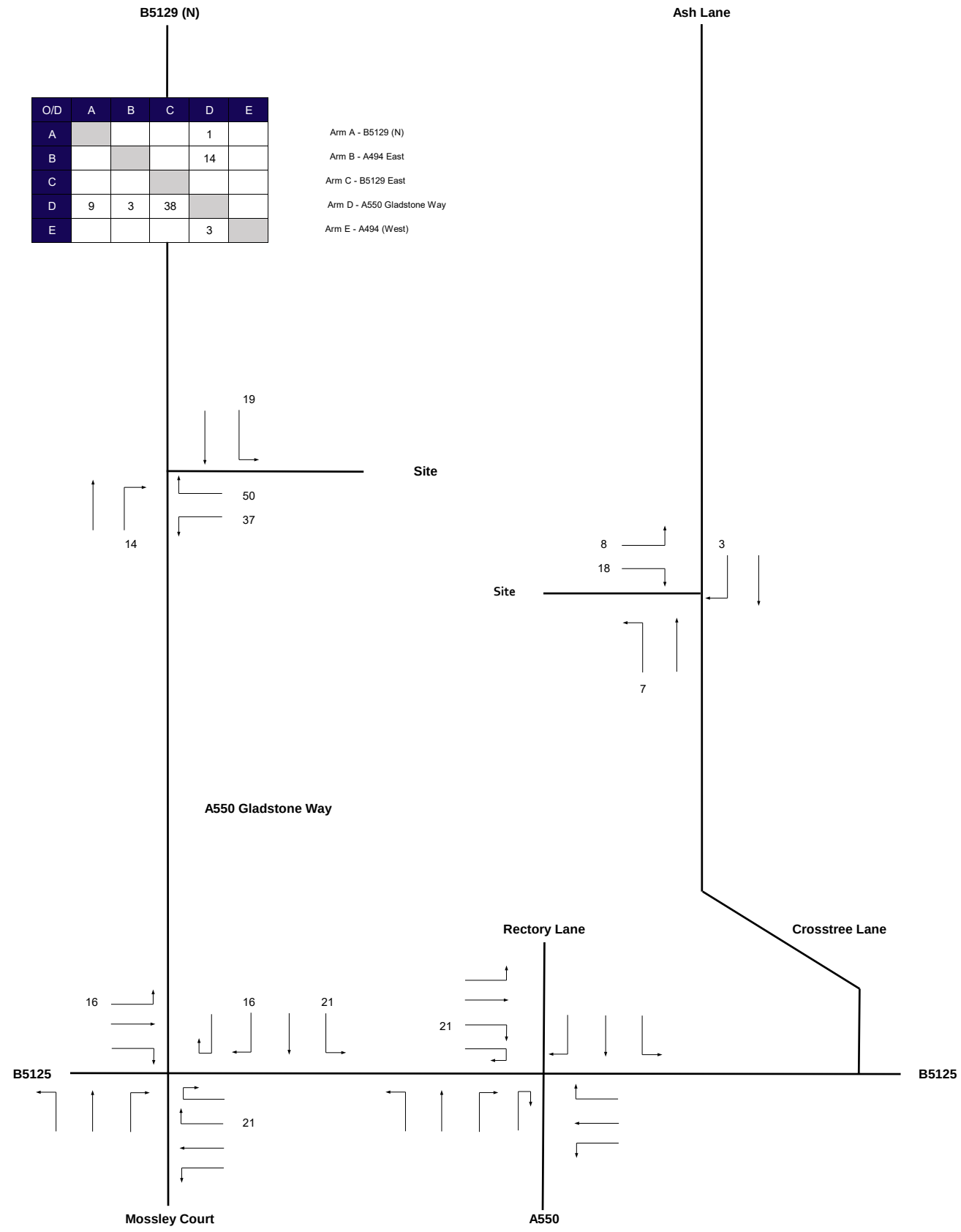


Figure 10 Proposed Development Flows - Weekday AM Peak

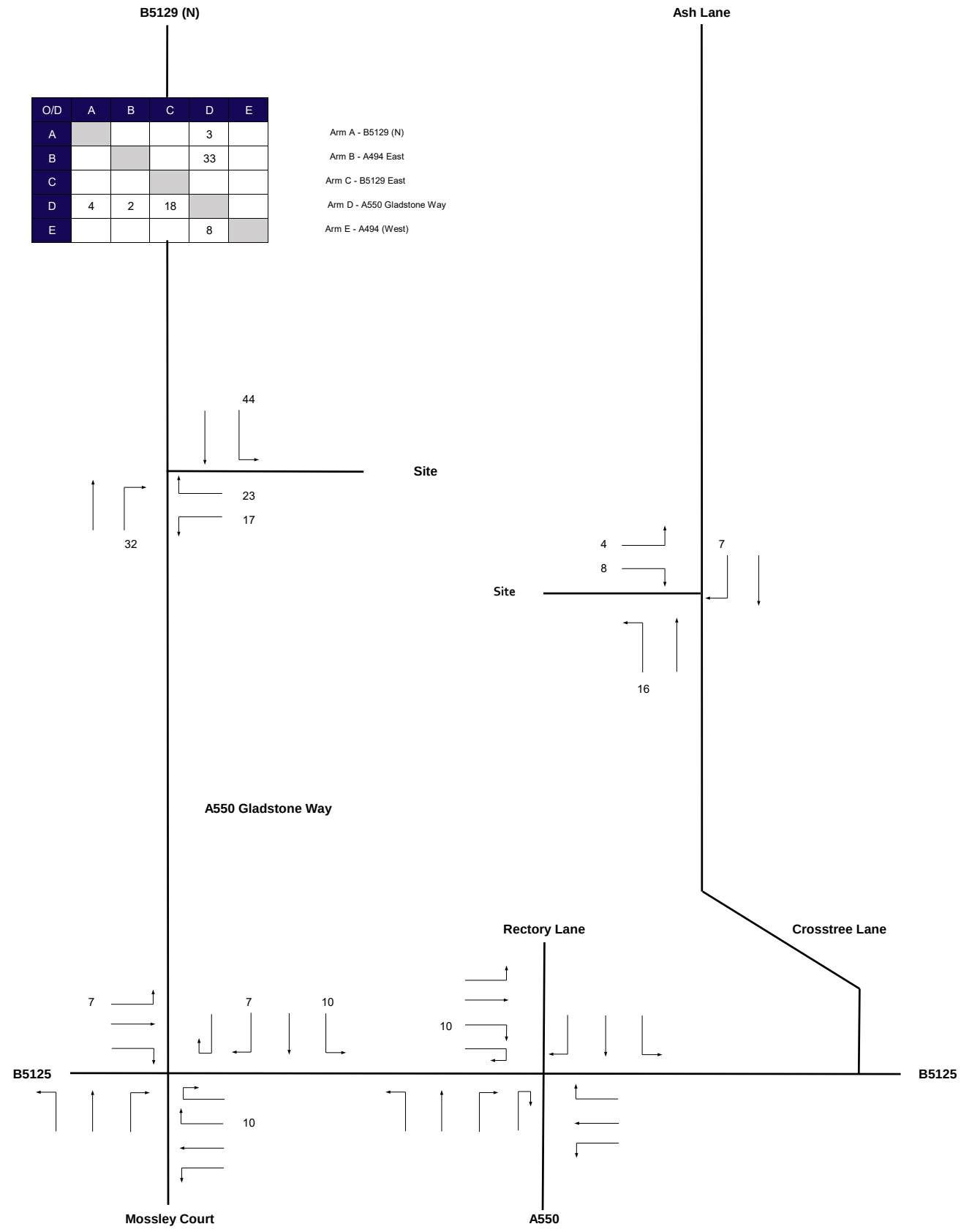
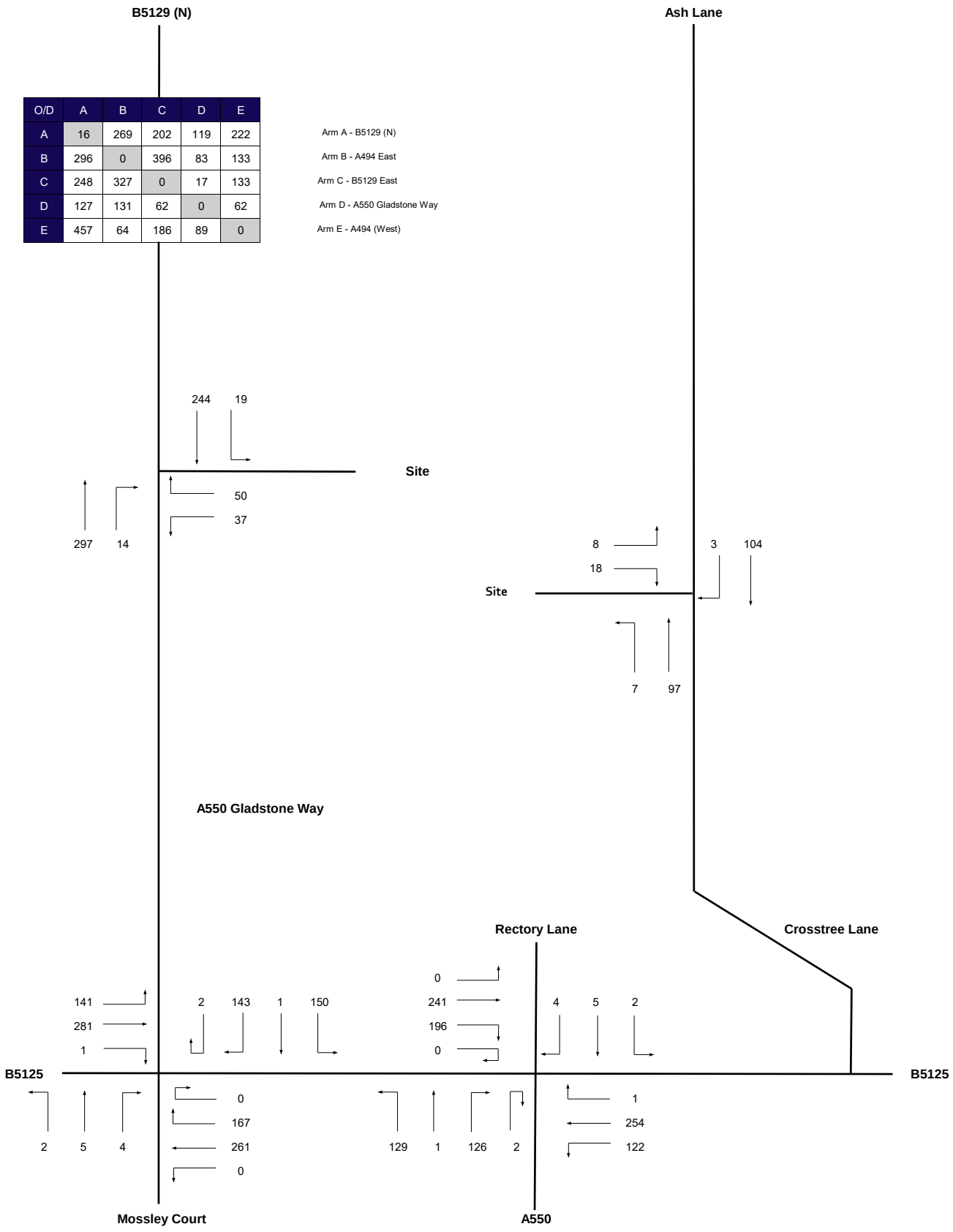


Figure 11 Proposed Development Flows - Weekday PM Peak

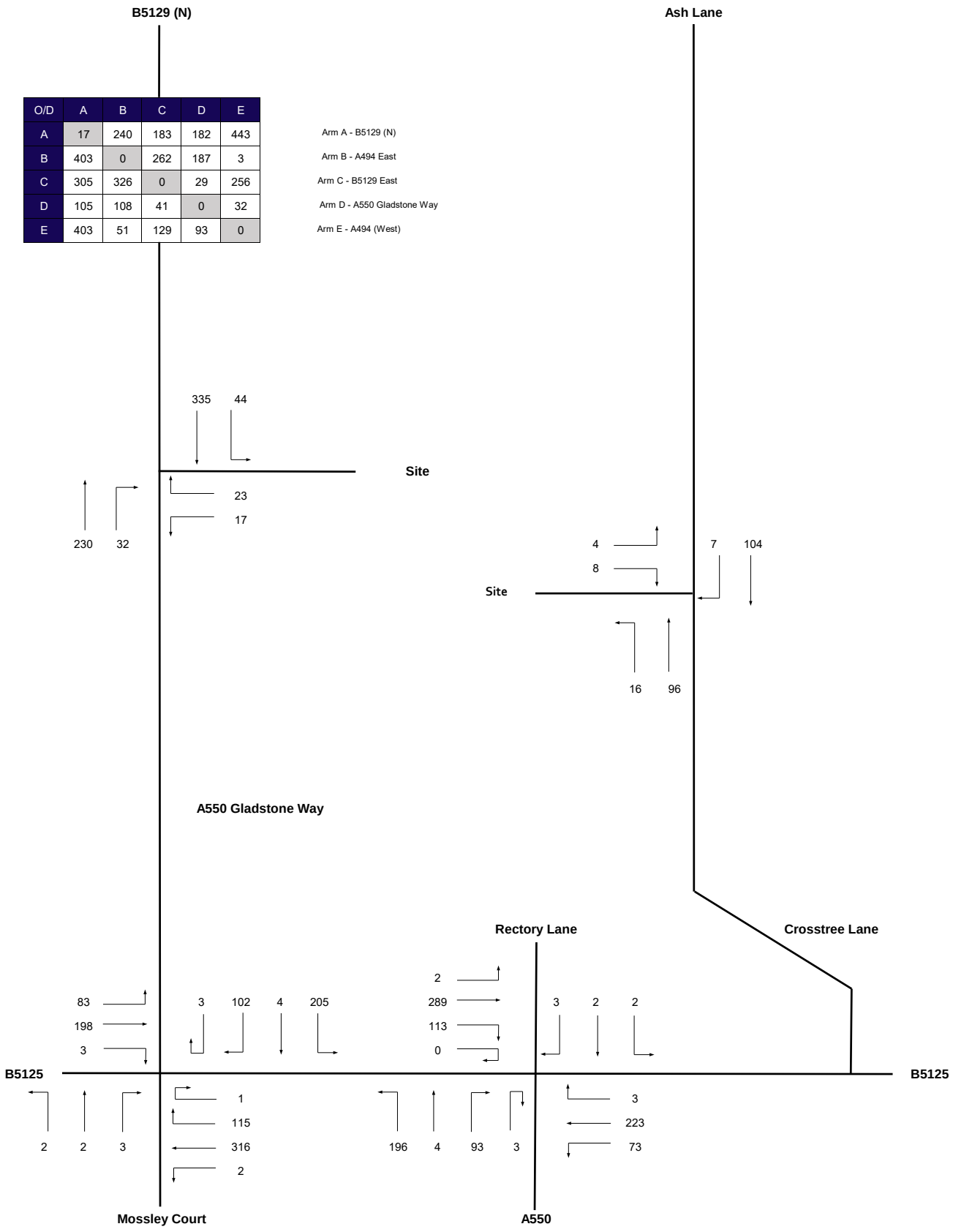


Flows in PCUs

Figure 12

Future Year 'With Development' Flows - Weekday AM Peak

Eddisons



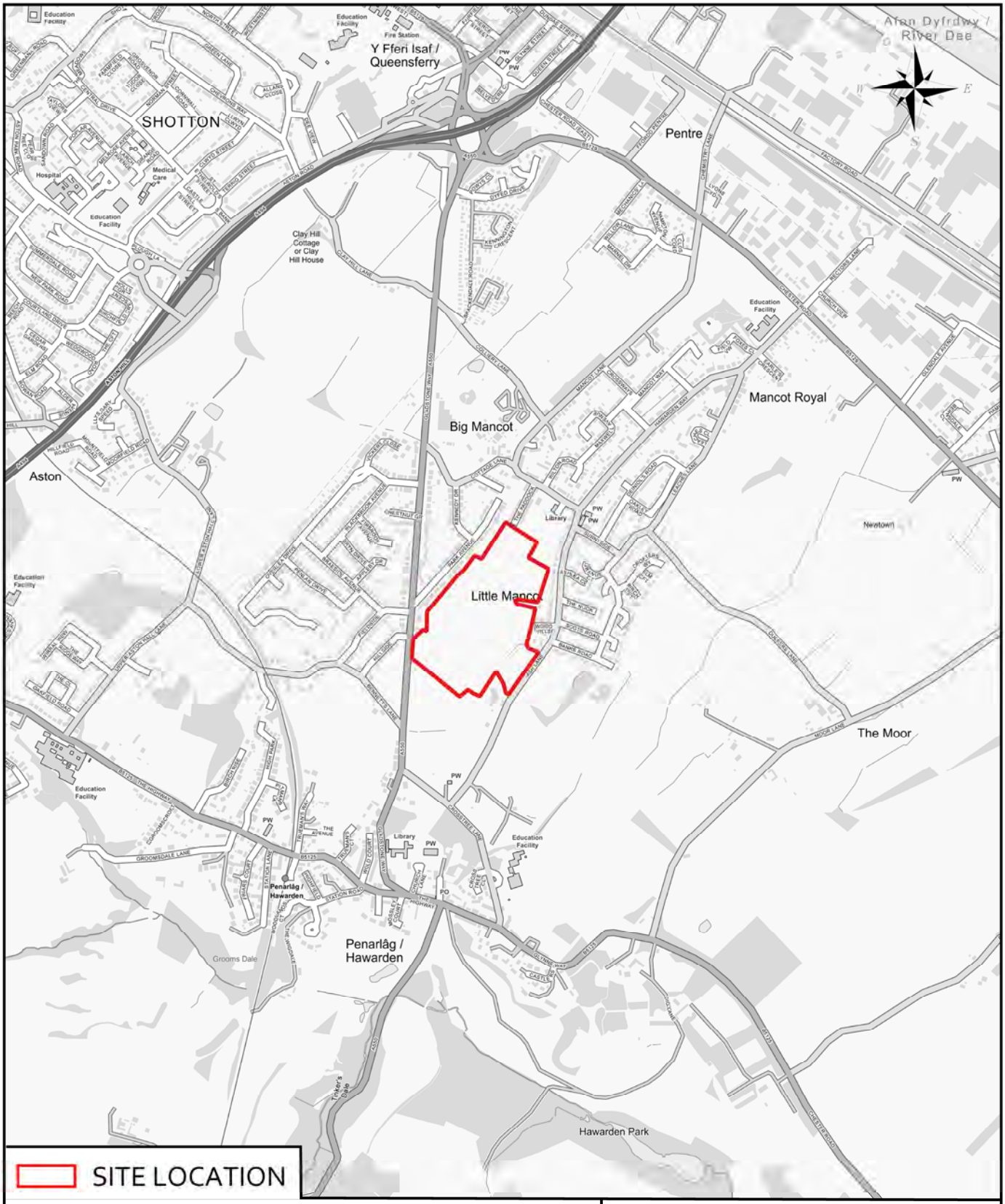
Flows in PCUs

Figure 13

Future Year 'With Developement Flows' - Weekday PM Peak

Eddisons

PLANS



CLIENT:

CASTLE GREEN HOMES

DRAWING TITLE:

ASH LANE, MANCOT
SITE LOCATION

DRAWN:	DATE:	CHECKED:	DATE:	SCALES:
LG	09.10.23	JE	09.10.23	NTS @ A4

Eddisons
340 Deansgate
Manchester
M3 4LY

Email: info@croftts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER: 4168-01

REVISION: -

Eddisons

Z:\projects\4168 Ash Lane, Mancot\GIS\Workspaces\4168-01.dwg

SCHEDULE OF ACCOMMODATION

HOUSE TYPE	DESCRIPTION	SQFT	NUMBER	PERCENTAGE
ATS3 (Affordable)	2 Bed, 2 Storey, End-Mid Terrace	895 SQFT	51	14.21
ST3B (Affordable)	3 Bed, 2 Storey, End-Terrace	1045 SQFT	44	14.64
DT4B (Affordable)	4 Bed, 2 Storey, Semi-Detached	1197 SQFT	8	2.14
Marlow Semi	3 Bed, 2 Storey	997 SQFT	26	9.29
Oxford	3 Bed, 2 Storey	1040 SQFT	8	2.14
Henley	3 Bed, 2 Storey	1040 SQFT	8	2.14
Knaresborough	3 Bed, 2 Storey	1066 SQFT	17	4.521
Cheltenham	3 Bed, 2 Storey	1234 SQFT	33	11.79
Wentworth	4 Bed, 2 Storey	1345 SQFT	25	10.00
Alnwick	4 Bed, 2 Storey	1501 SQFT	23	8.21
Sandringham	4 Bed, 2 Storey	1871 SQFT	7	2.50
Wilshire	4 Bed, 2 Storey	1727 SQFT	16	5.71
TOTAL		323993 SQFT	280	100.00

Gross Site Area	27.55 Acres	11.06 Hectares
Ecological Buffer & Existing Watercourse	5.62 Acres	2.25 Hectares
POS	5.58 Acres	2.26 Hectares
Unbuildable: Swl Apron, SSPI, Swale & Substation	1.22 Acres	0.54 Hectares
NETT SITE AREA:	19.8 ACRES	8.01 HECTARES
Gross Density:	10.25 Units/Acre	25.32 Units/Hectare
NETT DENSITY:	14.14 UNITS/ACRE	34.94 UNITS/HECTARE
Gross Footage:	115497.73 SQFT/Acre	3720.36 SQM/Hectare
NETT FOOTAGE:	16356.21 SQFT/ACRE	3764.93 SQM/HECTARE

Key:

- Site Boundary
- 1.8m high boundary fence
- 1.8m high screen wall / fence
- Private Drive
- Visibility Splays - 2.4x??m to Site Entrances
- Indicative Landscaping. - refer to landscaping design for exact details
- Number of parking spaces proposed to Semi-Detached and Detached Dwellings in accordance with LPA Parking Standards
- Parking space allocation to Frontage Parking Dwellings
- Existing retained hedges/landscaping
- Proposed Landscape Screen to Southern boundary
- Approx. Mineshaft Location & offset
- Route of watercourse/ditch

Rev:	Description:	Date:
A	Minor amends in line with Engineering appraisal	03/04/23

Castle Green,
Unit 20,
St. Asaph Business Park,
St Asaph,
Denbighshire. LL17 0LJ.
Tel. 01745 536677

Site:
Land between Park Avenue & Ash Lane, Mancot

Title:
Proposed Site Plan

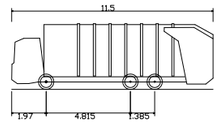
Scale: 1:500@A0

Date: 20.03.23

Ref: ASHLN-MANC-SP01

Rev: A

NOTES



Refuse Vehicle	
Overall Length	11.500m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:

CASTLE GREEN HOMES

PROJECT:

ASH LANE, MANCOT

DRAWING TITLE:

SWEPT PATH ANALYSIS

SCALES:

1:1000 @ A3

DRAWN:	CHECKED:	DATE:
LG	GM	OCT 23

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M3 4LY

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DRAWING NUMBER:	REVISION:
4168-SP01	-

Eddisons

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NOTES

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY.
THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.

— — FIRE ACCESS - DISTANCES TO BUILDINGS (Metres)

— — REVERSING DISTANCE (Metres)

DB32 Fire Appliance

Overall Length	8.680m
Overall Width	2.158m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

FIRE TENDER HIGHWAY DESIGN CHECKLIST - BUILDING REGS PART B

DESIGN FEATURE	DESIGN REQUIREMENTS	*NOTES*
TURNING FACILITIES	FIRE SERVICE VEHICLES SHOULD NOT HAVE TO REVERSE MORE THAN 20m FROM THE END OF AN ACCESS ROAD.	Complies
ACCESS ROUTE	MINIMUM WIDTH OF ROAD BETWEEN KERBS - 3.7m	Complies
ACCESS TO BUILDINGS	THERE SHOULD BE VEHICULAR ACCESS FOR A PUMP APPLIANCE TO SMALL BUILDINGS TO EITHER: A) 15% OF THE PERIMETER; OR B) WITHIN 45m OF EVERY POINT ON THE PROJECTED PLAN AREA (OR FOOTPRINT) OF THE BUILDING	Complies

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:

CASTLE GREEN HOMES

PROJECT:

ASH LANE, MANCOT

DRAWING TITLE:

SWEPT PATH ANALYSIS

SCALES:

1:1000 @ A3

DRAWN:	CHECKED:	DATE:
LG	GM	OCT 23

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DRAWING NUMBER:	REVISION:
4168-SP02	-

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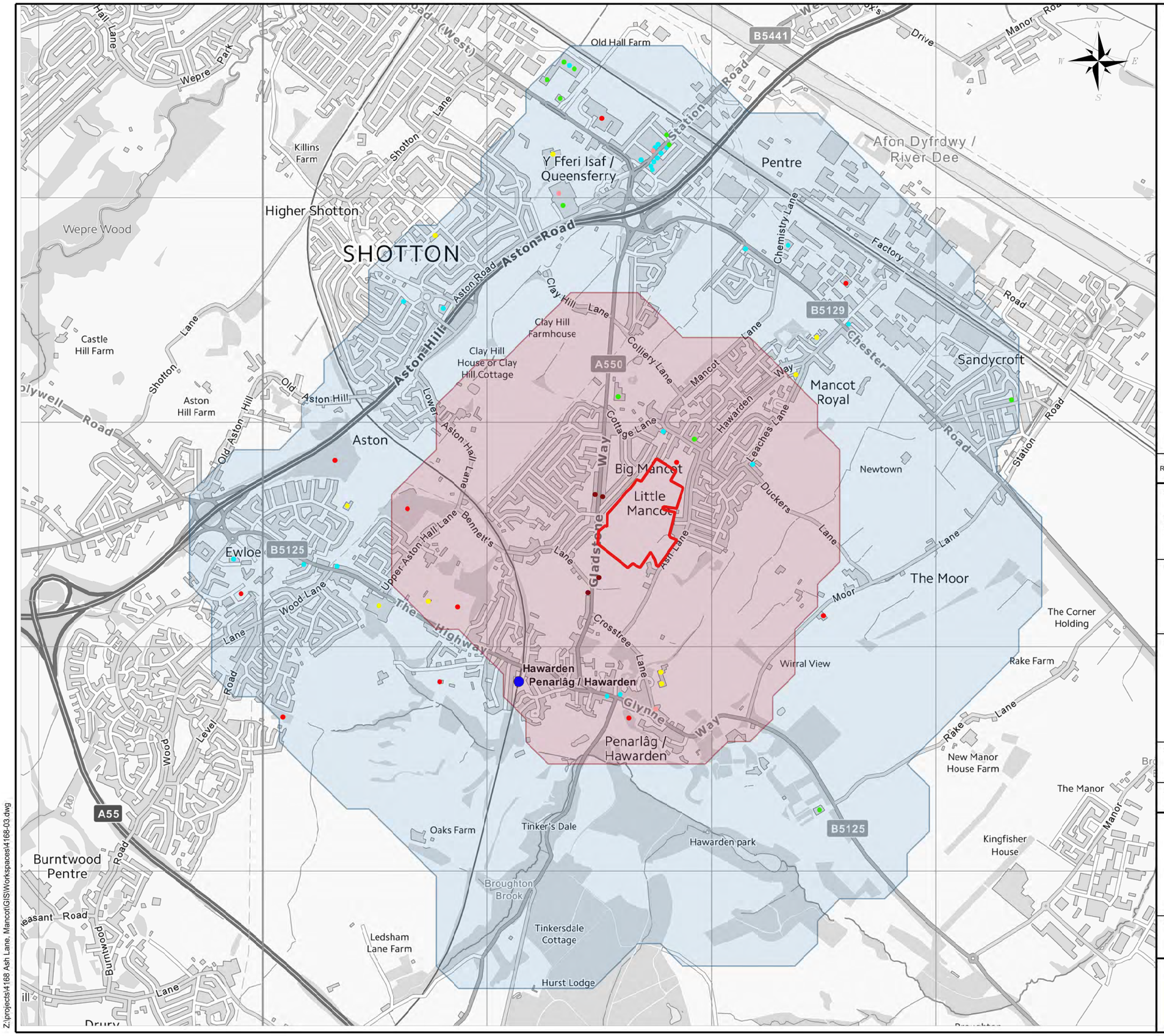

NOTES

- Site Location
- 800m Pedestrian Catchment
- 2km PEdestrian Catchment
- Train station
- Nearest Bus Stops
- Education
- Sport/Leisure
- Medical/Healthcare
- Retail
- Cafe/Takeaway/Public House

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:

CASTLE GREEN HOMES

PROJECT:

ASH LANE, MASCOT

DRAWING TITLE:

800M & 2KM PEDESTRIAN CATCHMENT WITH AMENITIES

SCALES: NTS @ A3

DRAWN:	CHECKED:	DATE:
LG	JE	OCT 23

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DRAWING NUMBER: 4168-03

REVISION: -

Eddisons

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APPENDICES

APPENDIX 1

Proposed Residential Development,
Ash Lane, Mancot

October 2023

RESIDENTIAL TRAVEL PLAN

eddisons.com

Eddisons

REPORT

DOCUMENT:	Residential Travel Plan
PROJECT:	Proposed Residential Development, Ash Lane, Mancot
CLIENT:	Castle Green Himes
JOB NUMBER:	4168
FILE ORIGIN:	"Z:\projects\4168 Ash Lane, Mancot\Docs\Reports\4168TP.01.docx"

DOCUMENT CHECKING:

Primary Author:	JE	**Initialled:**
Contributor	GW	**Initialled:**
Review By:		**Initialled:**

Issue	Date	Status	Checked for Issue
1		First Draft	
2			
3			
4			

CONTENTS

PLANS

See Transport Assessment.

1 INTRODUCTION

1.1 Preamble

1.1.1 Eddisons has been instructed by Castle Green Homes to advise on traffic and transport matters relating to a proposed residential development on land to the west of Manchester Road West, Little Hulton.

1.1.2 This Travel Plan Framework sets out the principal strategies that will be put in place to encourage and support sustainable trip making to and from the development.

1.2 Structure of the Travel Plan

1.2.1 Following this introduction, Section 2 details Travel Plan Policy and guidance and presents the 'Travel Plan Pyramid'.

1.2.2 Section 3 sets out a series of management measures that will be implemented as part of the Travel Plan.

1.2.3 Section 4 of the Travel Plan considers the accessibility of the site by non-car modes, including walking, cycling and public transport. Section 5 discusses targets for reducing trips by the private car while Section 6 details the monitoring of the Travel Plan.

1.2.4 Section 7 draws together the findings and conclusions.

1.3 Development Proposals

1.3.1 The proposed development would comprise up to 280 residential dwellings. The development would include a mix of house types.

1.3.2 The site would be served via two new vehicular access points, one off Ash Lane West to the east of the site, and one off Gladstone Way to the west of the site. Additional dedicated active travel routes would also be provided towards the north of the site which would provide access to Ash Lane, Park Avenue and

Mancot Lane. The proposed active travel routes would connect with the surrounding pedestrian infrastructure, which would provide links to the nearby services and amenities

1.3.3 The proposed indicative site masterplan is included within other documents submitted as part of the planning application.

1.4 Travel Plan Aims

1.4.1 The aims of the Travel Plan are:

- To encourage residents and visitors to use alternatives to the private car;
- To increase the awareness of the advantages and potential for travel by more environmentally friendly modes; and
- To introduce a package of management measures that will facilitate travel by modes of transport other than the private car.

1.5 Resident's Travel Pack

1.5.1 The principal measure of this TP will be the Resident's Travel Pack. The pack will include information and schemes to support and promote non-car modes of travel. This will be supplemented by the provision of certain physical measures, as is discussed further in **Section 3**.

2 TRAVEL PLANNING POLICY AND GUIDANCE

2.1 Travel Planning Policy

2.1.1 The need to manage transport in new developments is included within national and local policy. The need to reduce car dependency, increase travel choices and encourage sustainable distribution is supported by Planning Policy Wales (PPW), which states that the planning system should support sustainable development that: "*increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution*". It seeks to achieve this by:

- Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;
- Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and
- Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles.

2.2 Travel Planning Guidance

2.2.1 The preparation and adoption of a Travel Plan is an important element of managing the demand for travel to all modern developments.

2.2.2 Guidance identifies a Travel Plan as *"a long-term management strategy for an occupier or site that seeks to deliver sustainable transport objectives through positive action and is articulated in a document that is regularly reviewed.*"

2.2.3 The concept of the 'Travel Plan Pyramid' helps to demonstrate how successful plans are built on the firm foundations of a good location and site design. The pyramid is presented in **Figure 2.1** below:

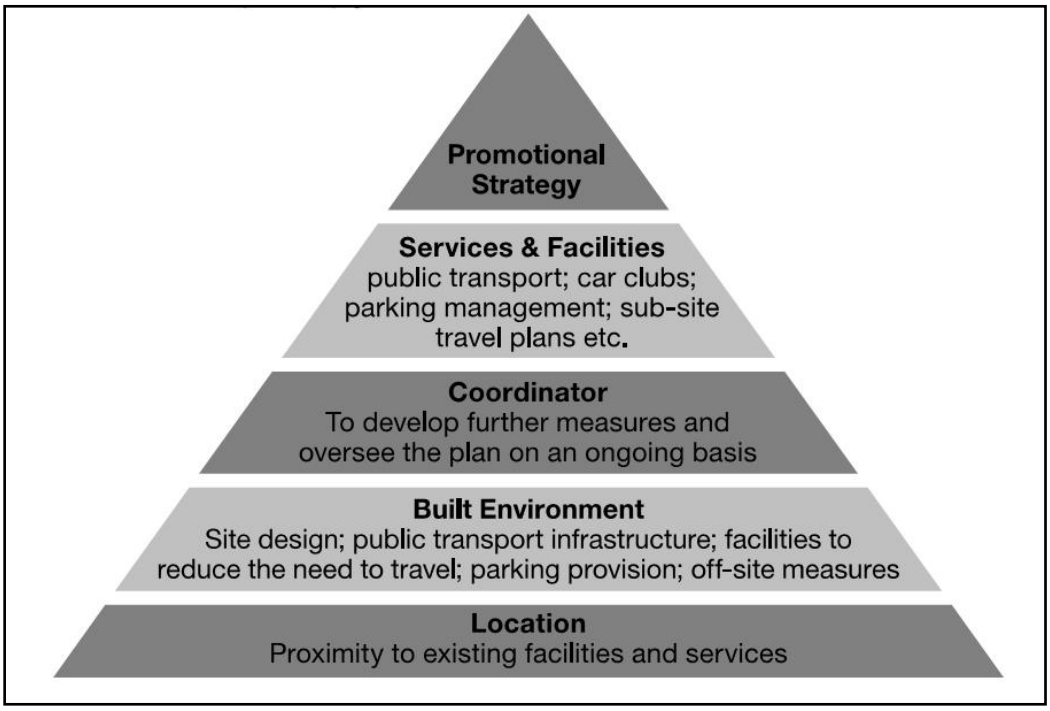

Figure 2.1 – The Travel Plan Pyramid

2.2.4 The hierarchy of 5 tiers of measures and criteria are well illustrated in pyramid form since the concept presented within that "good practice" is that each higher layer builds upon the more important foundations of the criteria and initiatives below it.

2.2.5 The most important layer of the pyramid is considered to be the base. This shows the key to making Travel Plans work is the actual location of the development and its proximity to local facilities and services essential to everyday life.

2.2.6 The second layer of the pyramid refers to how the layout of the site can assist in reducing the need to travel, which in this instance is again linked to the existing level of provision to facilitate sustainable travel.

2.2.7 As indicated in level 3 of the pyramid, the Travel Plan Coordinator will be free to develop further measures to maximise the sustainability of the site.

2.2.8 The fourth layer of the pyramid looks at how parking management and public transport can influence travel choice, while the top layer of the pyramid relates to how the Travel Plan will be marketed and how the measures within are to be promoted.

3 MANAGEMENT MEASURES

3.1 Introduction

3.1.1 The following provides a summary of the measures that will be implemented by this Travel Plan, which are discussed in more detail below:

i) Appointment of Travel Plan Co-ordinator

ii) Resident's Travel Pack

iii) Travel Awareness and Information

iv) Promotion of Lift Share Scheme

v) Encouraging Walking/Cycling

vi) Encouraging Home Working and Delivery Services

vii) Encouraging Travel by Public Transport

viii) Marketing and Promotion

3.2 Appointment of Travel Plan Co-ordinator

3.2.1 A Travel Plan Co-ordinator (TPC) will be appointed by the housebuilder or developer at least one month prior to occupation of the first dwelling.

3.2.2 The TPC will be responsible for all aspects of the Travel Plan. Their primary functions will be:

- Liaison with the local planning and highway authorities;
- Provision of a Resident's Travel Pack containing information for residents;
- Promotion of the sustainable transport options available to residents by providing information on local public transport, cycle, walking and car sharing schemes; and

- Maintenance of all necessary systems, data and paperwork.

3.2.3 The role of the TPC will also be to develop and manage the Site's Travel Plan.

3.2.4 Their duties will include monitoring, reviewing targets and forming action plans if an area of the Travel Plan is underperforming. Annual progress reports will be prepared and submitted to the Council.

3.2.5 Details of the nominated TPC will be submitted to the Planning and Highway Authorities, and the appropriate local bus companies, at least one month prior to first occupation of the site. Similarly, the TPC will be advised of appropriate contact personnel at the Council.

3.3 Resident's Travel Pack

3.3.1 A Travel Plan is an important component of new development. It is a document created as part of the planning application process, but it comes fully into force when a development becomes operational. It will then evolve with the Site over a number of years with input from Residents, the TPC and feedback from the Local Authorities.

3.3.2 It promotes sustainable travel patterns from development inception by ensuring that prospective residents are aware of the Travel Plan and its objectives at the earliest opportunity. This encourages all new residents to consider the travel options available to them and what trips could be undertaken by sustainable means.

3.3.3 The following section discusses the active travel network serving the Site, which connects the site to a wide range of local facilities. Similarly, the local bus services will encourage residents to use public transport as a primary means of travel where appropriate.

3.3.4 The content of the Travel Pack will be updated over time when new resources and information become available; however, the following basic information will be included within the first issue:

- information relating to local walking and cycling routes.
- information on the local bus and rail timetables, including online information and local journey planner services.
- Information about the local area and identification of the local amenities and facilities , e.g. the location, distance and routes to the local shops, schools, Post Offices, Doctor Surgeries, Hospitals, Banks, Libraries, Parks, attractions and other local amenities.
- Copies of the most recently published public transport information and the online equivalent.
- Details of other websites and sources of information that can help plan sustainable travel such as:
    - Public Transport - Links to timetable information e.g. www.traveline.org.uk and www.nationalrail.co.uk
    - Car Sharing - Links to websites that co-ordinate car sharing such as www.carshare.com, www.liftshare.org.uk and www.nationalcarshare.co.uk to encourage car sharing.
    - Cycling - Link to the UK's National Cyclists Organisation website www.ctc.org.uk and Sustrans www.sustrans.org.uk
    - Local Amenities - local supermarkets and delivery services offering online shopping (reduce the need for car travel).

3.3.5 The first issue of the Resident's Travel Pack will be the responsibility of the house builder.

3.4 Travel Awareness and Information

3.4.1 All prospective residents will be made aware of the Travel Plan and its aims. Resident Travel Packs will be issued to all new residents prior to occupation and prospective buyers will be made aware of the Travel Plan when viewing properties to promote the sustainable travel opportunities of the Site.

3.5 Promotion of the Lift Share Scheme

3.5.1 The TPC will promote the use of lift sharing, encouraging residents interested in lift sharing to register on the Wales Liftshare website. The site allows users to register their details, where they are travelling to, if they are offering a lift or need a lift to their destination. This site will then provide information on matching lift share opportunities.

3.5.2 The website can be found at https://liftshare.com/uk/community/wales

3.6 Encouraging Walking/Cycling

3.6.1 Residents will be provided with information and advice concerning safe pedestrian and cycle routes to the site. They will also be provided with information on how to set up a local Walk Buddy and Bike Buddy scheme.

3.6.2 The Walk Buddy and Bike Buddy schemes can match individuals with others that walk or cycle the same routes, such that they can walk or cycle together. This seeks to help individuals to meet others wanting to travel the same way. They can be used for regular trips such as walking or cycling to the workplace or going to the station. They can also improve the feeling of security for those unwilling to travel alone or those who are new to cycling for example.

3.6.3 If there is interest in these schemes, the TPC could review the potential for the provision of walking / cycling signage, or provide details of walks and cycle routes. That information could identify the distances to key destinations served by the route, along with information on the local services and amenities in those areas.

3.7 Encouraging Travel by Public Transport

3.7.1 The TPC will liaise with the local bus operators to promote the use of bus and rail services and ensure that up to date timetable information is readily available to residents.

3.7.2 Travel by public transport will be promoted and residents will be encouraged to access the public transport information provided on relevant websites, as well as utilising the Journey Planning tools available.

3.8 Marketing and Promotion

3.8.1 To ensure that potential residents of the site are informed about the Travel Plan and its goals from the earliest stage, the Travel Plan will have a significant presence within the sales suite of the development. This will include a display outlining the sustainable travel options available from the site and the travel measures being implemented to promote their use.

3.8.2 The sales staff will be given training to promote the Travel Plan as an asset and selling point of the development. Key concepts relating to the site's accessibility will also be included within marketing and sales particulars.

4 ACCESSIBILITY BY NON-CAR MODES

4.1 Introduction

4.1.1 In order to accord with the aspirations of the Planning Policy for Wales (PPW), any new proposals should extend the choice in transport and secure mobility in a way that supports sustainable development.

4.1.2 As set out in the above section, the principle of the PWW policy is to encourage sustainable travel. This includes:

- "*Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;*
- *Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and*
- *Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles*."

4.1.3 New development should therefore seek to influence the predominant mode of travel in order to achieve a shift in mode split towards non-car modes, thus assisting in meeting the aspirations of current national and local planning policy.

4.1.4 The accessibility of the proposed site has been considered by the following modes of transport:

- accessibility on foot;
- accessibility by cycle;
- accessibility by bus;
- accessibility by rail.

4.2 Access on Foot

4.2.1 It is important to create a choice of direct, safe and attractive routes between where people live and where they need to travel in their day-to-day life. This philosophy clearly encourages the opportunity to walk whatever the journey purpose and also helps to create more active streets and a more vibrant neighbourhood.

4.2.2 Existing footways are provided along the A550 Gladstone Way, Park Avenue and Ash Lane. These link to the wider pedestrian network.

4.2.3 Flintshire County Council are developing their Active Travel Integrated Network. The aim of the network is to encourage people to walk or cycle for short journeys to access a workplace or educational establishment or to access health, leisure or other services or facilities and to ultimately make Wales a walking and cycling nation.

4.2.4 Included in the Integrated Walking Network are Active Travel Routes MA2/12 and MA2/14, which are located to the north of the development site. These routes run along Park Avenue and Mancot Lane and provide links with Ewloe, Hawarden and through to Deeside as shown in **Figure 4.1** below.

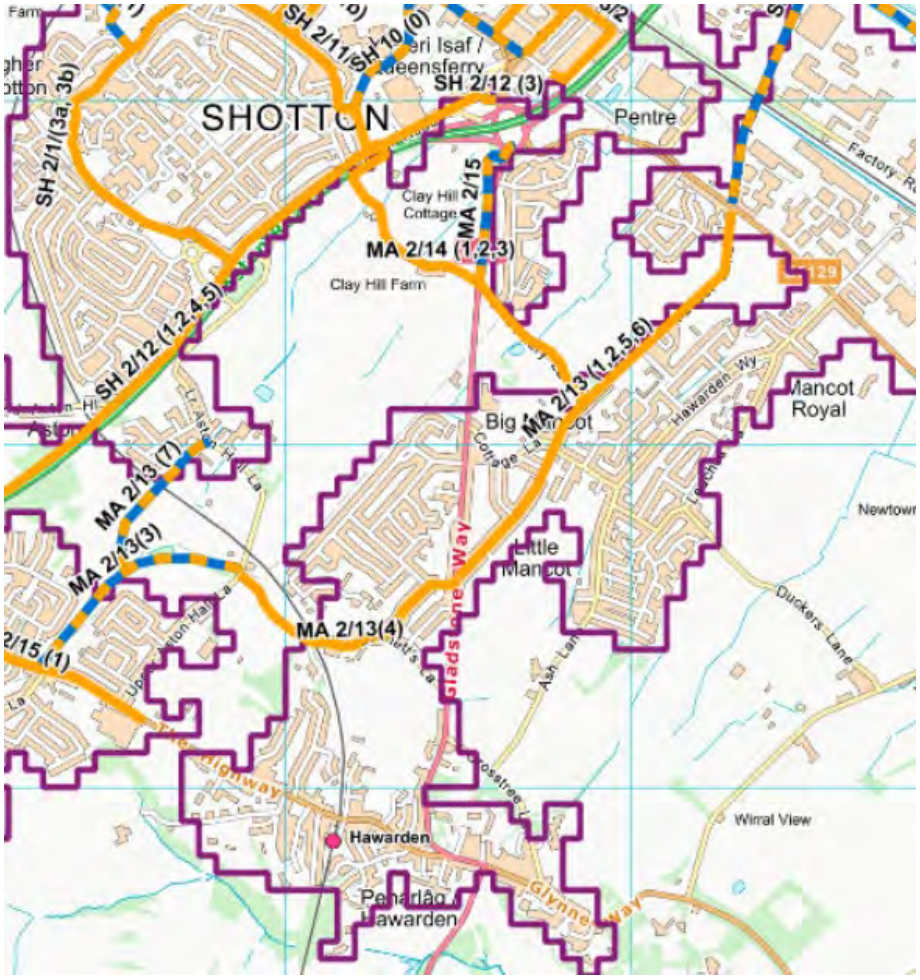

Figure 4.1 – Map of Integrated Walking Network

4.2.5 The above figure shows that the site is well placed to connect with the Integrated Walking Network surrounding the site. This will promote the use of active travel between the site and the leisure, health and employment facilities within the town centre. It will also provide access to the surrounding countryside areas for leisure and well-being purposes.

4.2.6 The Institute of Highways and Transportation (IHT) document 'Guidelines for Providing for Journeys on Foot', provides information on acceptable walking distances. **Table 4.1** suggests distances for desirable, acceptable and

preferred maximum walks to 'town centres', 'commuting/schools' and 'elsewhere'.

Suggested Preferred Maximum Walk		
Town Centre	**Commuting/School**	**Elsewhere**
800m	2,000m	1,200m

Table 4.1 IHT 'Providing for Journeys on Foot' Walk Distances

4.2.7 Manual for Streets (MfS) continues the theme of the acceptability of the 2,000 metre distance in paragraph 4.4.1. This states that '*walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPS13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km*'.

4.2.8 **Table 4.2** below summarises this guidance in tabular form.

'Comfortable' Walk	'Preferred Maximum' Walk
800m	2,000m

Table 4.2 Manual for Streets Walk Distances

4.2.9 Further evidence that people will walk further than the suggested 'preferred maximum' distances in the IHT 'Providing for Journeys on Foot' is contained in a WYG Report entitled 'Accessibility – How Far Do People Walk and Cycle'. This report refers to National Travel Survey (NTS) data for the UK as a whole, excluding London, and confirms the following 85th percentile walk distances:

- All journey purposes – 1,930 metres;
- Commuting – 2,400 metres;
- Shopping – 1,600 metres;
- Education – 3,200 or 4,800 metres;
- Personal business – 1,600 metres.

4.2.10 Overall, in its Table 5.1, the document states that 1,950 square metres is the 85th percentile distance for walking as the main mode of travel. **Table 4.3** below summarises the various 85th percentile walk distances suggested as guidelines in the WYG Study below.

85th Percentile Walk Distances				Overall Recommended Preferred Max
All Journeys	Commuting	Shopping	Personal	
1,950m	2,100m	1,600m	1,600m	1,950m

Table 4.3 WYG Report/NTS Data Walk Distances

4.2.11 In summary, the distance of 1,950 metres, or around 2 kilometres, represents an acceptable maximum walking distance for the majority of land uses.

4.2.12 Section 3.1 of the CIHT guidance 'Planning for Walking' mentioned earlier in this report provides a useful reminder of the health benefits of walking. This states that:

'A brisk *20 minute walk each day could be enough to reduce an individual's risk of* an *early death.'*

4.2.13 A 20-minute walk equates to a walking distance of around 1,600 metres.

4.2.14 In light of the above, a pedestrian catchment of 2 kilometres from the centre of the site, using all usable pedestrian routes, has been provided in Plan 5 of the Transport Assessment (TA) document.

4.2.15 The 2,000-metre pedestrian catchment illustrates that almost the entirety of the Mancot town centre boundary, including the primary shopping area, falls within the 2km catchment. Clearly, this represents a key destination for potential employment, retail and leisure trips.

4.2.16 In a recent 2023 YouGov poll, respondents were asked to identify the local amenities they valued the most within a 15 minute walk of their home. The poll results highlight amenities that people consider essential for their day to day lives, such as, grocery stores, healthcare facilities and public transportation. The results of the YouGov Poll are displayed in **Table 4.4** below:

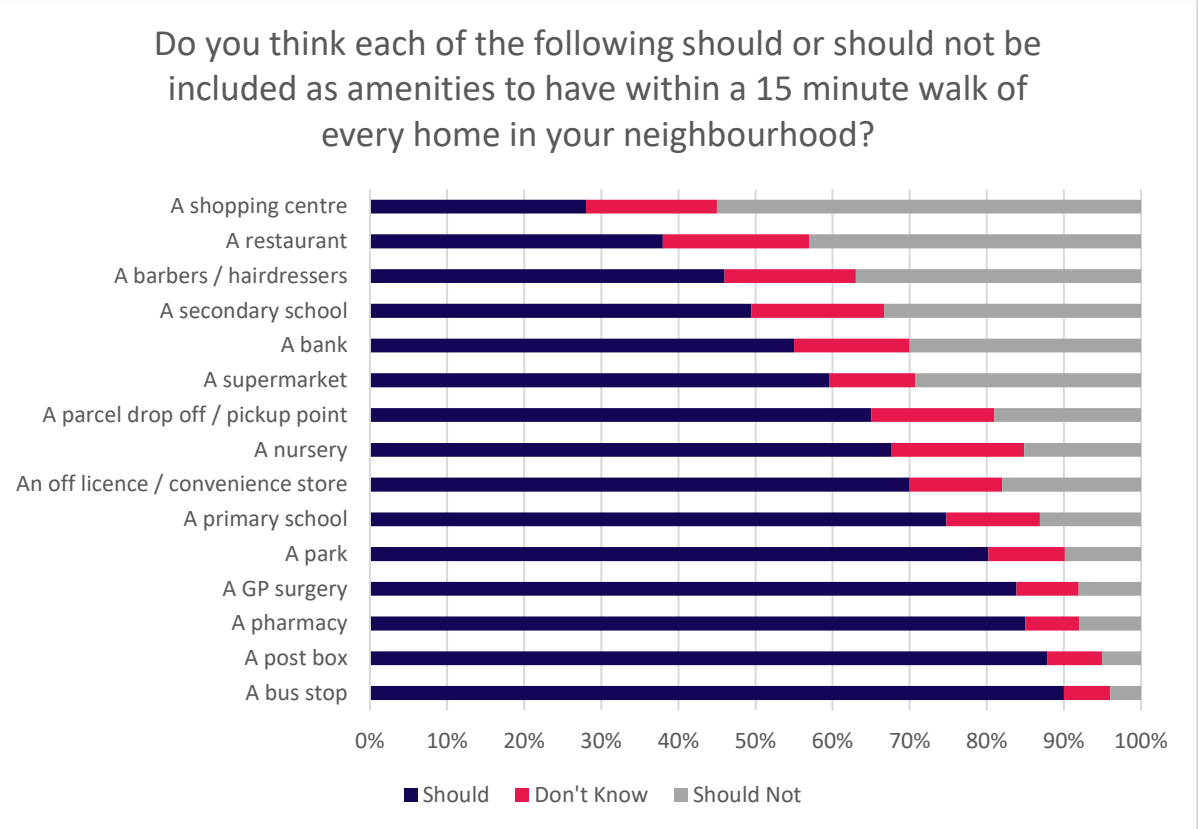

Table 4.4 YouGov Poll Results (Source YouGov)

4.2.17 **Table 4.4** shows that the majority of respondents, approximately nine in ten, believe that having a bus stop (90%) and a post box (87%) within a short walk of their home is most important. Similarly, a significant proportion of Britons

think that medical facilities like a pharmacy (85%) and a GP surgery (83%) should be easily accessible. Less than half of the respondents see the need for a shopping centre (28%), restaurant (38%), or hairdressers (46%) to be located nearby.

4.2.18 Plan 5 of the TA provides an illustrative indication of the areas that can be reached based on a leisurely walk from the site. The plan also displays nearby local amenities, as per those identified within the findings of the YouGov poll.

4.2.19 As can be seen in Plan, 5 the site is located in close proximity to a number of a local amenities, including a bus stop, a post box, a pharmacy / GP surgery, and a local convenience store.

4.2.20 **Table 4.5** below, shows the walking distance from the centre of the site to several of the local key amenities in the immediate vicinity of the site. The table also confirms whether the particular amenity is within the 'preferred maximum' walk distances using the above guideline criteria.

Local Amenity	Distance	Guidance Criteria	Meets with Guidance?
Mancot Bowling Club	300m	1,600m	**YES**
The Village Store	500m	1,600m	**YES**
The White Bear	635m	1,600m	**YES**
The Old Orchard Tavern	670m	1,600m	**YES**
Hawarden Village Church School	700m	3,200m	**YES**
Knights Hawarden Pharmacy	770m	1,600m	**YES**
Hawarden Old Park	850m	1,600m	**YES**
The Stables Medical Practice	880m	1,600m	**YES**
Flintshire Childrens Centre	960m	1,600m	**YES**
Sandycroft County Primary School	1,225m	3,200m	**YES**

Table 4.5 Distance from Site to Local Facilities

4.2.21 Based on the review, it is considered that the existing pedestrian infrastructure will facilitate safe and direct pedestrian linkages between the site and numerous local services and amenities.

4.3 Access by Cycle

4.3.1 Cycling represents a realistic alternative mode to car travel for some site journeys.

4.3.2 Clearly, the new advice contained within the Highway Code, which was updated on 29th January 2022, will improve the safety of vulnerable road users including cyclists, pedestrians, and horse-riders. Most of the new advice relates to where cyclists should position themselves within the lane in various traffic conditions and motorists being required to give cyclists priority in slow moving traffic and

locations where there is insufficient room for vehicles to overtake cyclists safely, allowing 1.5-metres for cyclists when overtaking them.

4.3.3 A distance of 5 kilometres is generally accepted as a distance where cycling has the potential to replace short car journeys. This distance equates to a journey of around 25 minutes based on a leisurely cycle speed of 12 kilometres per hour and would encompass Hawarden, Sansycroft, Broughton, Breton, Ewloe, Deeside, Sealand and Connah's Quay.

4.3.4 National Cycle Route 5 is located north of the site. It provides access from Chester where it then runs west via Garden City and Connah's Quay. It is both an on and off-road cycle route and is located approximately 1.5km from the centre of the site.

4.3.5 National Cycle Route 568 is also located north of the site. This cycle route runs from the north of Chester via Chester city centre then west via Garden City and hen back up north. It is both an on and off-road cycle route and is located approximately 2.1km from the centre of the site.

4.3.6 Also, as part of the Active Travel Integrated Network there are numerous cycle networks located in the vicinity of the site. As can be seen in Figure 5.2 below, the orange and blue striped line represents a shared cycle and walking network which provides access to Chester and nearby areas.

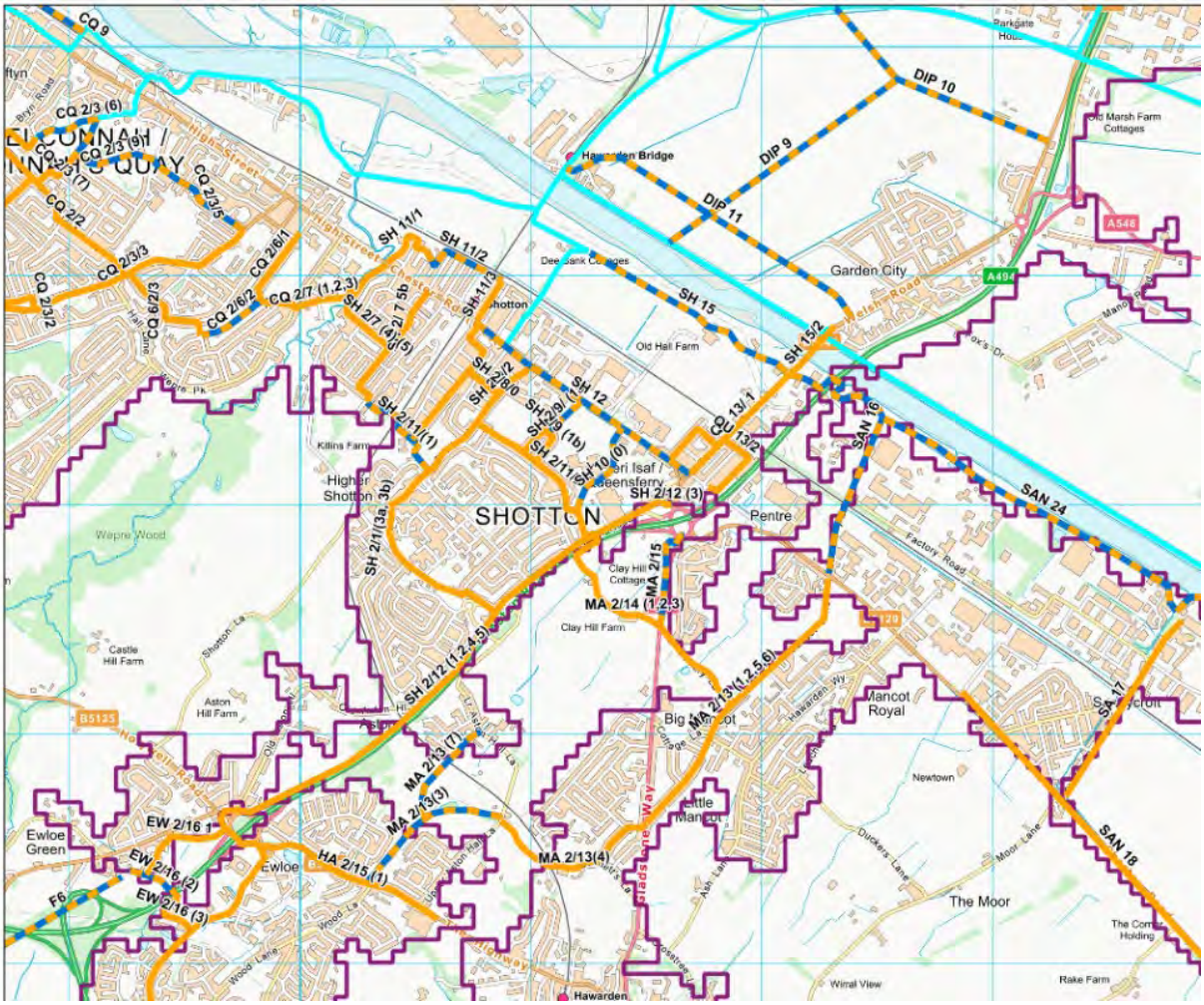

Figure 4.2 – Map of nearby cycle routes

4.3.7 The site can, therefore, be considered as being accessible by cycle.

4.4 Access by Bus

4.4.1 An effective public transport system is essential in providing good accessibility for large parts of the population to opportunities for work, education, shopping, leisure, and healthcare in the town and beyond.

4.4.2 The nearest bus stop to the site is located along Gladstone Way immediately to the west of the development site. This stop consists of a bus stop pole, shelter and timetable. Additional bus stops are located further along Gladstone Way and on the A550 The Highway. All the nearest bus stops to the site are shown on Plan 5 of the TA.

4.4.3 A summary of the services available from the nearest bus stops from the development site is provided in **Table 4.6** below.

Servic No	Route	Monday - Friday			Saturday			Sun
		Pre 08:00	08:00-17:00	Post 17:00	Pre 08:00	08:00-17:00	Post 17:00	
11	Chester Bus Interchange, Stand F - Holywell Bus Station	5 services	30 mins	6 services	5 services	30 mins	6 services	120 mins

Table 4.6 Existing Bus Services Operating in the Vicinity of the Site

4.4.4 As can be seen from Table 5.7, the nearest bus stops to the site provides various services throughout the day to destinations such as Chester and Broughton.

4.4.5 It is noted that the above services provide a choice of how people travel with the bus services operating from around 6:00am to around 21:10pm, making travel by public transport a real alternative to travelling by car for commuting trips.

4.4.6 In order to demonstrate the level of accessibility some example journey times by bus are presented below **Table 4.7** below.

Destination	Duration
Chester	27 mins
Broughton	8 mins

Table 4.7 Example Bus Journey Times from the Site

4.4.7 The above table demonstrates that Chester is just a 27-minute bus journey from the site and Broughton is just an 8-minute bus journey.

4.4.8 It is therefore concluded that the proposed development site is accessible by bus.

4.5 Accessibility by Rail

4.5.1 The nearest train station located to the site is Hawarden, which is located 800 metres to the south. This train station can be accessed by a 12-minute walk or a 6-minute cycle. This train station is managed by Transport for Wales and has 2 platforms, offering 2 services per hour to destinations such as Wrexham and Bidston.

4.5.2 This provides opportunities for commuting/leisure opportunities from the site via rail.

4.6 Accessibility Summary

4.6.1 The proposals have been considered in terms of accessibility by non-car modes of transport.

4.6.2 The following conclusions can be drawn from this section of the report:

- the site is well located to cater for trips on foot and provides potential for a high degree of pedestrian trips between the development and the surrounding area, including Mancot centre;
- it has been demonstrated that the site is accessible by cycle, with a number of national cycle routes being located within close proximity of the site;
- the services from the bus stops on Gladstone Way, travelling to destinations such as Chester and Broughton, show that the proposed development can be considered as accessible by bus;

- The site is accessible via rail with Hawarden station, located just over 800m from the site.

4.6.3 In light of the above, it is considered that the site is accessible by non-car modes of transport and that it caters for the needs of the development's residents and visitors. As such, this will assist in promoting a choice of travel modes other than the private car, as set out in PPW.

5 TRAVEL PLAN TARGETS

5.1 Introduction

5.1.1 This section considers the operation of the Travel Plan once the development has been completed, occupied and the site is operational. The Travel Plan provides targets against which the success of the Plan in achieving its objectives will be measured.

5.1.2 The targets are designed to be quantifiable, relevant to both measures and objectives in the Plan and include a timescale.

5.1.3 In order to set the targets, further information may have to be obtained in order to establish against which to set the targets. This information will be related to existing patterns of movement (i.e. the proportion of residents who travel to their workplace by non-car mode) and may be obtained from sources such as the National Travel Survey and the National Census.

5.1.4 More accurate information to establish the baseline targets however, will be obtained from a Residents Travel Survey which will be undertaken within one month of the development being 75% occupied.

5.1.5 Suitable targets for reducing the need to travel by private car will be set against the baseline targets and agreed with the Council and included in the final Residential Travel Plan for the whole development.

5.2 Potential Targets

5.2.1 The Travel Plan targets are designed to be quantifiable, be relevant to both the Plan's measures and objectives and include a timescale within which they should be achieved.

5.2.2 Targets that can be included within a Travel Plan include:

- Car trips per household - targets set on the basis of predicted trip rates for the development.
- Uptake of alternatives to car travel - targets for bus patronage, registration and participation in the Liftshare car share scheme, cycle counts and pedestrian counts.
- Car ownership and mode of travel - trip based targets may be supplemented by targets related to car ownership, travel to work by mode and travel to school by mode.
- Travel Plan awareness targets - for example, a target can be established to ensure a significant percentage of residents are aware of the Travel Plan and its purpose.

5.3 Action Plan

5.3.1 **Table 5.1** below sets out the key tasks that will need to be undertaken by the Travel Plan Co-ordinator. The Action Plan includes timescales to assist the TPC with implementing the obligations of the Travel Plan.

	Target Date	Indicator/Measured by	Responsibility
Appointment of TPC	TPC appointed one month prior to first occupation of site	Appointment of TPC by target date	Housebuilder
Production of Residents Travel Pack	Upon Occupation	Resident travel survey	Housebuilder
Undertake initial travel surveys	Within 1 month of reaching 75% occupation of development	Receipt of survey results	TPC
Agree Travel Plan Targets	1 month after initial travel survey undertaken	Receipt of written agreements of targets	TPC
Achieve target car driver travel to work mode split	5 years after initial travel survey	Residents travel surveys conducted in years 1, 3 and 5	TPC

Table 5.1 – Travel Plan Action Plan and Timescales

6 PLAN MONITORING AND ASSESSMENT

6.1.1 Travel Plan monitoring typically takes place on the following basis:

- Early on in the occupation period of the site - for example, triggered by 75% occupancy to provide the information base for the review of the plan;
- Annually, or at least every two years thereafter, to provide on-going information on the impact of the plan;
- Monitoring should take place over a wide range of time periods to review the different patterns of journeys that can be generated by residential development.

6.1.2 The monitoring could include items such as:

- 'Full residential surveys' to be completed in year 1, year 3 and year 5, with 'snap-shot' surveys completed every 6 to 12 months.
- Feedback from bus operators to establish demand for local bus services and provide an understanding of how the demand might integrate with existing timetables.

6.1.3 A Final Travel Plan will be produced once planning permission has been granted. The production of that document will consider of how best to monitor and measure the success of the Travel Plan. Appropriate monitoring arrangements will also be agreed with the Local Planning Authorities.

6.1.4 Annual progress reports will be submitted as part of the monitoring and assessment process. This will summarise the results of the travel surveys with regards to targets, budgets, general effectiveness and current initiatives. The report will be submitted to the Local Authority no later than one month following the anniversary of the Travel Plan approval.

6.1.5 The monitoring of the Travel Plan will identify which measures are proving most effective and which are not performing as intended. This will enable the

effective measures to be promoted further, whilst ineffective measures can be reviewed and rectified. The monitoring also provides an opportunity to identify any existing barriers to sustainable trip making and what initiatives could be used to overcome them. New initiatives for the coming year will also be identified by the report.

7 CONCLUSIONS

7.1.1 This Travel Plan has identified how the proposed development seeks to promote travel by sustainable modes and reduce the dependency of the private car. It has presented a series of measures that will be implemented to support the reduction in car usage, particularly for single car occupancy trips.

7.1.2 The aims of the Travel Plan are to:

- encourage residents to use sustainable modes of transport;
- reduce the reliance on single car occupancy journeys; and
- generally reduce traffic related pollution and noise.

7.1.3 This Travel Plan provides information on the non-car modes of transport that will be accessible by residents and visitors of the Site.

7.1.4 The Travel Plan also identifies the wide range of measures and actions that will be used to encourage walking, cycling, public transport use and car sharing.

7.1.5 The Travel Plan will be managed by a Travel Plan Co-ordinator, who will ensure that the Travel Plan is implemented and operating effectively. They will also be a point of contact for residents and the Local Authority.

7.1.6 The Travel Plan Coordinator will conduct Resident Travel Surveys to establish the baseline travel characteristics of the site and consider how sustainable trip making could be enhanced. From that baseline, Travel Plan targets will be set and agreed with the Travel Plan team at the Council.

7.1.7 It can therefore be concluded that the proposals will provide a highly sustainable development and should be considered acceptable to the local highway authority.

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APPENDIX 2

Mancot ATC, Ash Lane

Direction: Southbound

Hour Beginning	Thu 21/09/2023	Fri 22/09/2023	Sat 23/09/2023	Sun 24/09/2023	Mon 25/09/2023	Tue 26/09/2023	Wed 27/09/2023	5-Day Ave.	7-Day Ave.
00:00	0	1	5	4	1	2	2	1	2
01:00	0	2	5	3	1	1	0	1	2
02:00	0	0	1	1	0	0	0	0	0
03:00	0	2	1	1	1	2	2	1	1
04:00	4	4	3	0	4	2	2	3	3
05:00	14	13	8	5	7	10	13	11	10
06:00	27	26	8	2	16	21	17	21	17
07:00	75	63	22	9	75	73	72	72	56
08:00	92	101	35	26	103	100	111	101	81
09:00	55	59	51	40	55	50	48	53	51
10:00	48	42	63	50	44	39	48	44	48
11:00	56	58	66	57	49	38	51	50	54
12:00	53	45	53	43	44	67	42	50	50
13:00	42	60	55	54	40	49	51	48	50
14:00	58	78	63	50	63	65	72	67	64
15:00	75	59	40	42	64	58	62	64	57
16:00	72	83	34	48	68	91	71	77	67
17:00	87	80	42	39	71	53	75	73	64
18:00	51	65	52	28	40	48	53	51	48
19:00	30	35	34	21	35	38	32	34	32
20:00	29	27	14	14	20	19	27	24	21
21:00	19	23	10	10	3	8	17	14	13
22:00	9	6	14	5	10	8	9	8	9
23:00	2	5	4	3	3	2	2	3	3
Total 12H(7-19)	764	793	576	486	716	731	756	752	689
16H(6-22)	869	904	642	533	790	817	849	846	772
18H(6-24)	880	915	660	541	803	827	860	857	784
24H(0-24)	898	937	683	555	817	844	879	875	802
AM Peak	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
	92	101	66	57	103	100	111	101	81
PM Peak	17:00	16:00	14:00	13:00	17:00	16:00	17:00	16:00	16:00
	87	83	63	54	71	91	75	77	67

Paul Castle Associates

Direction: Northbound

Hour Beginning	Thu 21/09/2023	Fri 22/09/2023	Sat 23/09/2023	Sun 24/09/2023	Mon 25/09/2023	Tue 26/09/2023	Wed 27/09/2023	5-Day Ave.	7-Day Ave.
00:00	0	2	4	9	2	2	4	2	3
01:00	0	0	6	3	2	2	0	1	2
02:00	0	0	0	0	0	0	1	0	0
03:00	0	0	3	1	1	2	1	1	1
04:00	1	2	2	1	0	0	0	1	1
05:00	2	1	1	0	0	1	1	1	1
06:00	14	11	9	4	10	9	10	11	10
07:00	28	32	13	8	35	36	39	34	27
08:00	99	89	17	8	89	98	96	94	71
09:00	60	53	33	21	63	56	44	55	47
10:00	44	47	56	35	33	38	48	42	43
11:00	49	47	69	61	61	57	50	53	56
12:00	53	80	96	64	42	47	54	55	62
13:00	37	58	43	71	54	53	56	52	53
14:00	60	62	50	57	60	57	57	59	58
15:00	106	101	59	60	98	104	99	102	90
16:00	75	95	69	58	98	99	109	95	86
17:00	77	84	70	49	80	111	91	89	80
18:00	60	68	57	41	56	65	66	63	59
19:00	48	53	35	33	43	60	45	50	45
20:00	43	38	27	19	21	26	26	31	29
21:00	20	21	13	16	20	13	21	19	18
22:00	18	15	19	5	15	6	17	14	14
23:00	7	16	10	5	5	12	3	9	8
Total 12H(7-19)	748	816	632	533	769	821	809	793	733
16H(6-22)	873	939	716	605	863	929	911	903	834
18H(6-24)	898	970	745	615	883	947	931	926	856
24H(0-24)	901	975	761	629	888	954	938	931	864
AM Peak	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
	99	89	69	61	89	98	96	94	71
PM Peak	15:00	15:00	12:00	13:00	15:00	17:00	16:00	15:00	15:00
	106	101	96	71	98	111	109	102	90

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Thu 21/09/2023	Fri 22/09/2023	Sat 23/09/2023	Sun 24/09/2023	Mon 25/09/2023	Tue 26/09/2023	Wed 27/09/2023	5-Day Ave.	7-Day Ave.
00:00	0	3	9	13	3	4	6	3	5
01:00	0	2	11	6	3	3	0	2	4
02:00	0	0	1	1	0	0	1	0	0
03:00	0	2	4	2	2	4	3	2	2
04:00	5	6	5	1	4	2	2	4	4
05:00	16	14	9	5	7	11	14	12	11
06:00	41	37	17	6	26	30	27	32	26
07:00	103	95	35	17	110	109	111	106	83
08:00	191	190	52	34	192	198	207	196	152
09:00	115	112	84	61	118	106	92	109	98
10:00	92	89	119	85	77	77	96	86	91
11:00	105	105	135	118	110	95	101	103	110
12:00	106	125	149	107	86	114	96	105	112
13:00	79	118	98	125	94	102	107	100	103
14:00	118	140	113	107	123	122	129	126	122
15:00	181	160	99	102	162	162	161	165	147
16:00	147	178	103	106	166	190	180	172	153
17:00	164	164	112	88	151	164	166	162	144
18:00	111	133	109	69	96	113	119	114	107
19:00	78	88	69	54	78	98	77	84	77
20:00	72	65	41	33	41	45	53	55	50
21:00	39	44	23	26	23	21	38	33	31
22:00	27	21	33	10	25	14	26	23	22
23:00	9	21	14	8	8	14	5	11	11
Total 12H(7-19)	1512	1609	1208	1019	1485	1552	1565	1545	1421
16H(6-22)	1742	1843	1358	1138	1653	1746	1760	1749	1606
18H(6-24)	1778	1885	1405	1156	1686	1774	1791	1783	1639
24H(0-24)	1799	1912	1444	1184	1705	1798	1817	1806	1666
AM Peak	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
	191	190	135	118	192	198	207	196	152
PM Peak	15:00	16:00	12:00	13:00	16:00	16:00	16:00	16:00	16:00
	181	178	149	125	166	190	180	172	153

Paul Castle Associates

Mancot ATC, A550 Gladstone Way

Direction: Southbound

Hour Beginning	Thu 21/09/2023	Fri 22/09/2023	Sat 23/09/2023	Sun 24/09/2023	Mon 25/09/2023	Tue 26/09/2023	Wed 27/09/2023	5-Day Ave.	7-Day Ave.
00:00	8	6	8	14	0	6	5	5	7
01:00	3	2	7	7	5	3	2	3	4
02:00	1	0	3	4	2	1	1	1	2
03:00	2	3	2	6	2	2	1	2	3
04:00	12	10	7	5	11	8	12	11	9
05:00	152	145	60	22	143	144	149	147	116
06:00	110	101	57	37	89	83	98	96	82
07:00	191	192	47	40	239	246	234	220	170
08:00	264	283	101	60	278	303	270	280	223
09:00	156	192	202	90	173	170	171	172	165
10:00	191	179	215	164	178	190	168	181	184
11:00	192	196	234	231	201	176	198	193	204
12:00	229	308	240	225	263	271	265	267	257
13:00	248	246	243	238	215	198	195	220	226
14:00	225	255	247	230	195	216	213	221	226
15:00	193	272	217	178	195	197	194	210	207
16:00	273	321	211	144	270	300	243	281	252
17:00	285	373	166	108	330	390	241	324	270
18:00	186	247	126	85	168	195	206	200	173
19:00	142	150	74	56	123	122	158	139	118
20:00	124	87	54	45	111	122	109	111	93
21:00	55	46	36	27	35	35	51	44	41
22:00	32	37	30	21	26	24	31	30	29
23:00	10	20	16	10	3	13	16	12	13
Total 12H(7-19)	2633	3064	2249	1793	2705	2852	2598	2770	2556
16H(6-22)	3064	3448	2470	1958	3063	3214	3014	3161	2890
18H(6-24)	3106	3505	2516	1989	3092	3251	3061	3203	2931
24H(0-24)	3284	3671	2603	2047	3255	3415	3231	3371	3072
AM Peak	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
	264	283	234	231	278	303	270	280	223
PM Peak	17:00	17:00	14:00	13:00	17:00	17:00	12:00	17:00	17:00
	285	373	247	238	330	390	265	324	270

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Direction: Northbound

Hour Beginning	Thu 21/09/2023	Fri 22/09/2023	Sat 23/09/2023	Sun 24/09/2023	Mon 25/09/2023	Tue 26/09/2023	Wed 27/09/2023	5-Day Ave.	7-Day Ave.
00:00	10	4	19	9	4	7	5	6	8
01:00	4	9	9	6	4	1	5	5	5
02:00	4	4	8	3	1	3	2	3	4
03:00	3	6	5	7	3	5	4	4	5
04:00	5	3	2	4	3	5	8	5	4
05:00	20	25	8	10	17	17	28	21	18
06:00	108	91	17	17	45	118	134	99	76
07:00	130	128	44	27	173	141	125	139	110
08:00	200	202	71	36	313	219	237	234	183
09:00	159	167	139	97	196	149	164	167	153
10:00	159	179	202	146	200	166	139	169	170
11:00	174	212	206	260	220	142	160	182	196
12:00	201	234	258	278	208	176	176	199	219
13:00	224	239	238	235	276	249	243	246	243
14:00	213	212	236	244	188	174	185	194	207
15:00	239	281	173	185	222	223	225	238	221
16:00	208	219	182	154	261	262	238	238	218
17:00	185	221	173	145	211	228	230	215	199
18:00	167	193	127	85	155	166	186	173	154
19:00	137	154	91	85	113	141	134	136	122
20:00	160	161	50	33	133	143	145	148	118
21:00	82	57	51	23	79	93	80	78	66
22:00	22	34	38	16	28	30	42	31	30
23:00	14	27	22	10	12	8	7	14	14
Total 12H(7-19)	2259	2487	2049	1892	2623	2295	2308	2394	2273
16H(6-22)	2746	2950	2258	2050	2993	2790	2801	2856	2655
18H(6-24)	2782	3011	2318	2076	3033	2828	2850	2901	2700
24H(0-24)	2828	3062	2369	2115	3065	2866	2902	2945	2744
AM Peak	08:00	11:00	11:00	11:00	08:00	08:00	08:00	08:00	11:00
	200	212	206	260	313	219	237	234	196
PM Peak	15:00	15:00	12:00	12:00	13:00	16:00	13:00	13:00	13:00
	239	281	258	278	276	262	243	246	243

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Thu 21/09/2023	Fri 22/09/2023	Sat 23/09/2023	Sun 24/09/2023	Mon 25/09/2023	Tue 26/09/2023	Wed 27/09/2023	5-Day Ave.	7-Day Ave.
00:00	18	10	27	23	4	13	10	11	15
01:00	7	11	16	13	9	4	7	8	10
02:00	5	4	11	7	3	4	3	4	5
03:00	5	9	7	13	5	7	5	6	7
04:00	17	13	9	9	14	13	20	15	14
05:00	172	170	68	32	160	161	177	168	134
06:00	218	192	74	54	134	201	232	195	158
07:00	321	320	91	67	412	387	359	360	280
08:00	464	485	172	96	591	522	507	514	405
09:00	315	359	341	187	369	319	335	339	318
10:00	350	358	417	310	378	356	307	350	354
11:00	366	408	440	491	421	318	358	374	400
12:00	430	542	498	503	471	447	441	466	476
13:00	472	485	481	473	491	447	438	467	470
14:00	438	467	483	474	383	390	398	415	433
15:00	432	553	390	363	417	420	419	448	428
16:00	481	540	393	298	531	562	481	519	469
17:00	470	594	339	253	541	618	471	539	469
18:00	353	440	253	170	323	361	392	374	327
19:00	279	304	165	141	236	263	292	275	240
20:00	284	248	104	78	244	265	254	259	211
21:00	137	103	87	50	114	128	131	123	107
22:00	54	71	68	37	54	54	73	61	59
23:00	24	47	38	20	15	21	23	26	27
Total 12H(7-19)	4892	5551	4298	3685	5328	5147	4906	5165	4830
16H(6-22)	5810	6398	4728	4008	6056	6004	5815	6017	5546
18H(6-24)	5888	6516	4834	4065	6125	6079	5911	6104	5631
24H(0-24)	6112	6733	4972	4162	6320	6281	6133	6316	5816
AM Peak	08:00	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00
	464	485	440	491	591	522	507	514	405
PM Peak	16:00	17:00	12:00	12:00	17:00	17:00	16:00	17:00	12:00
	481	594	498	503	541	618	481	539	476

Paul Castle Associates

Mancot, Thursday 21st September 2023

Junction: 1
Approach: B5129 North

	To A494 (East)					To B5129 (East)					To A550 Gladstone Way					To A494 (West)					U-Turn				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	74	2	0	76	78.6	45	0	1	46	47.0	20	0	1	21	22.0	45	6	0	51	58.8	0	0	0	0	0.0
07:45 - 08:00	77	0	1	78	79.0	32	3	0	35	38.9	18	0	0	18	18.0	62	0	0	62	62.0	0	0	0	0	0.0
Hourly Total	**151**	**2**	**1**	**154**	**157.6**	**77**	**3**	**1**	**81**	**85.9**	**38**	**0**	**1**	**39**	**40.0**	**107**	**6**	**0**	**113**	**120.8**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	68	4	0	72	77.2	47	0	1	48	49.0	16	0	1	17	18.0	60	0	1	61	62.0	2	0	0	2	2.0
08:15 - 08:30	59	0	0	59	59.0	52	0	0	52	52.0	20	0	2	22	24.0	45	2	0	47	49.6	2	0	0	2	2.0
08:30 - 08:45	73	2	0	75	77.6	46	2	0	48	50.6	30	0	0	30	30.0	56	2	0	58	60.6	0	0	0	0	0.0
08:45 - 09:00	56	2	0	58	60.6	36	1	1	38	40.3	30	0	1	31	32.0	38	0	0	38	38.0	3	1	0	4	5.3
Hourly Total	**256**	**8**	**0**	**264**	**274.4**	**181**	**3**	**2**	**186**	**191.9**	**96**	**0**	**4**	**100**	**104.0**	**199**	**4**	**1**	**204**	**210.2**	**7**	**1**	**0**	**8**	**9.3**
09:00 - 09:15	57	1	0	58	59.3	50	0	0	50	50.0	26	0	0	26	26.0	55	4	0	59	64.2	5	1	0	6	7.3
09:15 - 09:30	47	5	0	52	58.5	54	2	0	56	58.6	25	0	0	25	25.0	74	2	0	76	78.6	1	0	0	1	1.0
Hourly Total	**104**	**6**	**0**	**110**	**117.8**	**104**	**2**	**0**	**106**	**108.6**	**51**	**0**	**0**	**51**	**51.0**	**129**	**6**	**0**	**135**	**142.8**	**6**	**1**	**0**	**7**	**8.3**
TOTAL	**511**	**16**	**1**	**528**	**549.8**	**362**	**8**	**3**	**373**	**386.4**	**185**	**0**	**5**	**190**	**195.0**	**435**	**16**	**1**	**452**	**473.8**	**13**	**2**	**0**	**15**	**17.6**
16:30 - 16:45	54	0	0	54	54.0	47	2	0	49	51.6	38	0	0	38	38.0	118	1	0	119	120.3	2	0	0	2	2.0
16:45 - 17:00	51	0	0	51	51.0	31	1	0	32	33.3	31	0	0	31	31.0	108	0	0	108	108.0	8	0	0	8	8.0
Hourly Total	**105**	**0**	**0**	**105**	**105.0**	**78**	**3**	**0**	**81**	**84.9**	**69**	**0**	**0**	**69**	**69.0**	**226**	**1**	**0**	**227**	**228.3**	**10**	**0**	**0**	**10**	**10.0**
17:00 - 17:15	58	2	0	60	62.6	44	0	0	44	44.0	50	0	1	51	52.0	85	5	0	90	96.5	3	0	0	3	3.0
17:15 - 17:30	61	0	0	61	61.0	46	0	0	46	46.0	50	0	0	50	50.0	98	0	0	98	98.0	3	0	0	3	3.0
17:30 - 17:45	53	0	0	53	53.0	47	1	0	48	49.3	47	0	0	47	47.0	80	0	0	80	80.0	1	0	0	1	1.0
17:45 - 18:00	43	0	0	43	43.0	46	0	0	46	46.0	37	0	0	37	37.0	89	0	0	89	89.0	2	0	0	2	2.0
Hourly Total	**215**	**2**	**0**	**217**	**219.6**	**183**	**1**	**0**	**184**	**185.3**	**184**	**0**	**1**	**185**	**186.0**	**352**	**5**	**0**	**357**	**363.5**	**9**	**0**	**0**	**9**	**9.0**
18:00 - 18:15	45	1	0	46	47.3	41	0	0	41	41.0	40	0	0	40	40.0	96	0	0	96	96.0	0	0	0	0	0.0
18:15 - 18:30	41	0	0	41	41.0	36	0	0	36	36.0	32	0	0	32	32.0	98	0	0	98	98.0	3	0	0	3	3.0
Hourly Total	**86**	**1**	**0**	**87**	**88.3**	**77**	**0**	**0**	**77**	**77.0**	**72**	**0**	**0**	**72**	**72.0**	**194**	**0**	**0**	**194**	**194.0**	**3**	**0**	**0**	**3**	**3.0**
TOTAL	**406**	**3**	**0**	**409**	**412.9**	**338**	**4**	**0**	**342**	**347.2**	**325**	**0**	**1**	**326**	**327.0**	**772**	**6**	**0**	**778**	**785.8**	**22**	**0**	**0**	**22**	**22.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 1
Approach: A494 East

	To B5129 (East)					To A550 Gladstone Way					To A494 (West)					To B5129 (North)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	90	12	0	102	117.6	14	2	0	16	18.6	0	0	0	0	0.0	41	3	0	44	47.9
07:45 - 08:00	94	17	0	111	133.1	10	1	0	11	12.3	1	0	0	1	1.0	48	7	0	55	64.1
Hourly Total	**184**	**29**	**0**	**213**	**250.7**	**24**	**3**	**0**	**27**	**30.9**	**1**	**0**	**0**	**1**	**1.0**	**89**	**10**	**0**	**99**	**112.0**
08:00 - 08:15	72	14	0	86	104.2	9	2	0	11	13.6	0	0	0	0	0.0	53	2	0	55	57.6
08:15 - 08:30	85	12	0	97	112.6	13	0	0	13	13.0	2	0	0	2	2.0	62	2	0	64	66.6
08:30 - 08:45	85	11	0	96	110.3	18	0	0	18	18.0	0	0	0	0	0.0	72	2	0	74	76.6
08:45 - 09:00	64	9	0	73	84.7	17	4	0	21	26.2	1	0	0	1	1.0	63	0	0	63	63.0
Hourly Total	**306**	**46**	**0**	**352**	**411.8**	**57**	**6**	**0**	**63**	**70.8**	**3**	**0**	**0**	**3**	**3.0**	**250**	**6**	**0**	**256**	**263.8**
09:00 - 09:15	56	5	0	61	67.5	6	0	0	6	6.0	0	1	0	1	2.3	63	1	0	64	65.3
09:15 - 09:30	47	7	0	54	63.1	11	0	0	11	11.0	0	0	0	0	0.0	54	5	0	59	65.5
Hourly Total	**103**	**12**	**0**	**115**	**130.6**	**17**	**0**	**0**	**17**	**17.0**	**0**	**1**	**0**	**1**	**2.3**	**117**	**6**	**0**	**123**	**130.8**
TOTAL	**593**	**87**	**0**	**680**	**793.1**	**98**	**9**	**0**	**107**	**118.7**	**4**	**1**	**0**	**5**	**6.3**	**456**	**22**	**0**	**478**	**506.6**
16:30 - 16:45	44	8	1	53	64.4	32	2	0	34	36.6	0	0	0	0	0.0	101	2	0	103	105.6
16:45 - 17:00	52	10	0	62	75.0	34	0	0	34	34.0	0	0	0	0	0.0	101	0	0	101	101.0
Hourly Total	**96**	**18**	**1**	**115**	**139.4**	**66**	**2**	**0**	**68**	**70.6**	**0**	**0**	**0**	**0**	**0.0**	**202**	**2**	**0**	**204**	**206.6**
17:00 - 17:15	40	4	0	44	49.2	37	0	0	37	37.0	2	0	0	2	2.0	84	0	0	84	84.0
17:15 - 17:30	40	7	0	47	56.1	34	0	0	34	34.0	1	0	0	1	1.0	79	3	0	82	85.9
17:30 - 17:45	41	2	0	43	45.6	47	0	0	47	47.0	0	0	0	0	0.0	83	0	0	83	83.0
17:45 - 18:00	51	3	1	55	59.9	32	0	0	32	32.0	3	0	0	3	3.0	94	1	0	95	96.3
Hourly Total	**172**	**16**	**1**	**189**	**210.8**	**150**	**0**	**0**	**150**	**150.0**	**6**	**0**	**0**	**6**	**6.0**	**340**	**4**	**0**	**344**	**349.2**
18:00 - 18:15	41	7	0	48	57.1	14	0	0	14	14.0	2	0	0	2	2.0	73	0	0	73	73.0
18:15 - 18:30	29	3	0	32	35.9	19	0	0	19	19.0	0	0	0	0	0.0	118	2	0	120	122.6
Hourly Total	**70**	**10**	**0**	**80**	**93.0**	**33**	**0**	**0**	**33**	**33.0**	**2**	**0**	**0**	**2**	**2.0**	**191**	**2**	**0**	**193**	**195.6**
TOTAL	**338**	**44**	**2**	**384**	**443.2**	**249**	**2**	**0**	**251**	**253.6**	**8**	**0**	**0**	**8**	**8.0**	**733**	**8**	**0**	**741**	**751.4**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 1
Approach: B5129 East

	To A550 Gladstone Way					To A494 (West)					To B5129 (North)					To A494 (East)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	0	0	0.0	12	11	0	23	37.3	17	1	0	18	19.3	53	14	0	67	85.2
07:45 - 08:00	3	0	0	3	3.0	13	2	0	15	17.6	21	3	0	24	27.9	53	9	0	62	73.7
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**25**	**13**	**0**	**38**	**54.9**	**38**	**4**	**0**	**42**	**47.2**	**106**	**23**	**0**	**129**	**158.9**
08:00 - 08:15	1	0	0	1	1.0	20	3	0	23	26.9	26	5	0	31	37.5	42	15	0	57	76.5
08:15 - 08:30	6	0	0	6	6.0	17	4	0	21	26.2	35	1	1	37	39.3	44	13	0	57	73.9
08:30 - 08:45	3	0	0	3	3.0	29	4	0	33	38.2	49	4	0	53	58.2	51	15	0	66	85.5
08:45 - 09:00	3	0	0	3	3.0	22	7	0	29	38.1	57	1	0	58	59.3	54	17	0	71	93.1
Hourly Total	**13**	**0**	**0**	**13**	**13.0**	**88**	**18**	**0**	**106**	**129.4**	**167**	**11**	**1**	**179**	**194.3**	**191**	**60**	**0**	**251**	**329.0**
09:00 - 09:15	4	0	0	4	4.0	18	3	0	21	24.9	55	11	0	66	80.3	39	7	0	46	55.1
09:15 - 09:30	5	0	0	5	5.0	23	2	0	25	27.6	49	4	0	53	58.2	33	9	0	42	53.7
Hourly Total	**9**	**0**	**0**	**9**	**9.0**	**41**	**5**	**0**	**46**	**52.5**	**104**	**15**	**0**	**119**	**138.5**	**72**	**16**	**0**	**88**	**108.8**
TOTAL	**25**	**0**	**0**	**25**	**25.0**	**154**	**36**	**0**	**190**	**236.8**	**309**	**30**	**1**	**340**	**380.0**	**369**	**99**	**0**	**468**	**596.7**
16:30 - 16:45	8	0	0	8	8.0	61	4	0	65	70.2	58	4	1	63	69.2	52	4	0	56	61.2
16:45 - 17:00	4	0	0	4	4.0	58	1	0	59	60.3	49	2	1	52	55.6	70	2	0	72	74.6
Hourly Total	**12**	**0**	**0**	**12**	**12.0**	**119**	**5**	**0**	**124**	**130.5**	**107**	**6**	**2**	**115**	**124.8**	**122**	**6**	**0**	**128**	**135.8**
17:00 - 17:15	6	0	0	6	6.0	55	0	0	55	55.0	75	6	0	81	88.8	78	2	0	80	82.6
17:15 - 17:30	10	0	0	10	10.0	59	0	0	59	59.0	68	4	0	72	77.2	86	2	0	88	90.6
17:30 - 17:45	9	0	0	9	9.0	58	0	1	59	60.0	63	3	2	68	73.9	61	2	0	63	65.6
17:45 - 18:00	4	0	0	4	4.0	44	0	0	44	44.0	52	4	0	56	61.2	53	0	0	53	53.0
Hourly Total	**29**	**0**	**0**	**29**	**29.0**	**216**	**0**	**1**	**217**	**218.0**	**258**	**17**	**2**	**277**	**301.1**	**278**	**6**	**0**	**284**	**291.8**
18:00 - 18:15	2	0	0	2	2.0	29	0	0	29	29.0	65	4	0	69	74.2	37	0	0	37	37.0
18:15 - 18:30	4	0	0	4	4.0	36	1	0	37	38.3	60	3	0	63	66.9	68	1	0	69	70.3
Hourly Total	**6**	**0**	**0**	**6**	**6.0**	**65**	**1**	**0**	**66**	**67.3**	**125**	**7**	**0**	**132**	**141.1**	**105**	**1**	**0**	**106**	**107.3**
TOTAL	**47**	**0**	**0**	**47**	**47.0**	**400**	**6**	**1**	**407**	**415.8**	**490**	**30**	**4**	**524**	**567.0**	**505**	**13**	**0**	**518**	**534.9**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 1
Approach: A550 Gladstone Way

	To A494 (West)					To B5129 (North)					To A494 (East)					To B5129 (East)				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	10	0	0	10	10.0	13	0	1	14	15.0	39	0	0	39	39.0	8	0	0	8	8.0
07:45 - 08:00	13	0	0	13	13.0	18	0	0	18	18.0	45	0	0	45	45.0	8	0	0	8	8.0
Hourly Total	**23**	**0**	**0**	**23**	**23.0**	**31**	**0**	**1**	**32**	**33.0**	**84**	**0**	**0**	**84**	**84.0**	**16**	**0**	**0**	**16**	**16.0**
08:00 - 08:15	17	0	0	17	17.0	22	0	0	22	22.0	43	0	0	43	43.0	7	0	0	7	7.0
08:15 - 08:30	20	0	0	20	20.0	27	0	1	28	29.0	36	0	0	36	36.0	4	0	0	4	4.0
08:30 - 08:45	14	0	0	14	14.0	23	0	0	23	23.0	23	0	0	23	23.0	9	0	0	9	9.0
08:45 - 09:00	15	0	0	15	15.0	31	0	0	31	31.0	30	0	0	30	30.0	3	0	0	3	3.0
Hourly Total	**66**	**0**	**0**	**66**	**66.0**	**103**	**0**	**1**	**104**	**105.0**	**132**	**0**	**0**	**132**	**132.0**	**23**	**0**	**0**	**23**	**23.0**
09:00 - 09:15	10	0	0	10	10.0	30	0	0	30	30.0	24	0	0	24	24.0	7	0	0	7	7.0
09:15 - 09:30	10	0	0	10	10.0	26	1	1	28	30.3	19	1	0	20	21.3	4	0	0	4	4.0
Hourly Total	**20**	**0**	**0**	**20**	**20.0**	**56**	**1**	**1**	**58**	**60.3**	**43**	**1**	**0**	**44**	**45.3**	**11**	**0**	**0**	**11**	**11.0**
TOTAL	**109**	**0**	**0**	**109**	**109.0**	**190**	**1**	**3**	**194**	**198.3**	**259**	**1**	**0**	**260**	**261.3**	**50**	**0**	**0**	**50**	**50.0**
16:30 - 16:45	4	0	0	4	4.0	31	0	0	31	31.0	25	0	0	25	25.0	4	0	0	4	4.0
16:45 - 17:00	8	0	0	8	8.0	22	0	0	22	22.0	30	0	0	30	30.0	7	0	0	7	7.0
Hourly Total	**12**	**0**	**0**	**12**	**12.0**	**53**	**0**	**0**	**53**	**53.0**	**55**	**0**	**0**	**55**	**55.0**	**11**	**0**	**0**	**11**	**11.0**
17:00 - 17:15	10	0	0	10	10.0	20	2	0	22	24.6	21	1	0	22	23.3	7	0	0	7	7.0
17:15 - 17:30	9	0	0	9	9.0	18	0	0	18	18.0	22	0	0	22	22.0	4	0	0	4	4.0
17:30 - 17:45	15	0	0	15	15.0	18	0	1	19	20.0	17	0	0	17	17.0	9	0	0	9	9.0
17:45 - 18:00	7	0	0	7	7.0	23	0	0	23	23.0	23	0	0	23	23.0	9	0	0	9	9.0
Hourly Total	**41**	**0**	**0**	**41**	**41.0**	**79**	**2**	**1**	**82**	**85.6**	**83**	**1**	**0**	**84**	**85.3**	**29**	**0**	**0**	**29**	**29.0**
18:00 - 18:15	9	0	0	9	9.0	27	0	1	28	29.0	14	0	0	14	14.0	6	0	0	6	6.0
18:15 - 18:30	5	0	0	5	5.0	22	0	1	23	24.0	25	0	0	25	25.0	5	0	0	5	5.0
Hourly Total	**14**	**0**	**0**	**14**	**14.0**	**49**	**0**	**2**	**51**	**53.0**	**39**	**0**	**0**	**39**	**39.0**	**11**	**0**	**0**	**11**	**11.0**
TOTAL	**67**	**0**	**0**	**67**	**67.0**	**181**	**2**	**3**	**186**	**191.6**	**177**	**1**	**0**	**178**	**179.3**	**51**	**0**	**0**	**51**	**51.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 1
Approach: A494 West

	To B5129 (North)					To A494 (East)					To B5129 (East)					To A550 Gladstone Way				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	45	5	1	51	58.5	17	0	0	17	17.0	35	1	0	36	37.3	13	0	0	13	13.0
07:45 - 08:00	61	3	2	66	71.9	18	3	0	21	24.9	43	4	0	47	52.2	23	0	2	25	27.0
Hourly Total	**106**	**8**	**3**	**117**	**130.4**	**35**	**3**	**0**	**38**	**41.9**	**78**	**5**	**0**	**83**	**89.5**	**36**	**0**	**2**	**38**	**40.0**
08:00 - 08:15	78	1	0	79	80.3	21	1	0	22	23.3	36	3	0	39	42.9	13	0	0	13	13.0
08:15 - 08:30	77	3	3	83	89.9	22	0	0	22	22.0	38	2	0	40	42.6	15	0	0	15	15.0
08:30 - 08:45	97	3	1	101	105.9	19	0	0	19	19.0	47	3	0	50	53.9	22	0	0	22	22.0
08:45 - 09:00	114	5	0	119	125.5	11	0	0	11	11.0	41	1	0	42	43.3	24	0	0	24	24.0
Hourly Total	**366**	**12**	**4**	**382**	**401.6**	**73**	**1**	**0**	**74**	**75.3**	**162**	**9**	**0**	**171**	**182.7**	**74**	**0**	**0**	**74**	**74.0**
09:00 - 09:15	106	3	1	110	114.9	9	0	0	9	9.0	38	0	0	38	38.0	21	0	0	21	21.0
09:15 - 09:30	90	8	0	98	108.4	16	0	0	16	16.0	31	1	0	32	33.3	13	0	0	13	13.0
Hourly Total	**196**	**11**	**1**	**208**	**223.3**	**25**	**0**	**0**	**25**	**25.0**	**69**	**1**	**0**	**70**	**71.3**	**34**	**0**	**0**	**34**	**34.0**
TOTAL	**668**	**31**	**8**	**707**	**755.3**	**133**	**4**	**0**	**137**	**142.2**	**309**	**15**	**0**	**324**	**343.5**	**144**	**0**	**2**	**146**	**148.0**
16:30 - 16:45	99	1	0	100	101.3	12	1	0	13	14.3	22	1	0	23	24.3	18	2	0	20	22.6
16:45 - 17:00	103	0	2	105	107.0	13	0	1	14	15.0	31	2	1	34	37.6	21	0	0	21	21.0
Hourly Total	**202**	**1**	**2**	**205**	**208.3**	**25**	**1**	**1**	**27**	**29.3**	**53**	**3**	**1**	**57**	**61.9**	**39**	**2**	**0**	**41**	**43.6**
17:00 - 17:15	91	1	0	92	93.3	11	0	0	11	11.0	24	4	0	28	33.2	21	0	0	21	21.0
17:15 - 17:30	79	2	0	81	83.6	7	0	1	8	9.0	23	2	0	25	27.6	16	0	0	16	16.0
17:30 - 17:45	96	0	1	97	98.0	18	1	0	19	20.3	21	1	0	22	23.3	25	0	0	25	25.0
17:45 - 18:00	114	2	1	117	120.6	22	0	0	22	22.0	29	1	0	30	31.3	26	1	0	27	28.3
Hourly Total	**380**	**5**	**2**	**387**	**395.5**	**58**	**1**	**1**	**60**	**62.3**	**97**	**8**	**0**	**105**	**115.4**	**88**	**1**	**0**	**89**	**90.3**
18:00 - 18:15	84	0	0	84	84.0	11	0	0	11	11.0	18	0	0	18	18.0	16	0	0	16	16.0
18:15 - 18:30	71	3	0	74	77.9	9	0	0	9	9.0	30	0	0	30	30.0	13	0	0	13	13.0
Hourly Total	**155**	**3**	**0**	**158**	**161.9**	**20**	**0**	**0**	**20**	**20.0**	**48**	**0**	**0**	**48**	**48.0**	**29**	**0**	**0**	**29**	**29.0**
TOTAL	**737**	**9**	**4**	**750**	**765.7**	**103**	**2**	**2**	**107**	**111.6**	**198**	**11**	**1**	**210**	**225.3**	**156**	**3**	**0**	**159**	**162.9**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 2
Approach: A550 Gladstone Way

	Left to A550 The Highway					Ahead to Mossley Court					Right to B5125 The Highway					U-Turn				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	22	0	1	23	24.0	1	0	0	1	1.0	11	0	0	11	11.0	0	0	0	0	0.0
07:45 - 08:00	32	1	0	33	34.3	0	0	0	0	0.0	15	0	1	16	17.0	1	0	0	1	1.0
Hourly Total	**54**	**1**	**1**	**56**	**58.3**	**1**	**0**	**0**	**1**	**1.0**	**26**	**0**	**1**	**27**	**28.0**	**1**	**0**	**0**	**1**	**1.0**
08:00 - 08:15	30	1	1	32	34.3	0	0	0	0	0.0	17	0	1	18	19.0	0	0	0	0	0.0
08:15 - 08:30	27	0	0	27	27.0	1	0	0	1	1.0	37	0	1	38	39.0	1	0	0	1	1.0
08:30 - 08:45	36	0	0	36	36.0	0	0	0	0	0.0	45	0	0	45	45.0	0	0	0	0	0.0
08:45 - 09:00	25	0	1	26	27.0	0	0	0	0	0.0	20	0	0	20	20.0	1	0	0	1	1.0
Hourly Total	**118**	**1**	**2**	**121**	**124.3**	**1**	**0**	**0**	**1**	**1.0**	**119**	**0**	**2**	**121**	**123.0**	**2**	**0**	**0**	**2**	**2.0**
09:00 - 09:15	22	1	1	24	26.3	1	0	0	1	1.0	11	0	0	11	11.0	5	0	0	5	5.0
09:15 - 09:30	29	0	0	29	29.0	0	0	0	0	0.0	11	0	0	11	11.0	1	0	0	1	1.0
Hourly Total	**51**	**1**	**1**	**53**	**55.3**	**1**	**0**	**0**	**1**	**1.0**	**22**	**0**	**0**	**22**	**22.0**	**6**	**0**	**0**	**6**	**6.0**
TOTAL	**223**	**3**	**4**	**230**	**237.9**	**3**	**0**	**0**	**3**	**3.0**	**167**	**0**	**3**	**170**	**173.0**	**9**	**0**	**0**	**9**	**9.0**
16:30 - 16:45	40	2	1	43	46.6	0	0	0	0	0.0	17	0	0	17	17.0	1	0	0	1	1.0
16:45 - 17:00	39	0	1	40	41.0	0	0	0	0	0.0	19	0	0	19	19.0	1	0	0	1	1.0
Hourly Total	**79**	**2**	**2**	**83**	**87.6**	**0**	**0**	**0**	**0**	**0.0**	**36**	**0**	**0**	**36**	**36.0**	**2**	**0**	**0**	**2**	**2.0**
17:00 - 17:15	53	0	0	53	53.0	0	0	0	0	0.0	27	0	0	27	27.0	1	0	0	1	1.0
17:15 - 17:30	39	2	0	41	43.6	3	0	0	3	3.0	17	0	0	17	17.0	1	0	0	1	1.0
17:30 - 17:45	51	0	0	51	51.0	1	0	0	1	1.0	26	1	0	27	28.3	0	0	0	0	0.0
17:45 - 18:00	39	0	0	39	39.0	1	0	0	1	1.0	13	0	0	13	13.0	1	0	0	1	1.0
Hourly Total	**182**	**2**	**0**	**184**	**186.6**	**5**	**0**	**0**	**5**	**5.0**	**83**	**1**	**0**	**84**	**85.3**	**3**	**0**	**0**	**3**	**3.0**
18:00 - 18:15	20	0	2	22	24.0	0	0	0	0	0.0	18	0	0	18	18.0	1	0	0	1	1.0
18:15 - 18:30	31	0	0	31	31.0	1	0	0	1	1.0	6	0	0	6	6.0	0	0	0	0	0.0
Hourly Total	**51**	**0**	**2**	**53**	**55.0**	**1**	**0**	**0**	**1**	**1.0**	**24**	**0**	**0**	**24**	**24.0**	**1**	**0**	**0**	**1**	**1.0**
TOTAL	**312**	**4**	**4**	**320**	**329.2**	**6**	**0**	**0**	**6**	**6.0**	**143**	**1**	**0**	**144**	**145.3**	**6**	**0**	**0**	**6**	**6.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 2
Approach: A550 The Highway

	Left to Mossley Court					Ahead to B125 The Highway					Right to A550 Gladstone Way					U-Turn				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	0	0	0.0	57	1	1	59	61.3	19	1	1	21	23.3	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0.0	67	1	0	68	69.3	23	0	1	24	25.0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**124**	**2**	**1**	**127**	**130.6**	**42**	**1**	**2**	**45**	**48.3**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	0	0	0	0	0.0	46	1	1	48	50.3	40	0	0	40	40.0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0.0	77	0	2	79	81.0	14	0	1	15	16.0	0	0	0	0	0.0
08:30 - 08:45	0	0	0	0	0.0	63	1	0	64	65.3	41	0	0	41	41.0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0.0	51	1	2	54	57.3	39	0	1	40	41.0	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**237**	**3**	**5**	**245**	**253.9**	**134**	**0**	**2**	**136**	**138.0**	**0**	**0**	**0**	**0**	**0.0**
09:00 - 09:15	0	0	0	0	0.0	45	1	1	47	49.3	30	0	1	31	32.0	0	0	0	0	0.0
09:15 - 09:30	0	0	0	0	0.0	48	2	1	51	54.6	22	2	1	25	28.6	0	0	0	0	0.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**93**	**3**	**2**	**98**	**103.9**	**52**	**2**	**2**	**56**	**60.6**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**0**	**0**	**0**	**0**	**0.0**	**454**	**8**	**8**	**470**	**488.4**	**228**	**3**	**6**	**237**	**246.9**	**0**	**0**	**0**	**0**	**0.0**
16:30 - 16:45	1	0	0	1	1.0	62	2	1	65	68.6	23	0	0	23	23.0	0	0	0	0	0.0
16:45 - 17:00	1	0	0	1	1.0	70	0	1	71	72.0	24	1	0	25	26.3	1	0	0	1	1.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**132**	**2**	**2**	**136**	**140.6**	**47**	**1**	**0**	**48**	**49.3**	**1**	**0**	**0**	**1**	**1.0**
17:00 - 17:15	0	0	0	0	0.0	67	1	1	69	71.3	28	0	0	28	28.0	0	0	0	0	0.0
17:15 - 17:30	1	0	0	1	1.0	79	3	0	82	85.9	19	0	0	19	19.0	0	0	0	0	0.0
17:30 - 17:45	0	0	0	0	0.0	72	1	2	75	78.3	24	0	1	25	26.0	0	0	0	0	0.0
17:45 - 18:00	1	0	0	1	1.0	69	0	1	70	71.0	19	0	1	20	21.0	0	0	0	0	0.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**287**	**5**	**4**	**296**	**306.5**	**90**	**0**	**2**	**92**	**94.0**	**0**	**0**	**0**	**0**	**0.0**
18:00 - 18:15	1	0	0	1	1.0	61	0	0	61	61.0	22	0	1	23	24.0	0	0	0	0	0.0
18:15 - 18:30	0	0	0	0	0.0	49	0	1	50	51.0	26	0	1	27	28.0	0	0	0	0	0.0
Hourly Total	**1**	**0**	**0**	**1**	**1.0**	**110**	**0**	**1**	**111**	**112.0**	**48**	**0**	**2**	**50**	**52.0**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**5**	**0**	**0**	**5**	**5.0**	**529**	**7**	**7**	**543**	**559.1**	**185**	**1**	**4**	**190**	**195.3**	**1**	**0**	**0**	**1**	**1.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 2
Approach: Mossley Court

	Left to B125 The Highway					Ahead to A550 Gladstone Way					Right to A550 The Highway				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0.0	2	0	0	2	2.0	1	0	0	1	1.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**2**	**0**	**0**	**2**	**2.0**	**1**	**0**	**0**	**1**	**1.0**
08:00 - 08:15	1	0	0	1	1.0	4	0	0	4	4.0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
08:30 - 08:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0.0	1	0	0	1	1.0	3	0	0	3	3.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**5**	**0**	**0**	**5**	**5.0**	**4**	**0**	**0**	**4**	**4.0**
09:00 - 09:15	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
09:15 - 09:30	1	0	0	1	1.0	1	0	0	1	1.0	1	0	0	1	1.0
Hourly Total	**1**	**0**	**0**	**1**	**1.0**	**2**	**0**	**0**	**2**	**2.0**	**1**	**0**	**0**	**1**	**1.0**
TOTAL	**3**	**0**	**0**	**3**	**3.0**	**9**	**0**	**0**	**9**	**9.0**	**6**	**0**	**0**	**6**	**6.0**
16:30 - 16:45	3	0	0	3	3.0	1	0	0	1	1.0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0.0	1	0	0	1	1.0	3	0	0	3	3.0
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**2**	**0**	**0**	**2**	**2.0**	**3**	**0**	**0**	**3**	**3.0**
17:00 - 17:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
17:15 - 17:30	1	0	0	1	1.0	1	0	0	1	1.0	0	0	0	0	0.0
17:30 - 17:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0
17:45 - 18:00	1	0	0	1	1.0	0	0	0	0	0.0	1	0	0	1	1.0
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**1**	**0**	**0**	**1**	**1.0**	**1**	**0**	**0**	**1**	**1.0**
18:00 - 18:15	2	0	0	2	2.0	0	0	0	0	0.0	1	0	0	1	1.0
18:15 - 18:30	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**0**	**1**	**1.0**
TOTAL	**8**	**0**	**0**	**8**	**8.0**	**3**	**0**	**0**	**3**	**3.0**	**5**	**0**	**0**	**5**	**5.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 2

Approach: B5125 The Highway

	Left to A550 Gladstone Way					Ahead to A550 The Highway					Right to Mossley Court				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	15	0	0	15	15.0	47	2	1	50	53.6	0	0	0	0	0.0
07:45 - 08:00	20	0	0	20	20.0	55	0	1	56	57.0	0	0	0	0	0.0
Hourly Total	**35**	**0**	**0**	**35**	**35.0**	**102**	**2**	**2**	**106**	**110.6**	**0**	**0**	**0**	**0**	**0.0**
08:00 - 08:15	28	0	0	28	28.0	53	0	1	54	55.0	0	0	0	0	0.0
08:15 - 08:30	19	0	0	19	19.0	69	0	2	71	73.0	1	0	0	1	1.0
08:30 - 08:45	43	1	0	44	45.3	75	2	0	77	79.6	0	0	0	0	0.0
08:45 - 09:00	27	0	0	27	27.0	59	1	2	62	65.3	0	0	0	0	0.0
Hourly Total	**117**	**1**	**0**	**118**	**119.3**	**256**	**3**	**5**	**264**	**272.9**	**1**	**0**	**0**	**1**	**1.0**
09:00 - 09:15	17	0	1	18	19.0	52	0	1	53	54.0	0	0	0	0	0.0
09:15 - 09:30	16	0	0	16	16.0	40	1	0	41	42.3	0	0	0	0	0.0
Hourly Total	**33**	**0**	**1**	**34**	**35.0**	**92**	**1**	**1**	**94**	**96.3**	**0**	**0**	**0**	**0**	**0.0**
TOTAL	**185**	**1**	**1**	**187**	**189.3**	**450**	**6**	**8**	**464**	**479.8**	**1**	**0**	**0**	**1**	**1.0**
16:30 - 16:45	16	0	0	16	16.0	42	1	0	43	44.3	3	0	0	3	3.0
16:45 - 17:00	20	0	0	20	20.0	35	0	0	35	35.0	1	0	0	1	1.0
Hourly Total	**36**	**0**	**0**	**36**	**36.0**	**77**	**1**	**0**	**78**	**79.3**	**4**	**0**	**0**	**4**	**4.0**
17:00 - 17:15	19	0	0	19	19.0	39	1	1	41	43.3	1	0	0	1	1.0
17:15 - 17:30	19	0	0	19	19.0	66	1	0	67	68.3	0	0	0	0	0.0
17:30 - 17:45	13	0	0	13	13.0	44	1	0	45	46.3	1	0	0	1	1.0
17:45 - 18:00	14	0	0	14	14.0	47	0	1	48	49.0	1	0	0	1	1.0
Hourly Total	**65**	**0**	**0**	**65**	**65.0**	**196**	**3**	**2**	**201**	**206.9**	**3**	**0**	**0**	**3**	**3.0**
18:00 - 18:15	8	0	0	8	8.0	42	0	0	42	42.0	2	0	0	2	2.0
18:15 - 18:30	11	0	0	11	11.0	39	0	1	40	41.0	1	0	0	1	1.0
Hourly Total	**19**	**0**	**0**	**19**	**19.0**	**81**	**0**	**1**	**82**	**83.0**	**3**	**0**	**0**	**3**	**3.0**
TOTAL	**120**	**0**	**0**	**120**	**120.0**	**354**	**4**	**3**	**361**	**369.2**	**10**	**0**	**0**	**10**	**10.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 3

Approach: Rectory Lane

	Left to B5125 Glynne Way					Ahead to A550					Right to A550 The Highway				
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
07:45 - 08:00	0	0	0	0	0.0	2	0	0	2	2.0	1	0	0	1	1.0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**2**	**0**	**0**	**2**	**2.0**	**1**	**0**	**0**	**1**	**1.0**
08:00 - 08:15	1	0	0	1	1.0	4	0	0	4	4.0	0	0	0	0	0.0
08:15 - 08:30	0	0	0	0	0.0	0	0	0	0	0.0	1	0	0	1	1.0
08:30 - 08:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0
08:45 - 09:00	0	0	0	0	0.0	1	0	0	1	1.0	3	0	0	3	3.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**5**	**0**	**0**	**5**	**5.0**	**4**	**0**	**0**	**4**	**4.0**
09:00 - 09:15	0	0	0	0	0.0	1	0	0	1	1.0	0	0	0	0	0.0
09:15 - 09:30	1	0	0	1	1.0	1	0	0	1	1.0	1	0	0	1	1.0
Hourly Total	**1**	**0**	**0**	**1**	**1.0**	**2**	**0**	**0**	**2**	**2.0**	**1**	**0**	**0**	**1**	**1.0**
TOTAL	**3**	**0**	**0**	**3**	**3.0**	**9**	**0**	**0**	**9**	**9.0**	**6**	**0**	**0**	**6**	**6.0**
16:30 - 16:45	3	0	0	3	3.0	1	0	0	1	1.0	0	0	0	0	0.0
16:45 - 17:00	0	0	0	0	0.0	1	0	0	1	1.0	3	0	0	3	3.0
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**2**	**0**	**0**	**2**	**2.0**	**3**	**0**	**0**	**3**	**3.0**
17:00 - 17:15	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
17:15 - 17:30	1	0	0	1	1.0	1	0	0	1	1.0	0	0	0	0	0.0
17:30 - 17:45	1	0	0	1	1.0	0	0	0	0	0.0	0	0	0	0	0.0
17:45 - 18:00	1	0	0	1	1.0	0	0	0	0	0.0	1	0	0	1	1.0
Hourly Total	**3**	**0**	**0**	**3**	**3.0**	**1**	**0**	**0**	**1**	**1.0**	**1**	**0**	**0**	**1**	**1.0**
18:00 - 18:15	2	0	0	2	2.0	0	0	0	0	0.0	1	0	0	1	1.0
18:15 - 18:30	0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0.0
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**0**	**0**	**0**	**0**	**0.0**	**1**	**0**	**0**	**1**	**1.0**
TOTAL	**8**	**0**	**0**	**8**	**8.0**	**3**	**0**	**0**	**3**	**3.0**	**5**	**0**	**0**	**5**	**5.0**

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 3

Approach: B5125 Glynne Way

	Left to A550					Ahead to A550 The		
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS
07:30 - 07:45	15	0	0	15	15.0	57	2	1
07:45 - 08:00	20	0	0	20	20.0	56	0	1
Hourly Total	**35**	**0**	**0**	**35**	**35.0**	**113**	**2**	**2**
08:00 - 08:15	28	0	0	28	28.0	53	0	1
08:15 - 08:30	19	0	0	19	19.0	69	0	2
08:30 - 08:45	43	1	0	44	45.3	75	1	0
08:45 - 09:00	27	0	0	27	27.0	53	1	2
Hourly Total	**117**	**1**	**0**	**118**	**119.3**	**250**	**2**	**5**
09:00 - 09:15	17	0	1	18	19.0	52	0	1
09:15 - 09:30	16	0	0	16	16.0	40	4	2
Hourly Total	**33**	**0**	**1**	**34**	**35.0**	**92**	**4**	**3**
TOTAL	**185**	**1**	**1**	**187**	**189.3**	**455**	**8**	**10**
16:30 - 16:45	16	0	0	16	16.0	42	1	0
16:45 - 17:00	20	0	0	20	20.0	51	0	0
Hourly Total	**36**	**0**	**0**	**36**	**36.0**	**93**	**1**	**0**
17:00 - 17:15	19	0	0	19	19.0	39	1	1
17:15 - 17:30	19	0	0	19	19.0	66	1	1
17:30 - 17:45	13	0	0	13	13.0	44	1	2
17:45 - 18:00	14	0	0	14	14.0	47	0	2
Hourly Total	**65**	**0**	**0**	**65**	**65.0**	**196**	**3**	**6**
18:00 - 18:15	8	0	0	8	8.0	46	0	0
18:15 - 18:30	11	0	0	11	11.0	39	0	1
Hourly Total	**19**	**0**	**0**	**19**	**19.0**	**85**	**0**	**1**
TOTAL	**120**	**0**	**0**	**120**	**120.0**	**374**	**4**	**7**

Highway		Right to Rectory Lane				
TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
60	63.6	0	0	0	0	0.0
57	58.0	0	0	0	0	0.0
117	121.6	0	0	0	0	0.0
54	55.0	0	0	0	0	0.0
71	73.0	1	0	0	1	1.0
76	77.3	0	0	0	0	0.0
56	59.3	0	0	0	0	0.0
257	264.6	1	0	0	1	1.0
53	54.0	0	0	0	0	0.0
46	53.2	0	0	0	0	0.0
99	107.2	0	0	0	0	0.0
473	493.4	1	0	0	1	1.0
43	44.3	3	0	0	3	3.0
51	51.0	1	0	0	1	1.0
94	95.3	4	0	0	4	4.0
41	43.3	1	0	0	1	1.0
68	70.3	0	0	0	0	0.0
47	50.3	1	0	0	1	1.0
49	51.0	1	0	0	1	1.0
205	214.9	3	0	0	3	3.0
46	46.0	2	0	0	2	2.0
40	41.0	1	0	0	1	1.0
86	87.0	3	0	0	3	3.0
385	397.2	10	0	0	10	10.0

PCU Fa
LIGHT
HEAVY
BUS

actors:
1.0
2.3
2.0

Mancot, Thursday 21st September 2023

Junction: 3
Approach: A550

	Left to A550 The Highway					Ahead to Rectory		
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS
07:30 - 07:45	22	0	1	23	24.0	1	0	0
07:45 - 08:00	32	1	0	33	34.3	0	0	0
Hourly Total	**54**	**1**	**1**	**56**	**58.3**	**1**	**0**	**0**
08:00 - 08:15	30	1	1	32	34.3	0	0	0
08:15 - 08:30	27	0	0	27	27.0	1	0	0
08:30 - 08:45	36	0	0	36	36.0	0	0	0
08:45 - 09:00	25	0	1	26	27.0	0	0	0
Hourly Total	**118**	**1**	**2**	**121**	**124.3**	**1**	**0**	**0**
09:00 - 09:15	22	1	1	24	26.3	1	0	0
09:15 - 09:30	29	0	0	29	29.0	0	0	0
Hourly Total	**51**	**1**	**1**	**53**	**55.3**	**1**	**0**	**0**
TOTAL	**223**	**3**	**4**	**230**	**237.9**	**3**	**0**	**0**
16:30 - 16:45	40	2	1	43	46.6	0	0	0
16:45 - 17:00	39	0	1	40	41.0	0	0	0
Hourly Total	**79**	**2**	**2**	**83**	**87.6**	**0**	**0**	**0**
17:00 - 17:15	53	0	0	53	53.0	0	0	0
17:15 - 17:30	39	2	0	41	43.6	3	0	0
17:30 - 17:45	51	0	0	51	51.0	1	0	0
17:45 - 18:00	39	0	0	39	39.0	1	0	0
Hourly Total	**182**	**2**	**0**	**184**	**186.6**	**5**	**0**	**0**
18:00 - 18:15	38	0	2	40	42.0	0	0	0
18:15 - 18:30	31	0	0	31	31.0	1	0	0
Hourly Total	**69**	**0**	**2**	**71**	**73.0**	**1**	**0**	**0**
TOTAL	**330**	**4**	**4**	**338**	**347.2**	**6**	**0**	**0**

y Lane		Right to B5125 Glynne Way							U-Turn
TOTAL	**PCUs**	LIGHT	HEAVY	BUS	**TOTAL**	**PCUs**	LIGHT	HEAVY	BUS
1	**1.0**	11	0	0	**11**	**11.0**	0	0	0
0	**0.0**	15	0	1	**16**	**17.0**	1	0	0
1	**1.0**	**26**	**0**	**1**	**27**	**28.0**	**1**	**0**	**0**
0	**0.0**	17	0	1	**18**	**19.0**	0	0	0
1	**1.0**	37	0	1	**38**	**39.0**	1	0	0
0	**0.0**	45	0	0	**45**	**45.0**	0	0	0
0	**0.0**	20	0	0	**20**	**20.0**	1	0	0
1	**1.0**	**119**	**0**	**2**	**121**	**123.0**	**2**	**0**	**0**
1	**1.0**	11	0	0	**11**	**11.0**	5	0	0
0	**0.0**	11	0	0	**11**	**11.0**	1	0	0
1	**1.0**	**22**	**0**	**0**	**22**	**22.0**	**6**	**0**	**0**
3	**3.0**	**167**	**0**	**3**	**170**	**173.0**	**9**	**0**	**0**
0	**0.0**	17	0	0	**17**	**17.0**	1	0	0
0	**0.0**	19	0	0	**19**	**19.0**	1	0	0
0	**0.0**	**36**	**0**	**0**	**36**	**36.0**	**2**	**0**	**0**
0	**0.0**	27	0	0	**27**	**27.0**	1	0	0
3	**3.0**	17	0	0	**17**	**17.0**	1	0	0
1	**1.0**	26	1	0	**27**	**28.3**	0	0	0
1	**1.0**	13	0	0	**13**	**13.0**	1	0	0
5	**5.0**	**83**	**1**	**0**	**84**	**85.3**	**3**	**0**	**0**
0	**0.0**	18	0	0	**18**	**18.0**	1	0	0
1	**1.0**	6	0	0	**6**	**6.0**	0	0	0
1	**1.0**	**24**	**0**	**0**	**24**	**24.0**	**1**	**0**	**0**
6	**6.0**	**143**	**1**	**0**	**144**	**145.3**	**6**	**0**	**0**

TOTAL	PCUs
0	0.0
1	1.0
1	1.0
0	0.0
1	1.0
0	0.0
1	1.0
2	2.0
5	5.0
1	1.0
6	6.0

9	9.0

1	1.0
1	1.0
2	2.0
1	1.0
1	1.0
0	0.0
1	1.0
3	3.0
1	1.0
0	0.0
1	1.0

6	6.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Junction: 3

Approach: A550 The Highway

	Left to Rectory Lane					Ahead to B5125 Gly		
TIME	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS
07:30 - 07:45	0	0	0	0	0.0	51	1	1
07:45 - 08:00	0	0	0	0	0.0	56	0	0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**107**	**1**	**1**
08:00 - 08:15	0	0	0	0	0.0	46	1	1
08:15 - 08:30	0	0	0	0	0.0	56	0	2
08:30 - 08:45	0	0	0	0	0.0	67	0	0
08:45 - 09:00	0	0	0	0	0.0	52	0	2
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**221**	**1**	**5**
09:00 - 09:15	0	0	0	0	0.0	45	1	1
09:15 - 09:30	0	0	0	0	0.0	46	1	0
Hourly Total	**0**	**0**	**0**	**0**	**0.0**	**91**	**2**	**1**
TOTAL	**0**	**0**	**0**	**0**	**0.0**	**419**	**4**	**7**
16:30 - 16:45	1	0	0	1	1.0	62	2	0
16:45 - 17:00	1	0	0	1	1.0	54	0	1
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**116**	**2**	**1**
17:00 - 17:15	0	0	0	0	0.0	67	1	1
17:15 - 17:30	1	0	0	1	1.0	75	3	0
17:30 - 17:45	0	0	0	0	0.0	69	1	0
17:45 - 18:00	1	0	0	1	1.0	69	0	1
Hourly Total	**2**	**0**	**0**	**2**	**2.0**	**280**	**5**	**2**
18:00 - 18:15	1	0	0	1	1.0	47	0	0
18:15 - 18:30	0	0	0	0	0.0	45	0	2
Hourly Total	**1**	**0**	**0**	**1**	**1.0**	**92**	**0**	**2**
TOTAL	**5**	**0**	**0**	**5**	**5.0**	**488**	**7**	**5**

nne Way		Right to A550					U-Turn		
TOTAL	**PCUs**	LIGHT	HEAVY	BUS	**TOTAL**	**PCUs**	LIGHT	HEAVY	BUS
53	**55.3**	19	1	1	**21**	**23.3**	0	0	0
56	**56.0**	23	0	1	**24**	**25.0**	0	0	0
109	**111.3**	**42**	**1**	**2**	**45**	**48.3**	**0**	**0**	**0**
48	**50.3**	40	0	0	**40**	**40.0**	0	0	0
58	**60.0**	41	0	1	**42**	**43.0**	0	0	0
67	**67.0**	41	1	0	**42**	**43.3**	0	0	0
54	**56.0**	39	1	1	**41**	**43.3**	0	0	0
227	**233.3**	**161**	**2**	**2**	**165**	**169.6**	**0**	**0**	**0**
47	**49.3**	30	0	0	**30**	**30.0**	0	0	0
47	**48.3**	22	0	1	**23**	**24.0**	0	0	0
94	**97.6**	**52**	**0**	**1**	**53**	**54.0**	**0**	**0**	**0**
430	**442.2**	**255**	**3**	**5**	**263**	**271.9**	**0**	**0**	**0**
64	**66.6**	23	0	0	**23**	**23.0**	0	0	0
55	**56.0**	24	1	0	**25**	**26.3**	1	0	0
119	**122.6**	**47**	**1**	**0**	**48**	**49.3**	**1**	**0**	**0**
69	**71.3**	22	0	0	**22**	**22.0**	0	0	0
78	**81.9**	28	0	0	**28**	**28.0**	0	0	0
70	**71.3**	24	0	0	**24**	**24.0**	0	0	0
70	**71.0**	19	0	0	**19**	**19.0**	0	0	0
287	**295.5**	**93**	**0**	**0**	**93**	**93.0**	**0**	**0**	**0**
47	**47.0**	22	0	1	**23**	**24.0**	0	0	0
47	**49.0**	26	0	0	**26**	**26.0**	0	0	0
94	**96.0**	**48**	**0**	**1**	**49**	**50.0**	**0**	**0**	**0**
500	**514.1**	**188**	**1**	**1**	**190**	**192.3**	**1**	**0**	**0**

TOTAL	PCUs
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0

0	0.0

0	0.0
1	1.0
1	1.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0
0	0.0

1	1.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Mancot, Thursday 21st September 2023

Queues are stationary vehicles each 5 minutes

TIME	B5129 (North)	A494 (East)	B5129 (East)	A550 Gladstone Way	A494 (West)
07:30	0	0	0	0	0
07:35	0	0	0	0	0
07:40	0	0	0	0	6
07:45	2	0	1	0	5
07:50	0	1	0	0	3
07:55	0	0	0	0	4
08:00	0	0	0	1	1
08:05	4	1	0	0	6
08:10	0	2	4	1	0
08:15	0	4	0	0	0
08:20	3	0	0	0	0
08:25	0	0	2	4	0
08:30	3	0	0	2	0
08:35	0	0	0	1	3
08:40	2	0	0	1	0
08:45	4	0	4	0	10
08:50	4	0	0	0	0
08:55	0	3	0	0	0
09:00	2	3	0	0	0
09:05	8	4	0	1	10
09:10	0	0	0	1	5
09:15	3	0	0	0	0
09:20	0	0	0	0	0
09:25	3	3	0	0	7
09:30	0	0	0	0	0
16:30	0	0	0	0	6
16:35	2	6	0	20	21
16:40	0	0	0	8	0
16:45	0	0	8	7	10
16:50	0	2	3	4	14
16:55	0	7	35	5	6
17:00	7	1	31	0	6
17:05	4	1	0	3	7
17:10	0	0	20	0	8
17:15	0	1	0	0	8
17:20	0	0	16	2	2
17:25	0	1	0	2	8
17:30	0	0	2	1	9
17:35	0	0	9	0	10
17:40	3	0	0	1	0
17:45	4	0	0	1	3
17:50	0	5	0	4	4
17:55	7	9	1	0	12
18:00	5	0	0	1	7
18:05	0	0	0	0	0
18:10	0	0	2	1	0
18:15	0	4	4	0	5
18:20	0	0	2	2	4
18:25	0	2	0	0	0
18:30	0	0	0	0	1

Mancot, Thursday 21st September 2023

Queues are stationary vehicles each 5 minutes

TIME	A550 Gladstone Way	A550 The Highway	Mossley Court	B5125 The Highway
07:30	0	0	0	0
07:35	0	0	0	0
07:40	1	0	0	0
07:45	1	0	0	0
07:50	1	0	0	0
07:55	2	0	0	0
08:00	0	0	1	0
08:05	0	0	0	0
08:10	0	0	0	0
08:15	0	0	0	0
08:20	0	1	0	0
08:25	0	0	0	0
08:30	0	0	0	0
08:35	0	0	0	0
08:40	0	0	0	0
08:45	0	0	1	0
08:50	2	0	0	0
08:55	0	0	1	0
09:00	1	0	0	0
09:05	0	0	0	0
09:10	0	0	0	0
09:15	0	0	0	0
09:20	0	0	0	0
09:25	0	1	0	0
09:30	0	0	0	0
16:30	0	0	0	0
16:35	0	0	0	0
16:40	0	0	0	0
16:45	0	0	2	0
16:50	0	0	0	0
16:55	0	0	0	0
17:00	0	0	0	0
17:05	3	1	0	0
17:10	0	0	0	0
17:15	0	0	0	0
17:20	0	0	0	0
17:25	0	0	1	0
17:30	0	0	0	0
17:35	0	0	4	0
17:40	0	0	0	0
17:45	0	0	3	0
17:50	0	0	2	0
17:55	0	0	0	0
18:00	1	0	0	0
18:05	0	0	0	0
18:10	0	0	0	0
18:15	0	0	0	0
18:20	0	0	0	0
18:25	0	0	0	0
18:30	0	0	0	0

Mancot, Thursday 21st September 2023

Queues are stationary vehicles each 5 minutes

TIME	Rectory Lane	B5125 Glynne Way	A550	A550 The Highway
07:30	0	0	0	0
07:35	0	0	1	0
07:40	0	0	1	0
07:45	0	0	0	0
07:50	0	0	2	0
07:55	0	0	4	0
08:00	0	0	0	0
08:05	0	0	0	0
08:10	0	0	2	0
08:15	0	0	0	0
08:20	0	0	0	0
08:25	0	0	12	0
08:30	0	0	6	1
08:35	0	0	15	0
08:40	0	0	0	3
08:45	0	0	0	0
08:50	0	0	3	0
08:55	0	0	8	0
09:00	0	0	4	0
09:05	0	0	4	0
09:10	0	0	0	0
09:15	0	0	0	0
09:20	0	0	1	1
09:25	0	0	0	0
09:30	0	0	0	0
16:30	0	0	2	0
16:35	0	0	0	0
16:40	0	0	1	1
16:45	0	0	0	1
16:50	0	0	0	0
16:55	0	0	0	0
17:00	0	0	0	0
17:05	0	0	9	0
17:10	0	0	0	0
17:15	0	0	0	0
17:20	0	0	0	0
17:25	0	0	1	0
17:30	0	0	5	1
17:35	0	0	0	0
17:40	0	0	0	0
17:45	0	0	0	0
17:50	0	0	0	0
17:55	0	0	0	0
18:00	0	0	0	0
18:05	0	0	0	0
18:10	0	0	0	0
18:15	0	0	0	0
18:20	0	0	0	0
18:25	0	0	0	0
18:30	0	0	0	0

APPENDIX 3

Calculation Reference: AUDIT-851401-231009-1041

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : M - MIXED PRIVATE/AFFORDABLE HOUSING
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	BH	BRIGHTON & HOVE	1 days
	ES	EAST SUSSEX	7 days
	HC	HAMPSHIRE	5 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	1 days
	SC	SURREY	2 days
	SP	SOUTHAMPTON	1 days
	WS	WEST SUSSEX	7 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	7 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	2 days
	WM	WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	BD	BRADFORD	1 days
09	NORTH		
	CU	CUMBERLAND	1 days
	TW	TYNE & WEAR	2 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 20 to 395 (units:)
Range Selected by User: 150 to 300 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 27/06/23

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

Selected survey days:

Monday	5 days
Tuesday	5 days
Wednesday	14 days
Thursday	10 days
Friday	8 days

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

Selected survey types:

Manual count	39 days
Directional ATC Count	3 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	34

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

Selected Location Sub Categories:

Residential Zone	40
Out of Town	2

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	25 days - Selected
Servicing vehicles Excluded	55 days - Selected

Secondary Filtering selection:

Use Class:

C3	42 days

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

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	5 days
5,001 to 10,000	12 days
10,001 to 15,000	13 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	7 days

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

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	6 days
50,001 to 75,000	9 days
75,001 to 100,000	4 days
100,001 to 125,000	3 days
125,001 to 250,000	9 days
250,001 to 500,000	5 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	29 days
1.6 to 2.0	5 days

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

Travel Plan:

Yes	30 days
No	12 days

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

PTAL Rating:

No PTAL Present	42 days

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

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	42	145	0.083	42	145	0.294	42	145	0.377
08:00 - 09:00	42	145	0.141	42	145	0.370	42	145	0.511
09:00 - 10:00	42	145	0.138	42	145	0.170	42	145	0.308
10:00 - 11:00	42	145	0.130	42	145	0.150	42	145	0.280
11:00 - 12:00	42	145	0.139	42	145	0.144	42	145	0.283
12:00 - 13:00	42	145	0.155	42	145	0.147	42	145	0.302
13:00 - 14:00	42	145	0.148	42	145	0.152	42	145	0.300
14:00 - 15:00	42	145	0.150	42	145	0.178	42	145	0.328
15:00 - 16:00	42	145	0.270	42	145	0.181	42	145	0.451
16:00 - 17:00	42	145	0.269	42	145	0.157	42	145	0.426
17:00 - 18:00	42	145	0.325	42	145	0.174	42	145	0.499
18:00 - 19:00	42	145	0.278	42	145	0.164	42	145	0.442
19:00 - 20:00	1	119	0.126	1	119	0.008	1	119	0.134
20:00 - 21:00	1	119	0.101	1	119	0.017	1	119	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.453			2.306			4.759

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

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

Parameter summary

Trip rate parameter range selected:	20 - 395 (units:)
Survey date date range:	01/01/15 - 27/06/23
Number of weekdays (Monday-Friday):	50
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	38
Surveys manually removed from selection:	0

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

APPENDIX 4

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Ash Lane - Site Access.j9
Path: Z:\projects\4168 Ash Lane, Mancot\Picady
Report generation date: 11/10/2023 10:51:01

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2028 With Development Flows									
Stream B-AC	D1	0.1	7.94	0.06	A	D2	0.0	7.65	0.03	A
Stream C-AB		0.0	5.51	0.01	A		0.0	5.57	0.01	A

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

File summary

File Description

Title	Ash Lane/Site Access
Location	Mancot
Site number	
Date	10/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	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	2028 With Development Flows	AM	ONE HOUR	00:00	01:30	15	✓
D2	2028 With Development Flows	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

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

2028 With Development Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Ash Lane (S)		Major
B	Site Access		Minor
C	Ash Lane (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00		✓	3.00	100.0	✓	6.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	25	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	486	0.088	0.224	0.141	0.319
B-C	624	0.096	0.242	-	-
C-B	687	0.266	0.266	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 With Development Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	104	100.000
B		ONE HOUR	✓	26	100.000
C		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	7	97
	B	18	0	8
	C	104	3	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.94	0.1	A	24	36
C-AB	0.01	5.51	0.0	A	3	4
C-A					95	143
A-B					6	10
A-C					89	134

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	494	0.040	19	0.0	0.0	7.579	A
C-AB	2	0.56	666	0.003	2	0.0	0.0	5.422	A
C-A	78	20			78				
A-B	5	1			5				
A-C	73	18			73				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	489	0.048	23	0.0	0.0	7.729	A
C-AB	3	0.67	662	0.004	3	0.0	0.0	5.459	A
C-A	93	23			93				
A-B	6	2			6				
A-C	87	22			87				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	482	0.059	29	0.0	0.1	7.940	A
C-AB	3	0.83	656	0.005	3	0.0	0.0	5.511	A
C-A	115	29			115				
A-B	8	2			8				
A-C	107	27			107				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	482	0.059	29	0.1	0.1	7.942	A
C-AB	3	0.83	656	0.005	3	0.0	0.0	5.511	A
C-A	115	29			115				
A-B	8	2			8				
A-C	107	27			107				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	489	0.048	23	0.1	0.1	7.733	A
C-AB	3	0.67	662	0.004	3	0.0	0.0	5.461	A
C-A	93	23			93				
A-B	6	2			6				
A-C	87	22			87				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	494	0.040	20	0.1	0.0	7.586	A
C-AB	2	0.56	666	0.003	2	0.0	0.0	5.422	A
C-A	78	20			78				
A-B	5	1			5				
A-C	73	18			73				

2028 With Development Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 With Development Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	112	100.000
B		ONE HOUR	✓	12	100.000
C		ONE HOUR	✓	111	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	96
	B	8	0	4
	C	104	7	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	7.65	0.0	A	11	17
C-AB	0.01	5.57	0.0	A	6	10
C-A					95	143
A-B					15	22
A-C					88	132

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	2	496	0.018	9	0.0	0.0	7.384	A
C-AB	5	1	664	0.008	5	0.0	0.0	5.466	A
C-A	78	20			78				
A-B	12	3			12				
A-C	72	18			72				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	491	0.022	11	0.0	0.0	7.494	A
C-AB	6	2	660	0.010	6	0.0	0.0	5.511	A
C-A	93	23			93				
A-B	14	4			14				
A-C	86	22			86				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	484	0.027	13	0.0	0.0	7.652	A
C-AB	8	2	654	0.012	8	0.0	0.0	5.574	A
C-A	115	29			115				
A-B	18	4			18				
A-C	106	26			106				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	484	0.027	13	0.0	0.0	7.652	A
C-AB	8	2	654	0.012	8	0.0	0.0	5.574	A
C-A	115	29			115				
A-B	18	4			18				
A-C	106	26			106				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	491	0.022	11	0.0	0.0	7.495	A
C-AB	6	2	660	0.010	6	0.0	0.0	5.511	A
C-A	93	23			93				
A-B	14	4			14				
A-C	86	22			86				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	2	496	0.018	9	0.0	0.0	7.385	A
C-AB	5	1	664	0.008	5	0.0	0.0	5.468	A
C-A	78	20			78				
A-B	12	3			12				
A-C	72	18			72				

APPENDIX 5

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Gladstone Way - Site Access.j9
Path: Z:\projects\4168 Ash Lane, Mancot\Picady
Report generation date: 11/10/2023 10:53:13

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2028 With Development Flows									
Stream B-AC	D1	0.3	10.50	0.22	B	D2	0.1	9.69	0.11	A
Stream C-AB		0.0	6.37	0.03	A		0.1	6.91	0.07	A

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

File summary

File Description

Title	Gladstone Way/Site Access
Location	Mancot
Site number	
Date	10/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	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	2028 With Development Flows	AM	ONE HOUR	00:00	01:30	15	✓
D2	2028 With Development Flows	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

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

2028 With Development Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Gladstone Way (N)		Major
B	Site Access		Minor
C	Gladstone Way (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.40			120.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	30	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	489	0.088	0.221	0.139	0.316
B-C	627	0.094	0.239	-	-
C-B	643	0.245	0.245	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 With Development Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	263	100.000
B		ONE HOUR	✓	87	100.000
C		ONE HOUR	✓	311	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	19	244
	B	50	0	37
	C	297	14	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.22	10.50	0.3	B	80	120
C-AB	0.03	6.37	0.0	A	13	19
C-A					272	409
A-B					17	26
A-C					224	336

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	471	0.139	65	0.0	0.2	8.848	A
C-AB	11	3	599	0.018	11	0.0	0.0	6.118	A
C-A	224	56			224				
A-B	14	4			14				
A-C	184	46			184				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	458	0.171	78	0.2	0.2	9.483	A
C-AB	13	3	591	0.021	13	0.0	0.0	6.221	A
C-A	267	67			267				
A-B	17	4			17				
A-C	219	55			219				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	439	0.218	96	0.2	0.3	10.485	B
C-AB	16	4	581	0.027	16	0.0	0.0	6.363	A
C-A	327	82			327				
A-B	21	5			21				
A-C	269	67			269				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	439	0.218	96	0.3	0.3	10.501	B
C-AB	16	4	581	0.027	16	0.0	0.0	6.365	A
C-A	327	82			327				
A-B	21	5			21				
A-C	269	67			269				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	78	20	458	0.171	78	0.3	0.2	9.506	A
C-AB	13	3	591	0.021	13	0.0	0.0	6.224	A
C-A	267	67			267				
A-B	17	4			17				
A-C	219	55			219				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	65	16	471	0.139	66	0.2	0.2	8.883	A
C-AB	11	3	599	0.018	11	0.0	0.0	6.121	A
C-A	224	56			224				
A-B	14	4			14				
A-C	184	46			184				

2028 With Development Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 With Development Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	379	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	44	335
	B	23	0	17
	C	230	32	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.69	0.1	A	37	55
C-AB	0.07	6.91	0.1	A	30	45
C-A					210	316
A-B					40	61
A-C					307	461

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	8	455	0.066	30	0.0	0.1	8.452	A
C-AB	24	6	581	0.042	24	0.0	0.0	6.466	A
C-A	173	43			173				
A-B	33	8			33				
A-C	252	63			252				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	439	0.082	36	0.1	0.1	8.934	A
C-AB	29	7	571	0.051	29	0.0	0.1	6.649	A
C-A	206	52			206				
A-B	40	10			40				
A-C	301	75			301				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	416	0.106	44	0.1	0.1	9.681	A
C-AB	36	9	558	0.065	36	0.1	0.1	6.903	A
C-A	252	63			252				
A-B	48	12			48				
A-C	369	92			369				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	44	11	416	0.106	44	0.1	0.1	9.687	A
C-AB	36	9	558	0.065	36	0.1	0.1	6.906	A
C-A	252	63			252				
A-B	48	12			48				
A-C	369	92			369				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	439	0.082	36	0.1	0.1	8.941	A
C-AB	29	7	571	0.051	29	0.1	0.1	6.651	A
C-A	208	52			208				
A-B	40	10			40				
A-C	301	75			301				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	8	455	0.066	30	0.1	0.1	8.466	A
C-AB	24	6	581	0.042	24	0.1	0.0	6.472	A
C-A	173	43			173				
A-B	33	8			33				
A-C	252	63			252				

APPENDIX 6

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Gladstone Way - Mossley Court - The Highway.j9
Path: Z:\projects\4168 Ash Lane, Mancot\Picady
Report generation date: 11/10/2023 12:04:57

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023 Surveyed Flows									
Stream B-ACD	D1	0.0	11.28	0.04	B	D2	0.0	10.70	0.02	B
Stream A-BCD		0.5	8.48	0.29	A		0.3	7.26	0.20	A
Stream D-ABC		1.8	23.81	0.64	C		1.7	19.98	0.64	C
Stream C-ABD		0.0	7.03	0.00	A		0.0	7.04	0.01	A
	2028 Base Flows									
Stream B-ACD	D3	0.0	11.50	0.04	B	D4	0.0	10.88	0.02	B
Stream A-BCD		0.5	8.67	0.31	A		0.3	7.35	0.21	A
Stream D-ABC		2.0	26.41	0.68	D		1.9	21.66	0.66	C
Stream C-ABD		0.0	7.10	0.00	A		0.0	7.11	0.01	A
	2028 With Development									
Stream B-ACD	D5	0.0	11.87	0.04	B	D6	0.0	11.03	0.02	B
Stream A-BCD		0.7	9.18	0.36	A		0.3	7.47	0.23	A
Stream D-ABC		3.4	39.63	0.79	E		2.3	25.26	0.71	D
Stream C-ABD		0.0	7.21	0.00	A		0.0	7.16	0.01	A

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

File summary

File Description

Title	Gladstone Way/Mossley Court/The Highway
Location	Mancot
Site number	
Date	10/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	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	2023 Surveyed Flows	AM	ONE HOUR	00:00	01:30	15	✓
D2	2023 Surveyed Flows	PM	ONE HOUR	00:00	01:30	15	✓
D3	2028 Base Flows	AM	ONE HOUR	00:00	01:30	15	✓
D4	2028 Base Flows	PM	ONE HOUR	00:00	01:30	15	✓
D5	2028 With Development	AM	ONE HOUR	00:00	01:30	15	✓
D6	2028 With Development	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

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

2023 Surveyed Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	The Highway (E)		Major
B	Mossley Court		Minor
C	The Highway (W)		Major
D	Gladstone Way		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.50			80.0	✓	1.00
C	6.50			100.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.50	14	16
D	One lane	3.20	55	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	620	-	-	-	-	-	-	0.235	0.336	0.235	-	-	-
B-A	466	0.083	0.210	0.210	-	-	-	0.132	0.300	-	0.210	0.210	0.105
B-C	602	0.090	0.228	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	466	0.083	0.210	0.210	-	-	-	0.132	0.300	0.132	-	-	-
B-D, offside lane	466	0.083	0.210	0.210	-	-	-	0.132	0.300	0.132	-	-	-
C-B	632	0.240	0.240	0.342	-	-	-	-	-	-	-	-	-
D-A	649	-	-	-	-	-	-	0.246	-	0.097	-	-	-
D-B, nearside lane	515	0.146	0.146	0.332	-	-	-	0.232	0.232	0.092	-	-	-
D-B, offside lane	515	0.146	0.146	0.332	-	-	-	0.232	0.232	0.092	-	-	-
D-C	515	-	0.146	0.332	0.116	0.232	0.232	0.232	0.232	0.092	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Surveyed Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	392	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	392	100.000
D		ONE HOUR	✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	254	138
	B	4	0	2	5
	C	272	1	0	119
	D	124	1	123	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.04	11.28	0.0	B	10	15
A-BCD	0.29	8.48	0.5	A	141	211
A-B					0	0
A-C					219	328
D-ABC	0.64	23.81	1.8	C	228	341
C-ABD	0.00	7.03	0.0	A	0.92	1
C-D					109	164
C-A					250	374

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	382	0.022	8	0.0	0.0	9.637	A
A-BCD	111	28	587	0.189	110	0.0	0.2	7.532	A
A-B	0	0			0				
A-C	184	46			184				
D-ABC	187	47	474	0.394	184	0.0	0.6	12.335	B
C-ABD	0.75	0.19	551	0.001	0.75	0.0	0.0	6.542	A
C-D	90	22			90				
C-A	205	51			205				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	361	0.027	10	0.0	0.0	10.265	B
A-BCD	136	34	590	0.231	136	0.2	0.3	7.925	A
A-B	0	0			0				
A-C	216	54			216				
D-ABC	223	56	453	0.492	222	0.6	0.9	15.495	C
C-ABD	0.90	0.22	535	0.002	0.90	0.0	0.0	6.739	A
C-D	107	27			107				
C-A	245	61			245				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	331	0.037	12	0.0	0.0	11.270	B
A-BCD	176	44	601	0.293	175	0.3	0.5	8.463	A
A-B	0	0			0				
A-C	256	64			256				
D-ABC	273	68	424	0.645	270	0.9	1.7	22.980	C
C-ABD	1	0.28	513	0.002	1	0.0	0.0	7.026	A
C-D	131	33			131				
C-A	299	75			299				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	331	0.037	12	0.0	0.0	11.284	B
A-BCD	176	44	601	0.293	176	0.5	0.5	8.485	A
A-B	0	0			0				
A-C	256	64			256				
D-ABC	273	68	423	0.645	273	1.7	1.8	23.805	C
C-ABD	1	0.28	513	0.002	1	0.0	0.0	7.028	A
C-D	131	33			131				
C-A	299	75			299				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	360	0.027	10	0.0	0.0	10.282	B
A-BCD	136	34	590	0.231	137	0.5	0.3	7.956	A
A-B	0	0			0				
A-C	216	54			216				
D-ABC	223	56	453	0.493	226	1.8	1.0	16.089	C
C-ABD	0.90	0.22	535	0.002	0.90	0.0	0.0	6.745	A
C-D	107	27			107				
C-A	245	61			245				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	381	0.022	8	0.0	0.0	9.658	A
A-BCD	111	28	587	0.189	111	0.3	0.3	7.574	A
A-B	0	0			0				
A-C	184	46			184				
D-ABC	187	47	473	0.395	188	1.0	0.7	12.684	B
C-ABD	0.75	0.19	550	0.001	0.75	0.0	0.0	6.550	A
C-D	90	22			90				
C-A	205	51			205				

2023 Surveyed Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Surveyed Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	409	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	267	100.000
D		ONE HOUR	✓	284	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	308	99
	B	3	0	2	2
	C	193	3	0	71
	D	189	4	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	10.70	0.0	B	6	10
A-BCD	0.20	7.26	0.3	A	99	148
A-B					2	3
A-C					275	412
D-ABC	0.64	19.98	1.7	C	261	391
C-ABD	0.01	7.04	0.0	A	3	4
C-D					65	98
C-A					177	266

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	395	0.013	5	0.0	0.0	9.234	A
A-BCD	78	20	603	0.130	78	0.0	0.2	6.846	A
A-B	1	0.37			1				
A-C	228	57			228				
D-ABC	214	53	527	0.406	211	0.0	0.7	11.298	B
C-ABD	2	0.57	551	0.004	2	0.0	0.0	6.556	A
C-D	53	13			53				
C-A	145	36			145				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	374	0.017	6	0.0	0.0	9.791	A
A-BCD	96	24	608	0.158	96	0.2	0.2	7.032	A
A-B	2	0.44			2				
A-C	270	67			270				
D-ABC	255	64	513	0.498	254	0.7	1.0	13.854	B
C-ABD	3	0.68	536	0.005	3	0.0	0.0	6.753	A
C-D	64	16			64				
C-A	173	43			173				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	345	0.022	8	0.0	0.0	10.686	B
A-BCD	122	31	618	0.198	122	0.2	0.3	7.254	A
A-B	2	0.53			2				
A-C	326	81			326				
D-ABC	313	78	492	0.635	310	1.0	1.6	19.444	C
C-ABD	3	0.83	514	0.006	3	0.0	0.0	7.042	A
C-D	78	20			78				
C-A	212	53			212				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	344	0.022	8	0.0	0.0	10.698	B
A-BCD	122	31	618	0.198	122	0.3	0.3	7.262	A
A-B	2	0.53			2				
A-C	326	81			326				
D-ABC	313	78	492	0.635	313	1.6	1.7	19.979	C
C-ABD	3	0.83	514	0.006	3	0.0	0.0	7.043	A
C-D	78	20			78				
C-A	212	53			212				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	374	0.017	6	0.0	0.0	9.806	A
A-BCD	96	24	608	0.158	96	0.3	0.2	7.047	A
A-B	2	0.44			2				
A-C	270	67			270				
D-ABC	255	64	513	0.498	258	1.7	1.0	14.285	B
C-ABD	3	0.68	536	0.005	3	0.0	0.0	6.758	A
C-D	64	16			64				
C-A	173	43			173				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	395	0.013	5	0.0	0.0	9.250	A
A-BCD	78	20	603	0.130	79	0.2	0.2	6.866	A
A-B	1	0.37			1				
A-C	228	57			228				
D-ABC	214	53	527	0.406	215	1.0	0.7	11.588	B
C-ABD	2	0.57	551	0.004	2	0.0	0.0	6.559	A
C-D	53	13			53				
C-A	145	36			145				

2028 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Base Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	407	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	407	100.000
D		ONE HOUR	✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	261	146
	B	4	0	2	5
	C	281	1	0	125
	D	128	1	127	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.04	11.50	0.0	B	10	15
A-BCD	0.31	8.67	0.5	A	151	226
A-B					0	0
A-C					223	334
D-ABC	0.68	26.41	2.0	D	235	352
C-ABD	0.00	7.10	0.0	A	0.92	1
C-D					115	172
C-A					258	387

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	378	0.022	8	0.0	0.0	9.738	A
A-BCD	118	29	588	0.201	117	0.0	0.3	7.632	A
A-B	0	0			0				
A-C	189	47			189				
D-ABC	193	48	469	0.411	190	0.0	0.7	12.763	B
C-ABD	0.75	0.19	548	0.001	0.75	0.0	0.0	6.582	A
C-D	94	24			94				
C-A	212	53			212				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	356	0.028	10	0.0	0.0	10.404	B
A-BCD	145	36	592	0.246	145	0.3	0.4	8.056	A
A-B	0	0			0				
A-C	220	55			220				
D-ABC	230	58	448	0.514	229	0.7	1.0	16.332	C
C-ABD	0.90	0.23	531	0.002	0.90	0.0	0.0	6.789	A
C-D	112	28			112				
C-A	253	63			253				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	326	0.037	12	0.0	0.0	11.481	B
A-BCD	189	47	605	0.312	188	0.4	0.5	8.642	A
A-B	0	0			0				
A-C	259	65			259				
D-ABC	282	70	417	0.676	278	1.0	1.9	25.238	D
C-ABD	1	0.28	509	0.002	1	0.0	0.0	7.093	A
C-D	138	34			138				
C-A	309	77			309				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	325	0.037	12	0.0	0.0	11.498	B
A-BCD	189	47	605	0.312	189	0.5	0.5	8.668	A
A-B	0	0			0				
A-C	259	65			259				
D-ABC	282	70	417	0.676	282	1.9	2.0	26.406	D
C-ABD	1	0.28	508	0.002	1	0.0	0.0	7.096	A
C-D	138	34			138				
C-A	309	77			309				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	355	0.028	10	0.0	0.0	10.426	B
A-BCD	145	36	592	0.246	146	0.5	0.4	8.092	A
A-B	0	0			0				
A-C	220	55			220				
D-ABC	230	58	448	0.514	234	2.0	1.1	17.108	C
C-ABD	0.90	0.23	531	0.002	0.90	0.0	0.0	6.794	A
C-D	112	28			112				
C-A	253	63			253				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	377	0.022	8	0.0	0.0	9.761	A
A-BCD	118	29	588	0.201	118	0.4	0.3	7.680	A
A-B	0	0			0				
A-C	189	47			189				
D-ABC	193	48	469	0.411	194	1.1	0.7	13.169	B
C-ABD	0.75	0.19	547	0.001	0.75	0.0	0.0	6.590	A
C-D	94	24			94				
C-A	212	53			212				

2028 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Base Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	424	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	277	100.000
D		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	316	106
	B	3	0	2	2
	C	198	3	0	76
	D	195	4	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	10.88	0.0	B	6	10
A-BCD	0.21	7.35	0.3	A	107	160
A-B					2	3
A-C					280	421
D-ABC	0.66	21.66	1.9	C	269	403
C-ABD	0.01	7.11	0.0	A	3	4
C-D					70	105
C-A					182	273

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	392	0.013	5	0.0	0.0	9.319	A
A-BCD	84	21	604	0.140	84	0.0	0.2	6.905	A
A-B	1	0.37			1				
A-C	233	58			233				
D-ABC	221	55	524	0.421	218	0.0	0.7	11.638	B
C-ABD	2	0.57	548	0.004	2	0.0	0.0	6.594	A
C-D	57	14			57				
C-A	149	37			149				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	370	0.017	6	0.0	0.0	9.909	A
A-BCD	104	26	610	0.170	103	0.2	0.2	7.104	A
A-B	2	0.44			2				
A-C	276	69			276				
D-ABC	263	66	509	0.517	262	0.7	1.0	14.477	B
C-ABD	3	0.68	532	0.005	3	0.0	0.0	6.802	A
C-D	68	17			68				
C-A	178	44			178				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	339	0.023	8	0.0	0.0	10.864	B
A-BCD	133	33	623	0.213	132	0.2	0.3	7.337	A
A-B	2	0.53			2				
A-C	332	83			332				
D-ABC	323	81	488	0.661	319	1.0	1.8	20.944	C
C-ABD	3	0.83	510	0.007	3	0.0	0.0	7.107	A
C-D	84	21			84				
C-A	218	54			218				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	339	0.023	8	0.0	0.0	10.877	B
A-BCD	133	33	623	0.213	133	0.3	0.3	7.346	A
A-B	2	0.53			2				
A-C	332	83			332				
D-ABC	323	81	488	0.661	322	1.8	1.9	21.657	C
C-ABD	3	0.83	510	0.007	3	0.0	0.0	7.108	A
C-D	84	21			84				
C-A	218	54			218				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	389	0.017	6	0.0	0.0	9.927	A
A-BCD	104	26	610	0.170	104	0.3	0.2	7.121	A
A-B	2	0.44			2				
A-C	276	69			276				
D-ABC	263	66	509	0.517	267	1.9	1.1	15.015	C
C-ABD	3	0.68	532	0.005	3	0.0	0.0	6.805	A
C-D	68	17			68				
C-A	178	44			178				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	391	0.013	5	0.0	0.0	9.338	A
A-BCD	84	21	604	0.140	85	0.2	0.2	6.928	A
A-B	1	0.37			1				
A-C	233	58			233				
D-ABC	221	55	524	0.421	222	1.1	0.7	11.966	B
C-ABD	2	0.57	548	0.004	2	0.0	0.0	6.601	A
C-D	57	14			57				
C-A	149	37			149				

2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		11.71	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
D5	2028 With Development	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	428	100.000
B		ONE HOUR	✓	11	100.000
C		ONE HOUR	✓	423	100.000
D		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	261	167
	B	4	0	2	5
	C	281	1	0	141
	D	150	1	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.04	11.87	0.0	B	10	15
A-BCD	0.36	9.18	0.7	A	175	263
A-B					0	0
A-C					217	326
D-ABC	0.79	39.63	3.4	E	270	405
C-ABD	0.00	7.21	0.0	A	0.92	1
C-D					129	194
C-A					258	387

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	372	0.022	8	0.0	0.0	9.900	A
A-BCD	136	34	591	0.231	135	0.0	0.3	7.880	A
A-B	0	0			0				
A-C	186	47			186				
D-ABC	221	55	466	0.474	218	0.0	0.9	14.288	B
C-ABD	0.75	0.19	542	0.001	0.75	0.0	0.0	6.647	A
C-D	106	27			106				
C-A	212	53			212				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	348	0.028	10	0.0	0.0	10.632	B
A-BCD	169	42	597	0.283	168	0.3	0.4	8.395	A
A-B	0	0			0				
A-C	216	54			216				
D-ABC	264	66	444	0.596	262	0.9	1.4	19.598	C
C-ABD	0.90	0.23	525	0.002	0.90	0.0	0.0	6.874	A
C-D	127	32			127				
C-A	253	63			253				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	316	0.038	12	0.0	0.0	11.835	B
A-BCD	221	55	614	0.360	220	0.4	0.7	9.137	A
A-B	0	0			0				
A-C	250	63			250				
D-ABC	324	81	412	0.786	317	1.4	3.1	35.575	E
C-ABD	1	0.28	501	0.002	1	0.0	0.0	7.206	A
C-D	155	39			155				
C-A	309	77			309				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	12	3	315	0.038	12	0.0	0.0	11.866	B
A-BCD	221	55	614	0.360	221	0.7	0.7	9.176	A
A-B	0	0			0				
A-C	250	63			250				
D-ABC	324	81	411	0.787	323	3.1	3.4	39.626	E
C-ABD	1	0.28	500	0.002	1	0.0	0.0	7.210	A
C-D	155	39			155				
C-A	309	77			309				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	10	2	347	0.028	10	0.0	0.0	10.667	B
A-BCD	169	42	597	0.283	170	0.7	0.5	8.447	A
A-B	0	0			0				
A-C	216	54			216				
D-ABC	264	66	443	0.596	272	3.4	1.6	21.742	C
C-ABD	0.90	0.23	524	0.002	0.90	0.0	0.0	6.882	A
C-D	127	32			127				
C-A	253	63			253				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	371	0.022	8	0.0	0.0	9.929	A
A-BCD	136	34	591	0.231	137	0.5	0.3	7.943	A
A-B	0	0			0				
A-C	186	47			186				
D-ABC	221	55	466	0.475	224	1.6	0.9	15.008	C
C-ABD	0.75	0.19	542	0.001	0.75	0.0	0.0	6.654	A
C-D	106	27			106				
C-A	212	53			212				

2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		8.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028 With Development	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	433	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	284	100.000
D		ONE HOUR	✓	311	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	316	115
	B	3	0	2	2
	C	198	3	0	83
	D	205	4	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	11.03	0.0	B	6	10
A-BCD	0.23	7.47	0.3	A	117	175
A-B					2	3
A-C					279	418
D-ABC	0.71	25.26	2.3	D	285	428
C-ABD	0.01	7.16	0.0	A	3	4
C-D					76	114
C-A					182	273

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	389	0.014	5	0.0	0.0	9.386	A
A-BCD	92	23	606	0.152	91	0.0	0.2	6.985	A
A-B	1	0.37			1				
A-C	232	58			232				
D-ABC	234	59	521	0.449	231	0.0	0.8	12.267	B
C-ABD	2	0.57	546	0.004	2	0.0	0.0	6.622	A
C-D	62	16			62				
C-A	149	37			149				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	366	0.017	6	0.0	0.0	10.003	B
A-BCD	113	28	613	0.185	113	0.2	0.2	7.201	A
A-B	2	0.43			2				
A-C	274	69			274				
D-ABC	280	70	506	0.553	278	0.8	1.2	15.688	C
C-ABD	3	0.68	529	0.005	3	0.0	0.0	6.838	A
C-D	75	19			75				
C-A	178	44			178				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	335	0.023	8	0.0	0.0	11.009	B
A-BCD	145	36	628	0.232	145	0.2	0.3	7.459	A
A-B	2	0.52			2				
A-C	329	82			329				
D-ABC	342	86	484	0.708	338	1.2	2.2	24.063	C
C-ABD	3	0.83	506	0.007	3	0.0	0.0	7.154	A
C-D	91	23			91				
C-A	218	54			218				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	334	0.023	8	0.0	0.0	11.028	B
A-BCD	145	36	628	0.232	145	0.3	0.3	7.470	A
A-B	2	0.52			2				
A-C	329	82			329				
D-ABC	342	86	484	0.708	342	2.2	2.3	25.261	D
C-ABD	3	0.83	506	0.007	3	0.0	0.0	7.156	A
C-D	91	23			91				
C-A	218	54			218				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	365	0.017	6	0.0	0.0	10.028	B
A-BCD	113	28	613	0.185	113	0.3	0.3	7.220	A
A-B	2	0.43			2				
A-C	274	69			274				
D-ABC	280	70	506	0.553	284	2.3	1.3	16.508	C
C-ABD	3	0.68	529	0.005	3	0.0	0.0	6.841	A
C-D	75	19			75				
C-A	178	44			178				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	388	0.014	5	0.0	0.0	9.406	A
A-BCD	92	23	606	0.152	92	0.3	0.2	7.012	A
A-B	1	0.37			1				
A-C	232	58			232				
D-ABC	234	59	521	0.449	236	1.3	0.8	12.700	B
C-ABD	2	0.57	545	0.004	2	0.0	0.0	6.626	A
C-D	62	16			62				
C-A	149	37			149				

APPENDIX 7

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: B5125 - A550 South - A550 West - Rectory Lane.j9
Path: Z:\projects\4168 Ash Lane, Mancot\Picady
Report generation date: 17/10/2023 10:05:04

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2023 Surveyed Flows									
Stream B-ACD	D1	1.7	23.06	0.64	C	D2	1.6	19.45	0.63	C
Stream A-BCD		0.0	7.16	0.00	A		0.0	6.98	0.01	A
Stream D-ABC		0.0	10.84	0.04	B		0.0	10.21	0.02	B
Stream C-ABD		0.6	9.01	0.35	A		0.3	7.37	0.20	A
	2028 Base Flows									
Stream B-ACD	D3	1.9	25.20	0.67	D	D4	1.8	20.91	0.65	C
Stream A-BCD		0.0	7.22	0.00	A		0.0	7.03	0.01	A
Stream D-ABC		0.0	11.02	0.04	B		0.0	10.37	0.02	B
Stream C-ABD		0.7	9.15	0.37	A		0.3	7.42	0.21	A
	2028 With Development Flows									
Stream B-ACD	D5	2.0	26.40	0.68	D	D6	1.8	21.19	0.66	C
Stream A-BCD		0.0	7.34	0.00	A		0.0	7.08	0.01	A
Stream D-ABC		0.0	11.20	0.04	B		0.0	10.44	0.02	B
Stream C-ABD		0.8	9.66	0.41	A		0.3	7.54	0.23	A

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

File summary

File Description

Title	B5125 - A550 South - A550 West - Rectory Lane
Location	Mancot
Site number	
Date	10/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	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	2023 Surveyed Flows	AM	ONE HOUR	00:00	01:30	15	✓
D2	2023 Surveyed Flows	PM	ONE HOUR	00:00	01:30	15	✓
D3	2028 Base Flows	AM	ONE HOUR	00:00	01:30	15	✓
D4	2028 Base Flows	PM	ONE HOUR	00:00	01:30	15	✓
D5	2028 With Development Flows	AM	ONE HOUR	00:00	01:30	15	✓
D6	2028 With Development Flows	PM	ONE HOUR	00:00	01:30	15	✓

Analysis Set Details

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

2023 Surveyed Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B5125		Major
B	A550 South		Minor
C	A550 West		Major
D	Rectory Lane		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00			100.0	✓	1.00
C	6.00			90.0	✓	1.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.40	16	35
D	One lane	3.00	10	12

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	632	-	-	-	-	-	-	0.245	0.350	0.245	-	-	-
B-A	520	0.095	0.239	0.239	-	-	-	0.151	0.342	-	0.239	0.239	0.120
B-C	672	0.103	0.260	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	520	0.095	0.239	0.239	-	-	-	0.151	0.342	0.151	-	-	-
B-D, offside lane	520	0.095	0.239	0.239	-	-	-	0.151	0.342	0.151	-	-	-
C-B	626	0.243	0.243	0.347	-	-	-	-	-	-	-	-	-
D-A	631	-	-	-	-	-	-	0.245	-	0.097	-	-	-
D-B, nearside lane	487	0.141	0.141	0.320	-	-	-	0.224	0.224	0.089	-	-	-
D-B, offside lane	487	0.141	0.141	0.320	-	-	-	0.224	0.224	0.089	-	-	-
D-C	487	-	0.141	0.320	0.112	0.224	0.224	0.224	0.224	0.089	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Surveyed Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	365	100.000
B		ONE HOUR	✓	248	100.000
C		ONE HOUR	✓	403	100.000
D		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	119	245	1
	B	123	0	124	1
	C	233	170	0	0
	D	2	5	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.64	23.06	1.7	C	228	341
A-BCD	0.00	7.16	0.0	A	0.92	1
A-B					109	164
A-C					225	337
D-ABC	0.04	10.84	0.0	B	10	15
C-ABD	0.35	9.01	0.6	A	175	263
C-D					0	0
C-A					195	292

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	187	47	481	0.388	184	0.0	0.6	12.026	B
A-BCD	0.75	0.19	545	0.001	0.75	0.0	0.0	6.619	A
A-B	90	22			90				
A-C	184	46			184				
D-ABC	8	2	398	0.021	8	0.0	0.0	9.232	A
C-ABD	137	34	599	0.229	136	0.0	0.3	7.748	A
C-D	0	0			0				
C-A	166	42			166				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	223	56	459	0.485	222	0.6	0.9	15.082	C
A-BCD	0.90	0.22	527	0.002	0.90	0.0	0.0	6.838	A
A-B	107	27			107				
A-C	220	55			220				
D-ABC	10	2	376	0.026	10	0.0	0.0	9.841	A
C-ABD	169	42	605	0.280	169	0.3	0.4	8.251	A
C-D	0	0			0				
C-A	193	48			193				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	273	68	429	0.637	270	0.9	1.6	22.294	C
A-BCD	1	0.28	504	0.002	1	0.0	0.0	7.158	A
A-B	131	33			131				
A-C	270	67			270				
D-ABC	12	3	345	0.035	12	0.0	0.0	10.820	B
C-ABD	219	55	619	0.354	219	0.4	0.6	8.978	A
C-D	0	0			0				
C-A	224	56			224				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	273	68	428	0.637	273	1.6	1.7	23.057	C
A-BCD	1	0.28	504	0.002	1	0.0	0.0	7.162	A
A-B	131	33			131				
A-C	270	67			270				
D-ABC	12	3	344	0.035	12	0.0	0.0	10.835	B
C-ABD	219	55	619	0.354	219	0.6	0.6	9.013	A
C-D	0	0			0				
C-A	224	56			224				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	223	56	459	0.486	226	1.7	1.0	15.624	C
A-BCD	0.90	0.22	527	0.002	0.90	0.0	0.0	6.846	A
A-B	107	27			107				
A-C	220	55			220				
D-ABC	10	2	375	0.026	10	0.0	0.0	9.862	A
C-ABD	169	42	605	0.280	170	0.6	0.4	8.299	A
C-D	0	0			0				
C-A	193	48			193				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	187	47	481	0.388	188	1.0	0.6	12.351	B
A-BCD	0.75	0.19	544	0.001	0.75	0.0	0.0	6.626	A
A-B	90	22			90				
A-C	184	46			184				
D-ABC	8	2	397	0.021	8	0.0	0.0	9.252	A
C-ABD	137	34	599	0.229	138	0.4	0.3	7.806	A
C-D	0	0			0				
C-A	166	42			166				

2023 Surveyed Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		6.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Surveyed Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	289	100.000
B		ONE HOUR	✓	284	100.000
C		ONE HOUR	✓	383	100.000
D		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	71	215	3
	B	91	0	189	4
	C	281	100	0	2
	D	2	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.63	19.45	1.6	C	261	391
A-BCD	0.01	6.98	0.0	A	3	4
A-B					65	98
A-C					197	296
D-ABC	0.02	10.21	0.0	B	6	10
C-ABD	0.20	7.37	0.3	A	99	149
C-D					2	3
C-A					250	375

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	214	53	535	0.399	211	0.0	0.7	11.023	B
A-BCD	2	0.57	554	0.004	2	0.0	0.0	6.520	A
A-B	53	13			53				
A-C	162	40			162				
D-ABC	5	1	414	0.013	5	0.0	0.0	8.815	A
C-ABD	79	20	601	0.131	78	0.0	0.2	6.880	A
C-D	1	0.37			1				
C-A	208	52			208				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	255	64	519	0.491	254	0.7	0.9	13.507	B
A-BCD	3	0.68	539	0.005	3	0.0	0.0	6.709	A
A-B	64	16			64				
A-C	193	48			193				
D-ABC	6	2	391	0.016	6	0.0	0.0	9.348	A
C-ABD	96	24	603	0.160	96	0.2	0.2	7.096	A
C-D	2	0.44			2				
C-A	246	62			246				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	313	78	497	0.629	310	0.9	1.6	18.953	C
A-BCD	3	0.83	519	0.006	3	0.0	0.0	6.982	A
A-B	78	20			78				
A-C	237	59			237				
D-ABC	8	2	361	0.021	8	0.0	0.0	10.203	B
C-ABD	123	31	611	0.201	122	0.2	0.3	7.362	A
C-D	2	0.53			2				
C-A	297	74			297				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	313	78	497	0.629	313	1.6	1.6	19.451	C
A-BCD	3	0.83	519	0.006	3	0.0	0.0	6.983	A
A-B	78	20			78				
A-C	237	59			237				
D-ABC	8	2	360	0.021	8	0.0	0.0	10.214	B
C-ABD	123	31	611	0.201	123	0.3	0.3	7.375	A
C-D	2	0.53			2				
C-A	297	74			297				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	255	64	519	0.492	258	1.6	1.0	13.905	B
A-BCD	3	0.68	539	0.005	3	0.0	0.0	6.711	A
A-B	64	16			64				
A-C	193	48			193				
D-ABC	6	2	391	0.016	6	0.0	0.0	9.364	A
C-ABD	96	24	603	0.160	97	0.3	0.2	7.111	A
C-D	2	0.44			2				
C-A	246	62			246				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	214	53	535	0.400	215	1.0	0.7	11.294	B
A-BCD	2	0.57	554	0.004	2	0.0	0.0	6.524	A
A-B	53	13			53				
A-C	162	40			162				
D-ABC	5	1	413	0.013	5	0.0	0.0	8.832	A
C-ABD	79	20	601	0.131	79	0.2	0.2	6.902	A
C-D	1	0.37			1				
C-A	208	52			208				

2028 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Base Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	377	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	416	100.000
D		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	122	254	1
	B	128	0	129	1
	C	241	175	0	0
	D	2	5	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.67	25.20	1.9	D	235	352
A-BCD	0.00	7.22	0.0	A	0.92	1
A-B					112	168
A-C					233	350
D-ABC	0.04	11.02	0.0	B	10	15
C-ABD	0.37	9.15	0.7	A	182	273
C-D					0	0
C-A					200	300

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	193	48	478	0.403	190	0.0	0.7	12.379	B
A-BCD	0.75	0.19	542	0.001	0.75	0.0	0.0	6.653	A
A-B	92	23			92				
A-C	191	48			191				
D-ABC	8	2	394	0.021	8	0.0	0.0	9.321	A
C-ABD	142	35	600	0.236	141	0.0	0.3	7.817	A
C-D	0	0			0				
C-A	171	43			171				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	230	58	456	0.505	229	0.7	1.0	15.767	C
A-BCD	0.90	0.22	524	0.002	0.90	0.0	0.0	6.881	A
A-B	110	27			110				
A-C	228	57			228				
D-ABC	10	2	371	0.027	10	0.0	0.0	9.965	A
C-ABD	175	44	606	0.289	175	0.3	0.4	8.340	A
C-D	0	0			0				
C-A	199	50			199				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	282	70	424	0.665	278	1.0	1.8	24.167	C
A-BCD	1	0.28	500	0.002	1	0.0	0.0	7.217	A
A-B	134	34			134				
A-C	280	70			280				
D-ABC	12	3	339	0.036	12	0.0	0.0	11.007	B
C-ABD	228	57	623	0.367	227	0.4	0.7	9.108	A
C-D	0	0			0				
C-A	230	57			230				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	282	70	424	0.665	282	1.8	1.9	25.201	D
A-BCD	1	0.28	500	0.002	1	0.0	0.0	7.221	A
A-B	134	34			134				
A-C	280	70			280				
D-ABC	12	3	339	0.036	12	0.0	0.0	11.025	B
C-ABD	228	57	623	0.367	228	0.7	0.7	9.147	A
C-D	0	0			0				
C-A	230	57			230				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	230	58	455	0.505	234	1.9	1.1	16.463	C
A-BCD	0.90	0.22	523	0.002	0.90	0.0	0.0	6.890	A
A-B	110	27			110				
A-C	228	57			228				
D-ABC	10	2	370	0.027	10	0.0	0.0	9.986	A
C-ABD	175	44	606	0.289	176	0.7	0.5	8.393	A
C-D	0	0			0				
C-A	199	50			199				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	193	48	478	0.403	194	1.1	0.7	12.751	B
A-BCD	0.75	0.19	541	0.001	0.75	0.0	0.0	6.663	A
A-B	92	23			92				
A-C	191	48			191				
D-ABC	8	2	394	0.021	8	0.0	0.0	9.345	A
C-ABD	142	35	600	0.236	142	0.5	0.3	7.877	A
C-D	0	0			0				
C-A	171	43			171				

2028 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Base Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	299	100.000
B		ONE HOUR	✓	293	100.000
C		ONE HOUR	✓	394	100.000
D		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	73	223	3
	B	93	0	196	4
	C	289	103	0	2
	D	2	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.65	20.91	1.8	C	269	403
A-BCD	0.01	7.03	0.0	A	3	4
A-B					67	100
A-C					205	307
D-ABC	0.02	10.37	0.0	B	6	10
C-ABD	0.21	7.42	0.3	A	103	154
C-D					2	3
C-A					257	385

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	221	55	533	0.414	218	0.0	0.7	11.311	B
A-BCD	2	0.57	552	0.004	2	0.0	0.0	6.547	A
A-B	55	14			55				
A-C	168	42			168				
D-ABC	5	1	410	0.013	5	0.0	0.0	8.890	A
C-ABD	82	20	601	0.136	81	0.0	0.2	6.913	A
C-D	1	0.37			1				
C-A	214	53			214				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	263	66	517	0.509	262	0.7	1.0	14.046	B
A-BCD	3	0.68	537	0.005	3	0.0	0.0	6.742	A
A-B	66	16			66				
A-C	200	50			200				
D-ABC	6	2	387	0.016	6	0.0	0.0	9.451	A
C-ABD	100	25	604	0.165	100	0.2	0.2	7.138	A
C-D	2	0.44			2				
C-A	253	63			253				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	323	81	494	0.653	320	1.0	1.8	20.266	C
A-BCD	3	0.83	516	0.006	3	0.0	0.0	7.026	A
A-B	80	20			80				
A-C	246	61			246				
D-ABC	8	2	355	0.022	8	0.0	0.0	10.360	B
C-ABD	127	32	612	0.208	127	0.2	0.3	7.412	A
C-D	2	0.53			2				
C-A	304	76			304				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	323	81	494	0.653	322	1.8	1.8	20.912	C
A-BCD	3	0.83	515	0.006	3	0.0	0.0	7.028	A
A-B	80	20			80				
A-C	246	61			246				
D-ABC	8	2	355	0.022	8	0.0	0.0	10.373	B
C-ABD	127	32	612	0.208	127	0.3	0.3	7.421	A
C-D	2	0.53			2				
C-A	304	76			304				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	263	66	517	0.509	266	1.8	1.1	14.536	B
A-BCD	3	0.68	536	0.005	3	0.0	0.0	6.744	A
A-B	66	16			66				
A-C	200	50			200				
D-ABC	6	2	387	0.016	6	0.0	0.0	9.468	A
C-ABD	100	25	604	0.165	100	0.3	0.2	7.154	A
C-D	2	0.44			2				
C-A	253	63			253				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	221	55	533	0.414	222	1.1	0.7	11.617	B
A-BCD	2	0.57	552	0.004	2	0.0	0.0	6.551	A
A-B	55	14			55				
A-C	168	42			168				
D-ABC	5	1	409	0.013	5	0.0	0.0	8.909	A
C-ABD	82	20	601	0.136	82	0.2	0.2	6.936	A
C-D	1	0.37			1				
C-A	214	53			214				

2028 With Development Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		8.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028 With Development Flows	AM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	377	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	437	100.000
D		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	122	254	1
	B	126	0	129	1
	C	241	196	0	0
	D	2	5	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.68	26.40	2.0	D	235	352
A-BCD	0.00	7.34	0.0	A	0.92	1
A-B					112	168
A-C					233	350
D-ABC	0.04	11.20	0.0	B	10	15
C-ABD	0.41	9.66	0.8	A	207	310
C-D					0	0
C-A					194	292

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	193	48	474	0.406	190	0.0	0.7	12.549	B
A-BCD	0.75	0.19	536	0.001	0.75	0.0	0.0	6.721	A
A-B	92	23			92				
A-C	191	48			191				
D-ABC	8	2	391	0.021	8	0.0	0.0	9.402	A
C-ABD	160	40	605	0.265	159	0.0	0.4	8.040	A
C-D	0	0			0				
C-A	169	42			169				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	230	58	451	0.511	229	0.7	1.0	16.116	C
A-BCD	0.90	0.23	517	0.002	0.90	0.0	0.0	6.970	A
A-B	110	27			110				
A-C	228	57			228				
D-ABC	10	2	367	0.027	10	0.0	0.0	10.079	B
C-ABD	199	50	614	0.324	198	0.4	0.5	8.658	A
C-D	0	0			0				
C-A	194	48			194				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	282	70	417	0.675	278	1.0	1.9	25.200	D
A-BCD	1	0.28	492	0.002	1	0.0	0.0	7.337	A
A-B	134	34			134				
A-C	280	70			280				
D-ABC	12	3	334	0.036	12	0.0	0.0	11.182	B
C-ABD	261	65	634	0.411	259	0.5	0.8	9.600	A
C-D	0	0			0				
C-A	221	55			221				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	282	70	417	0.676	282	1.9	2.0	26.405	D
A-BCD	1	0.28	491	0.002	1	0.0	0.0	7.343	A
A-B	134	34			134				
A-C	280	70			280				
D-ABC	12	3	333	0.036	12	0.0	0.0	11.204	B
C-ABD	261	65	634	0.411	261	0.8	0.8	9.658	A
C-D	0	0			0				
C-A	221	55			221				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	230	58	450	0.511	234	2.0	1.1	16.894	C
A-BCD	0.90	0.23	517	0.002	0.90	0.0	0.0	6.981	A
A-B	110	27			110				
A-C	228	57			228				
D-ABC	10	2	366	0.027	10	0.0	0.0	10.106	B
C-ABD	199	50	614	0.324	200	0.8	0.6	8.732	A
C-D	0	0			0				
C-A	194	48			194				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	193	48	474	0.407	194	1.1	0.7	12.945	B
A-BCD	0.75	0.19	535	0.001	0.75	0.0	0.0	6.734	A
A-B	92	23			92				
A-C	191	48			191				
D-ABC	8	2	390	0.021	8	0.0	0.0	9.427	A
C-ABD	160	40	605	0.265	161	0.6	0.4	8.119	A
C-D	0	0			0				
C-A	169	42			169				

2028 With Development Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way		7.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028 With Development Flows	PM	ONE HOUR	00:00	01:30	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 (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	299	100.000
B		ONE HOUR	✓	293	100.000
C		ONE HOUR	✓	404	100.000
D		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	73	223	3
	B	93	0	196	4
	C	289	113	0	2
	D	2	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.66	21.19	1.8	C	269	403
A-BCD	0.01	7.08	0.0	A	3	4
A-B					67	100
A-C					205	307
D-ABC	0.02	10.44	0.0	B	6	10
C-ABD	0.23	7.54	0.3	A	114	171
C-D					2	3
C-A					255	383

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	221	55	532	0.415	218	0.0	0.7	11.383	B
A-BCD	2	0.57	549	0.004	2	0.0	0.0	6.578	A
A-B	55	14			55				
A-C	168	42			168				
D-ABC	5	1	409	0.013	5	0.0	0.0	8.924	A
C-ABD	90	22	604	0.149	89	0.0	0.2	6.987	A
C-D	1	0.37			1				
C-A	213	53			213				

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	263	66	515	0.511	262	0.7	1.0	14.142	B
A-BCD	3	0.68	533	0.005	3	0.0	0.0	6.782	A
A-B	66	16			66				
A-C	200	50			200				
D-ABC	6	2	385	0.016	6	0.0	0.0	9.498	A
C-ABD	110	28	608	0.181	110	0.2	0.2	7.227	A
C-D	2	0.43			2				
C-A	251	63			251				

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	323	81	492	0.656	319	1.0	1.8	20.537	C
A-BCD	3	0.83	512	0.006	3	0.0	0.0	7.080	A
A-B	80	20			80				
A-C	246	61			246				
D-ABC	8	2	353	0.022	8	0.0	0.0	10.430	B
C-ABD	141	35	619	0.228	141	0.2	0.3	7.527	A
C-D	2	0.52			2				
C-A	302	75			302				

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	323	81	492	0.656	322	1.8	1.8	21.194	C
A-BCD	3	0.83	512	0.006	3	0.0	0.0	7.081	A
A-B	80	20			80				
A-C	246	61			246				
D-ABC	8	2	352	0.022	8	0.0	0.0	10.444	B
C-ABD	141	35	619	0.228	141	0.3	0.3	7.537	A
C-D	2	0.52			2				
C-A	302	75			302				

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	263	66	515	0.511	266	1.8	1.1	14.646	B
A-BCD	3	0.68	533	0.005	3	0.0	0.0	6.788	A
A-B	66	16			66				
A-C	200	50			200				
D-ABC	6	2	385	0.016	6	0.0	0.0	9.515	A
C-ABD	110	28	608	0.181	111	0.3	0.2	7.246	A
C-D	2	0.43			2				
C-A	251	63			251				

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	221	55	532	0.415	222	1.1	0.7	11.675	B
A-BCD	2	0.57	549	0.004	2	0.0	0.0	6.585	A
A-B	55	14			55				
A-C	168	42			168				
D-ABC	5	1	408	0.013	5	0.0	0.0	8.941	A
C-ABD	90	22	604	0.149	90	0.2	0.2	7.011	A
C-D	1	0.37			1				
C-A	213	53			213				

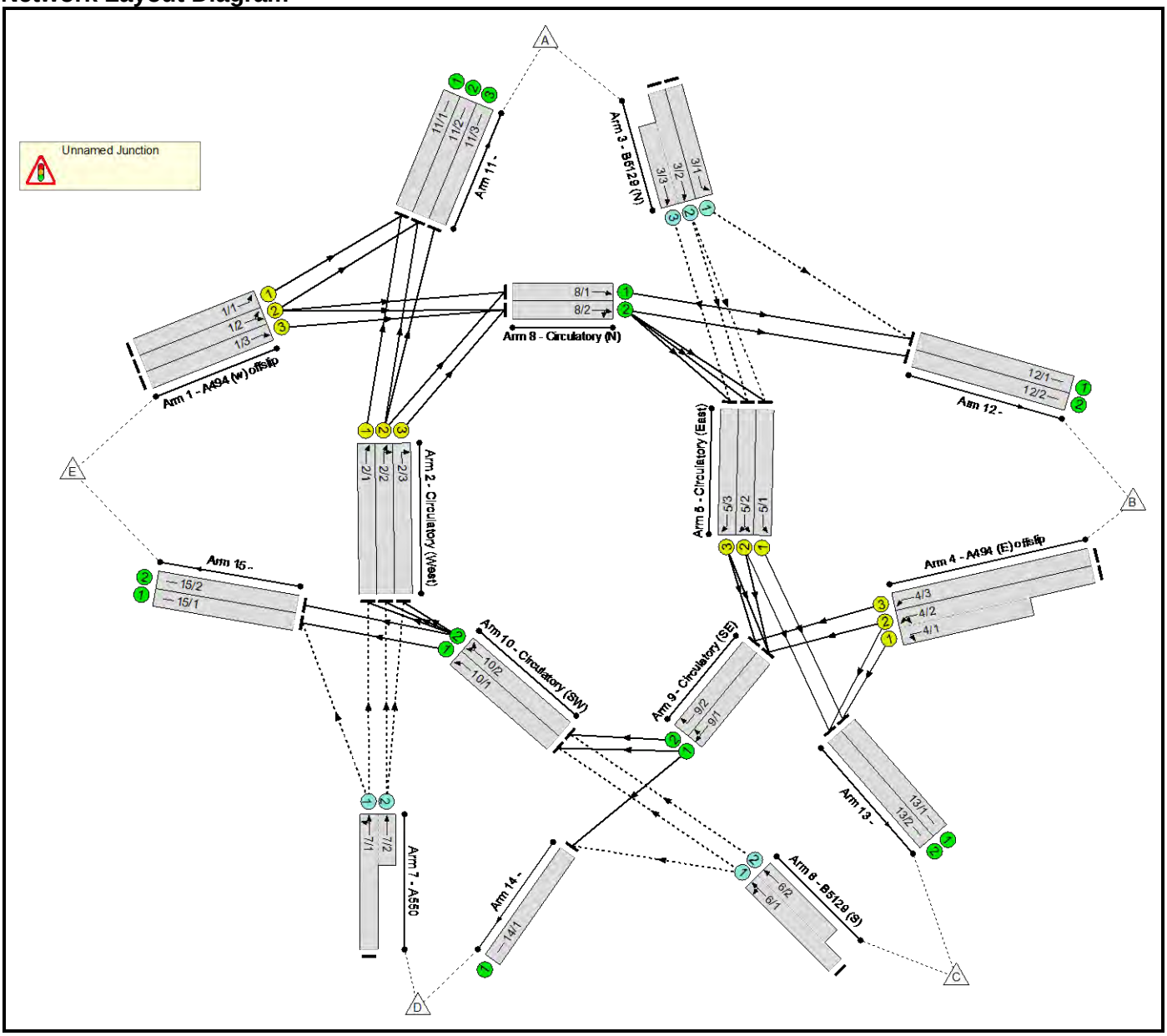
APPENDIX 8

Full Input Data And Results

User and Project Details

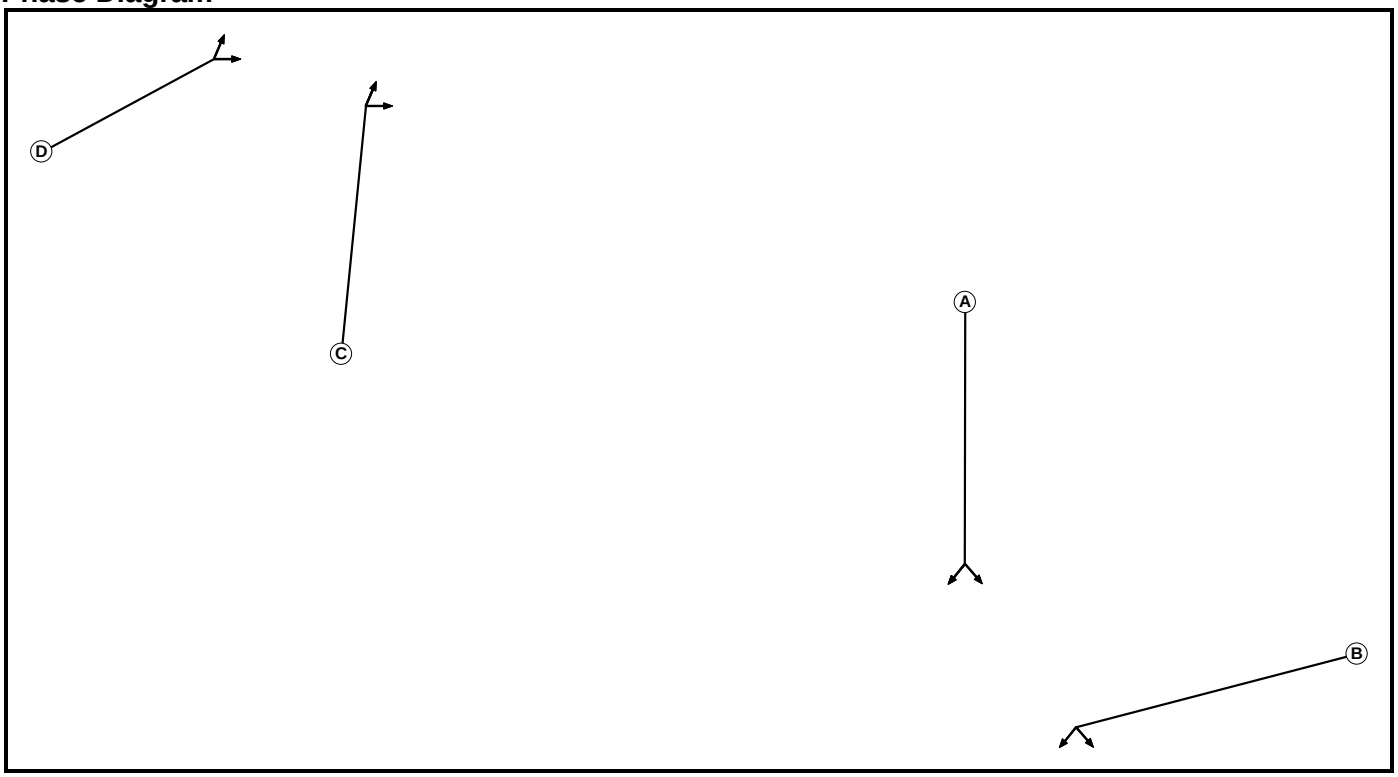
Project:	
Title:	**A494-A550**
Location:	
Additional detail:	
File name:	A494 - A550 Roundabout.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	2		7	7
B	Traffic	2		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7

Phase Intergreens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A		5	-	-
	B	5		-	-
	C	-	-		5
	D	-	-	5	

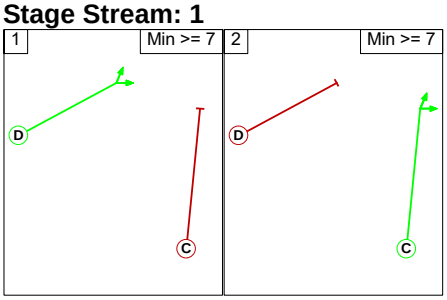
Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	D
1	2	C
2	1	A
2	2	B

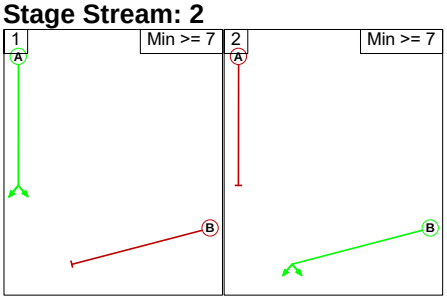
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

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

Stage Stream: 2

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

Prohibited Stage Change

Stage Stream: 1

	To Stage		
		1	2
From Stage	1		5
	2	5	

Stage Stream: 2

	To Stage		
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
3/1 (B5129 (N))	12/1 (Left)	1164	0	8/1	0.39	All	-	-	-	-	-
				8/2	0.39	All					
3/2 (B5129 (N))	5/1 (Ahead)	1164	0	8/1	0.39	All	-	-	-	-	-
				8/2	0.39	All					
	5/2 (Ahead)	1164	0	8/1	0.39	All					
				8/2	0.39	All					
3/3 (B5129 (N))	5/3 (Ahead)	1164	0	8/1	0.39	All	-	-	-	-	-
				8/2	0.39	All					
6/1 (B5129 (S))	10/1 (Ahead)	1579	0	9/1	0.56	All	-	-	-	-	-
				9/2	0.56	All					
	14/1 (Left)	1579	0	9/1	0.56	All					
				9/2	0.56	All					
6/2 (B5129 (S))	10/2 (Ahead)	1579	0	9/1	0.56	All	-	-	-	-	-
				9/2	0.56	All					
7/1 (A550)	2/1 (Ahead)	1032	0	10/1	0.33	All	-	-	-	-	-
				10/2	0.33	All					
	15/1 (Left)	1032	0	10/1	0.33	All					
				10/2	0.33	All					
7/2 (A550)	2/2 (Ahead)	1032	0	10/1	0.33	All	-	-	-	-	-
				10/2	0.33	All					
	2/3 (Ahead)	1032	0	10/1	0.33	All					
				10/2	0.33	All					

Full Input Data And Results

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 (A494 (w) offslip)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 11 Left	Inf
1/2 (A494 (w) offslip)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 8 Ahead	Inf
											Arm 11 Left	Inf
1/3 (A494 (w) offslip)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 8 Ahead	Inf
2/1 (Circulatory (West))	U	C	2	3	16.5	Geom	-	3.50	0.00	N	Arm 11 Ahead	Inf
2/2 (Circulatory (West))	U	C	2	3	16.5	Geom	-	3.50	0.00	N	Arm 8 Right	Inf
											Arm 11 Ahead	Inf
2/3 (Circulatory (West))	U	C	2	3	16.5	Geom	-	3.50	0.00	N	Arm 8 Right	Inf
3/1 (B5129 (N))	O		2	3	60.0	Geom	-	3.20	0.00	Y	Arm 12 Left	Inf
3/2 (B5129 (N))	O		2	3	60.0	Geom	-	3.20	0.00	N	Arm 5 Ahead	Inf
3/3 (B5129 (N))	O		2	3	7.1	Geom	-	3.20	0.00	N	Arm 5 Ahead	Inf
4/1 (A494 (E) offslip)	U	B	2	3	11.3	Geom	-	3.50	0.00	Y	Arm 13 Left	Inf
4/2 (A494 (E) offslip)	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 9 Ahead	Inf
											Arm 13 Left	Inf
4/3 (A494 (E) offslip)	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 9 Ahead	Inf
5/1 (Circulatory (East))	U	A	2	3	15.0	Geom	-	3.50	0.00	N	Arm 13 Ahead	Inf
5/2 (Circulatory (East))	U	A	2	3	15.0	Geom	-	3.50	0.00	N	Arm 9 Ahead	Inf
											Arm 13 Ahead	Inf
5/3 (Circulatory (East))	U	A	2	3	15.0	Geom	-	3.50	0.00	N	Arm 9 Ahead	Inf
6/1 (B5129 (S))	O		2	3	60.0	Geom	-	4.10	0.00	Y	Arm 10 Ahead	Inf

Full Input Data And Results

											Arm 14 Left	Inf
6/2 (B5129 (S))	O		2	3	9.9	Geom	-	4.00	0.00	N	Arm 10 Ahead	Inf
7/1 (A550)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 15 Left	Inf
7/2 (A550)	O		2	3	4.3	Geom	-	3.00	0.00	N	Arm 2 Ahead	Inf
8/1 (Circulatory (N))	U		2	3	9.7	Geom	-	4.20	0.00	N	Arm 12 Ahead	Inf
8/2 (Circulatory (N))	U		2	3	9.7	Geom	-	4.20	0.00	N	Arm 5 Right	Inf
											Arm 12 Ahead	Inf
9/1 (Circulatory (SE))	U		2	3	8.2	Geom	-	4.20	0.00	N	Arm 10 Right	Inf
											Arm 14 Ahead	Inf
9/2 (Circulatory (SE))	U		2	3	8.2	Geom	-	4.20	0.00	N	Arm 10 Right	Inf
10/1 (Circulatory (SW))	U		2	3	7.0	Geom	-	4.20	0.00	N	Arm 15 Ahead	Inf
10/2 (Circulatory (SW))	U		2	3	7.0	Geom	-	4.20	0.00	N	Arm 2 Right	Inf
											Arm 15 Ahead	Inf
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/2	U		2	3	60.0	Inf	-	-	-	-	-	-
11/3	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-
12/2	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
13/2	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1	U		2	3	60.0	Inf	-	-	-	-	-	-
15/1	U		2	3	60.0	Inf	-	-	-	-	-	-
15/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Surveyed Flows - AM Peak'	08:00	09:00	01:00	
2: '2023 Surveyed Flows - PM Peak'	16:45	17:45	01:00	
3: '2033 Base Flows - AM Peak'	08:00	09:00	01:00	
4: '2033 Base Flows - PM Peak'	16:45	17:45	01:00	
5: '2033 With Development Flows - AM Peak'	08:00	09:00	01:00	
6: '2033 With Development Flows - PM Peak'	16:45	17:45	01:00	

Scenario 1: '2023 Surveyed Flows - AM Peak' (FG1: '2023 Surveyed Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	257	193	112	212	774
	B	272	0	375	63	127	837
	C	237	308	0	16	127	688
	D	113	113	23	0	59	308
	E	436	61	178	82	0	757
	Tot.	1058	739	769	273	525	3364

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2023 Surveyed Flows - AM Peak
Junction: Unnamed Junction	
1/1	227
1/2	276
1/3	254
2/1	358
2/2	354
2/3	354
3/1	257
3/2 (with short)	517(In) 408(Out)
3/3 (short)	109
4/1 (short)	273
4/2 (with short)	565(In) 292(Out)
4/3	272
5/1	311
5/2	304
5/3	185
6/1 (with short)	688(In) 143(Out)
6/2 (short)	545
7/1 (with short)	308(In) 122(Out)
7/2 (short)	186
8/1	147
8/2	618
9/1	596
9/2	272
10/1	466
10/2	817
11/1	585
11/2	341
11/3	132
12/1	404
12/2	335
13/1	584
13/2	185
14/1	273
15/1	525

Full Input Data And Results

15/2	0

Full Input Data And Results

Lane Saturation Flows

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 (A494 (w) offslip)	3.50	0.00	Y	Arm 11 Left	Inf	100.0 %	1965	1965
1/2 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	24.3 %	2105	2105
				Arm 11 Left	Inf	75.7 %		
1/3 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/1 (Circulatory (West))	3.50	0.00	N	Arm 11 Ahead	Inf	100.0 %	2105	2105
2/2 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	25.4 %	2105	2105
				Arm 11 Ahead	Inf	74.6 %		
2/3 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	100.0 %	2105	2105
3/1 (B5129 (N))	3.20	0.00	Y	Arm 12 Left	Inf	100.0 %	1935	1935
3/2 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
3/3 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
4/1 (A494 (E) offslip)	3.50	0.00	Y	Arm 13 Left	Inf	100.0 %	1965	1965
4/2 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	65.1 %	2105	2105
				Arm 13 Left	Inf	34.9 %		
4/3 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
5/1 (Circulatory (East))	3.50	0.00	N	Arm 13 Ahead	Inf	100.0 %	2105	2105
5/2 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	72.7 %	2105	2105
				Arm 13 Ahead	Inf	27.3 %		
5/3 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
6/1 (B5129 (S))	4.10	0.00	Y	Arm 10 Ahead	Inf	88.8 %	2025	2025
				Arm 14 Left	Inf	11.2 %		
6/2 (B5129 (S))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
7/1 (A550)	3.50	0.00	Y	Arm 2 Ahead	Inf	51.6 %	1965	1965
				Arm 15 Left	Inf	48.4 %		
7/2 (A550)	3.00	0.00	N	Arm 2 Ahead	Inf	100.0 %	2055	2055
8/1 (Circulatory (N))	4.20	0.00	N	Arm 12 Ahead	Inf	100.0 %	2175	2175
8/2 (Circulatory (N))	4.20	0.00	N	Arm 5 Right	Inf	45.8 %	2175	2175
				Arm 12 Ahead	Inf	54.2 %		
9/1	4.20	0.00	N	Arm 10 Right	Inf	56.9 %	2175	2175

(Circulatory (SE))				Arm 14 Ahead	Inf	43.1 %		
9/2 (Circulatory (SE))	4.20	0.00	N	Arm 10 Right	Inf	100.0 %	2175	2175
10/1 (Circulatory (SW))	4.20	0.00	N	Arm 15 Ahead	Inf	100.0 %	2175	2175
10/2 (Circulatory (SW))	4.20	0.00	N	Arm 2 Right	Inf	100.0 %	2175	2175
				Arm 15 Ahead	Inf	0.0 %		
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
11/3	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
13/2	Infinite Saturation Flow						Inf	Inf
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2023 Surveyed Flows - PM Peak' (FG2: '2023 Surveyed Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	229	175	171	423	998
	B	377	0	245	142	3	767
	C	291	309	0	28	245	873
	D	96	100	22	0	31	249
	E	385	49	123	81	0	638
	Tot.	1149	687	565	422	702	3525

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2023 Surveyed Flows - PM Peak
Junction: Unnamed Junction	
1/1	190
1/2	255
1/3	193
2/1	460
2/2	400
2/3	335
3/1	229
3/2 (with short)	769(In) 500(Out)
3/3 (short)	269
4/1 (short)	189
4/2 (with short)	390(In) 201(Out)
4/3	377
5/1	297
5/2	378
5/3	320
6/1 (with short)	873(In) 273(Out)
6/2 (short)	600
7/1 (with short)	249(In) 83(Out)
7/2 (short)	166
8/1	143
8/2	541
9/1	752
9/2	445
10/1	603
10/2	1045
11/1	650
11/2	347
11/3	152
12/1	372
12/2	315
13/1	486
13/2	79
14/1	422
15/1	634

Full Input Data And Results

15/2	68

Full Input Data And Results

Lane Saturation Flows

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 (A494 (w) offslip)	3.50	0.00	Y	Arm 11 Left	Inf	100.0 %	1965	1965
1/2 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	23.5 %	2105	2105
				Arm 11 Left	Inf	76.5 %		
1/3 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/1 (Circulatory (West))	3.50	0.00	N	Arm 11 Ahead	Inf	100.0 %	2105	2105
2/2 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	24.0 %	2105	2105
				Arm 11 Ahead	Inf	76.0 %		
2/3 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	100.0 %	2105	2105
3/1 (B5129 (N))	3.20	0.00	Y	Arm 12 Left	Inf	100.0 %	1935	1935
3/2 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
3/3 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
4/1 (A494 (E) offslip)	3.50	0.00	Y	Arm 13 Left	Inf	100.0 %	1965	1965
4/2 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	72.1 %	2105	2105
				Arm 13 Left	Inf	27.9 %		
4/3 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
5/1 (Circulatory (East))	3.50	0.00	N	Arm 13 Ahead	Inf	100.0 %	2105	2105
5/2 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	93.9 %	2105	2105
				Arm 13 Ahead	Inf	6.1 %		
5/3 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
6/1 (B5129 (S))	4.10	0.00	Y	Arm 10 Ahead	Inf	89.7 %	2025	2025
				Arm 14 Left	Inf	10.3 %		
6/2 (B5129 (S))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
7/1 (A550)	3.50	0.00	Y	Arm 2 Ahead	Inf	62.7 %	1965	1965
				Arm 15 Left	Inf	37.3 %		
7/2 (A550)	3.00	0.00	N	Arm 2 Ahead	Inf	100.0 %	2055	2055
8/1 (Circulatory (N))	4.20	0.00	N	Arm 12 Ahead	Inf	100.0 %	2175	2175
8/2 (Circulatory (N))	4.20	0.00	N	Arm 5 Right	Inf	41.8 %	2175	2175
				Arm 12 Ahead	Inf	58.2 %		
9/1	4.20	0.00	N	Arm 10 Right	Inf	47.6 %	2175	2175

(Circulatory (SE))				Arm 14 Ahead	Inf	52.4 %		
9/2 (Circulatory (SE))	4.20	0.00	N	Arm 10 Right	Inf	100.0 %	2175	2175
10/1 (Circulatory (SW))	4.20	0.00	N	Arm 15 Ahead	Inf	100.0 %	2175	2175
10/2 (Circulatory (SW))	4.20	0.00	N	Arm 2 Right	Inf	93.5 %	2175	2175
				Arm 15 Ahead	Inf	6.5 %		
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
11/3	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
13/2	Infinite Saturation Flow						Inf	Inf
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2033 Base Flows - AM Peak' (FG3: '2033 Base Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	269	202	117	222	810
	B	296	0	396	69	133	894
	C	248	327	0	17	133	725
	D	118	127	24	0	62	331
	E	457	64	186	86	0	793
	Tot.	1119	787	808	289	550	3553

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2033 Base Flows - AM Peak
Junction: Unnamed Junction	
1/1	240
1/2	290
1/3	263
2/1	380
2/2	380
2/3	380
3/1	269
3/2 (with short)	541(In) 434(Out)
3/3 (short)	107
4/1 (short)	289
4/2 (with short)	598(In) 309(Out)
4/3	296
5/1	326
5/2	322
5/3	189
6/1 (with short)	725(In) 150(Out)
6/2 (short)	575
7/1 (with short)	331(In) 128(Out)
7/2 (short)	203
8/1	160
8/2	654
9/1	627
9/2	296
10/1	488
10/2	871
11/1	620
11/2	358
11/3	141
12/1	429
12/2	358
13/1	615
13/2	193
14/1	289
15/1	550

Full Input Data And Results

15/2	0

Full Input Data And Results

Lane Saturation Flows

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 (A494 (w) offslip)	3.50	0.00	Y	Arm 11 Left	Inf	100.0 %	1965	1965
1/2 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	25.2 %	2105	2105
				Arm 11 Left	Inf	74.8 %		
1/3 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/1 (Circulatory (West))	3.50	0.00	N	Arm 11 Ahead	Inf	100.0 %	2105	2105
2/2 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	25.8 %	2105	2105
				Arm 11 Ahead	Inf	74.2 %		
2/3 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	100.0 %	2105	2105
3/1 (B5129 (N))	3.20	0.00	Y	Arm 12 Left	Inf	100.0 %	1935	1935
3/2 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
3/3 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
4/1 (A494 (E) offslip)	3.50	0.00	Y	Arm 13 Left	Inf	100.0 %	1965	1965
4/2 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	65.4 %	2105	2105
				Arm 13 Left	Inf	34.6 %		
4/3 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
5/1 (Circulatory (East))	3.50	0.00	N	Arm 13 Ahead	Inf	100.0 %	2105	2105
5/2 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	73.3 %	2105	2105
				Arm 13 Ahead	Inf	26.7 %		
5/3 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
6/1 (B5129 (S))	4.10	0.00	Y	Arm 10 Ahead	Inf	88.7 %	2025	2025
				Arm 14 Left	Inf	11.3 %		
6/2 (B5129 (S))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
7/1 (A550)	3.50	0.00	Y	Arm 2 Ahead	Inf	51.6 %	1965	1965
				Arm 15 Left	Inf	48.4 %		
7/2 (A550)	3.00	0.00	N	Arm 2 Ahead	Inf	100.0 %	2055	2055
8/1 (Circulatory (N))	4.20	0.00	N	Arm 12 Ahead	Inf	100.0 %	2175	2175
8/2 (Circulatory (N))	4.20	0.00	N	Arm 5 Right	Inf	45.3 %	2175	2175
				Arm 12 Ahead	Inf	54.7 %		
9/1	4.20	0.00	N	Arm 10 Right	Inf	56.6 %	2175	2175

(Circulatory (SE))				Arm 14 Ahead	Inf	43.4 %		
9/2 (Circulatory (SE))	4.20	0.00	N	Arm 10 Right	Inf	100.0 %	2175	2175
10/1 (Circulatory (SW))	4.20	0.00	N	Arm 15 Ahead	Inf	100.0 %	2175	2175
10/2 (Circulatory (SW))	4.20	0.00	N	Arm 2 Right	Inf	100.0 %	2175	2175
				Arm 15 Ahead	Inf	0.0 %		
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
11/3	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
13/2	Infinite Saturation Flow						Inf	Inf
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2033 Base Flows - PM Peak' (FG4: '2033 Base Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	240	183	179	443	1045
	B	403	0	262	154	3	822
	C	305	326	0	29	256	916
	D	100	107	23	0	32	262
	E	403	51	129	85	0	668
	Tot.	1211	724	597	447	734	3713

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 Base Flows - PM Peak
Junction: Unnamed Junction	
1/1	201
1/2	266
1/3	201
2/1	496
2/2	420
2/3	348
3/1	240
3/2 (with short)	805(In) 516(Out)
3/3 (short)	289
4/1 (short)	203
4/2 (with short)	419(In) 216(Out)
4/3	403
5/1	306
5/2	400
5/3	336
6/1 (with short)	916(In) 285(Out)
6/2 (short)	631
7/1 (with short)	262(In) 86(Out)
7/2 (short)	176
8/1	157
8/2	564
9/1	808
9/2	459
10/1	646
10/2	1090
11/1	697
11/2	358
11/3	156
12/1	397
12/2	327
13/1	509
13/2	88
14/1	447
15/1	678

Full Input Data And Results

15/2	56

Full Input Data And Results

Lane Saturation Flows

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 (A494 (w) offslip)	3.50	0.00	Y	Arm 11 Left	Inf	100.0 %	1965	1965
1/2 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	24.1 %	2105	2105
				Arm 11 Left	Inf	75.9 %		
1/3 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/1 (Circulatory (West))	3.50	0.00	N	Arm 11 Ahead	Inf	100.0 %	2105	2105
2/2 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	25.7 %	2105	2105
				Arm 11 Ahead	Inf	74.3 %		
2/3 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	100.0 %	2105	2105
3/1 (B5129 (N))	3.20	0.00	Y	Arm 12 Left	Inf	100.0 %	1935	1935
3/2 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
3/3 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
4/1 (A494 (E) offslip)	3.50	0.00	Y	Arm 13 Left	Inf	100.0 %	1965	1965
4/2 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	72.7 %	2105	2105
				Arm 13 Left	Inf	27.3 %		
4/3 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
5/1 (Circulatory (East))	3.50	0.00	N	Arm 13 Ahead	Inf	100.0 %	2105	2105
5/2 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	92.8 %	2105	2105
				Arm 13 Ahead	Inf	7.2 %		
5/3 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
6/1 (B5129 (S))	4.10	0.00	Y	Arm 10 Ahead	Inf	89.8 %	2025	2025
				Arm 14 Left	Inf	10.2 %		
6/2 (B5129 (S))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
7/1 (A550)	3.50	0.00	Y	Arm 2 Ahead	Inf	62.8 %	1965	1965
				Arm 15 Left	Inf	37.2 %		
7/2 (A550)	3.00	0.00	N	Arm 2 Ahead	Inf	100.0 %	2055	2055
8/1 (Circulatory (N))	4.20	0.00	N	Arm 12 Ahead	Inf	100.0 %	2175	2175
8/2 (Circulatory (N))	4.20	0.00	N	Arm 5 Right	Inf	42.0 %	2175	2175
				Arm 12 Ahead	Inf	58.0 %		
9/1	4.20	0.00	N	Arm 10 Right	Inf	48.3 %	2175	2175

(Circulatory (SE))				Arm 14 Ahead	Inf	51.7 %		
9/2 (Circulatory (SE))	4.20	0.00	N	Arm 10 Right	Inf	100.0 %	2175	2175
10/1 (Circulatory (SW))	4.20	0.00	N	Arm 15 Ahead	Inf	100.0 %	2175	2175
10/2 (Circulatory (SW))	4.20	0.00	N	Arm 2 Right	Inf	94.9 %	2175	2175
				Arm 15 Ahead	Inf	5.1 %		
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
11/3	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
13/2	Infinite Saturation Flow						Inf	Inf
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2033 With Development Flows - AM Peak' (FG5: '2033 With Development Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	269	202	119	222	812
	B	296	0	396	83	133	908
	C	248	327	0	17	133	725
	D	127	131	62	0	62	382
	E	457	64	186	89	0	796
	Tot.	1128	791	846	308	550	3623

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2033 With Development Flows - AM Peak
Junction: Unnamed Junction	
1/1	239
1/2	290
1/3	267
2/1	395
2/2	399
2/3	397
3/1	269
3/2 (with short)	543(In) 422(Out)
3/3 (short)	121
4/1 (short)	295
4/2 (with short)	612(In) 317(Out)
4/3	296
5/1	348
5/2	328
5/3	204
6/1 (with short)	725(In) 150(Out)
6/2 (short)	575
7/1 (with short)	382(In) 133(Out)
7/2 (short)	249
8/1	184
8/2	675
9/1	646
9/2	296
10/1	488
10/2	871
11/1	634
11/2	356
11/3	138
12/1	453
12/2	338
13/1	643
13/2	203
14/1	308
15/1	550

Full Input Data And Results

15/2	0

Full Input Data And Results

Lane Saturation Flows

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 (A494 (w) offslip)	3.50	0.00	Y	Arm 11 Left	Inf	100.0 %	1965	1965
1/2 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	24.8 %	2105	2105
				Arm 11 Left	Inf	75.2 %		
1/3 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/1 (Circulatory (West))	3.50	0.00	N	Arm 11 Ahead	Inf	100.0 %	2105	2105
2/2 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	30.8 %	2105	2105
				Arm 11 Ahead	Inf	69.2 %		
2/3 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	100.0 %	2105	2105
3/1 (B5129 (N))	3.20	0.00	Y	Arm 12 Left	Inf	100.0 %	1935	1935
3/2 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
3/3 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
4/1 (A494 (E) offslip)	3.50	0.00	Y	Arm 13 Left	Inf	100.0 %	1965	1965
4/2 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	68.1 %	2105	2105
				Arm 13 Left	Inf	31.9 %		
4/3 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
5/1 (Circulatory (East))	3.50	0.00	N	Arm 13 Ahead	Inf	100.0 %	2105	2105
5/2 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	68.9 %	2105	2105
				Arm 13 Ahead	Inf	31.1 %		
5/3 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
6/1 (B5129 (S))	4.10	0.00	Y	Arm 10 Ahead	Inf	88.7 %	2025	2025
				Arm 14 Left	Inf	11.3 %		
6/2 (B5129 (S))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
7/1 (A550)	3.50	0.00	Y	Arm 2 Ahead	Inf	53.4 %	1965	1965
				Arm 15 Left	Inf	46.6 %		
7/2 (A550)	3.00	0.00	N	Arm 2 Ahead	Inf	100.0 %	2055	2055
8/1 (Circulatory (N))	4.20	0.00	N	Arm 12 Ahead	Inf	100.0 %	2175	2175
8/2 (Circulatory (N))	4.20	0.00	N	Arm 5 Right	Inf	49.9 %	2175	2175
				Arm 12 Ahead	Inf	50.1 %		
9/1	4.20	0.00	N	Arm 10 Right	Inf	55.0 %	2175	2175

(Circulatory (SE))				Arm 14 Ahead	Inf	45.0 %		
9/2 (Circulatory (SE))	4.20	0.00	N	Arm 10 Right	Inf	100.0 %	2175	2175
10/1 (Circulatory (SW))	4.20	0.00	N	Arm 15 Ahead	Inf	100.0 %	2175	2175
10/2 (Circulatory (SW))	4.20	0.00	N	Arm 2 Right	Inf	100.0 %	2175	2175
				Arm 15 Ahead	Inf	0.0 %		
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
11/3	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
13/2	Infinite Saturation Flow						Inf	Inf
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2033 With Development Flows - PM Peak' (FG6: '2033 With Development Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	240	183	182	443	1048
	B	403	0	262	187	3	855
	C	305	326	0	29	256	916
	D	105	108	41	0	32	286
	E	403	51	129	93	0	676
	Tot.	1216	725	615	491	734	3781

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2033 With Development Flows - PM Peak
Junction: Unnamed Junction	
1/1	202
1/2	266
1/3	208
2/1	491
2/2	441
2/3	356
3/1	240
3/2 (with short)	808(In) 524(Out)
3/3 (short)	284
4/1 (short)	219
4/2 (with short)	452(In) 233(Out)
4/3	403
5/1	321
5/2	414
5/3	336
6/1 (with short)	916(In) 285(Out)
6/2 (short)	631
7/1 (with short)	286(In) 93(Out)
7/2 (short)	193
8/1	169
8/2	579
9/1	822
9/2	489
10/1	616
10/2	1120
11/1	693
11/2	362
11/3	161
12/1	409
12/2	316
13/1	540
13/2	75
14/1	491
15/1	648

Full Input Data And Results

15/2	86

Full Input Data And Results

Lane Saturation Flows

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 (A494 (w) offslip)	3.50	0.00	Y	Arm 11 Left	Inf	100.0 %	1965	1965
1/2 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	24.4 %	2105	2105
				Arm 11 Left	Inf	75.6 %		
1/3 (A494 (w) offslip)	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/1 (Circulatory (West))	3.50	0.00	N	Arm 11 Ahead	Inf	100.0 %	2105	2105
2/2 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	27.0 %	2105	2105
				Arm 11 Ahead	Inf	73.0 %		
2/3 (Circulatory (West))	3.50	0.00	N	Arm 8 Right	Inf	100.0 %	2105	2105
3/1 (B5129 (N))	3.20	0.00	Y	Arm 12 Left	Inf	100.0 %	1935	1935
3/2 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
3/3 (B5129 (N))	3.20	0.00	N	Arm 5 Ahead	Inf	100.0 %	2075	2075
4/1 (A494 (E) offslip)	3.50	0.00	Y	Arm 13 Left	Inf	100.0 %	1965	1965
4/2 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	81.5 %	2105	2105
				Arm 13 Left	Inf	18.5 %		
4/3 (A494 (E) offslip)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
5/1 (Circulatory (East))	3.50	0.00	N	Arm 13 Ahead	Inf	100.0 %	2105	2105
5/2 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	92.3 %	2105	2105
				Arm 13 Ahead	Inf	7.7 %		
5/3 (Circulatory (East))	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
6/1 (B5129 (S))	4.10	0.00	Y	Arm 10 Ahead	Inf	89.8 %	2025	2025
				Arm 14 Left	Inf	10.2 %		
6/2 (B5129 (S))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
7/1 (A550)	3.50	0.00	Y	Arm 2 Ahead	Inf	65.6 %	1965	1965
				Arm 15 Left	Inf	34.4 %		
7/2 (A550)	3.00	0.00	N	Arm 2 Ahead	Inf	100.0 %	2055	2055
8/1 (Circulatory (N))	4.20	0.00	N	Arm 12 Ahead	Inf	100.0 %	2175	2175
8/2 (Circulatory (N))	4.20	0.00	N	Arm 5 Right	Inf	45.4 %	2175	2175
				Arm 12 Ahead	Inf	54.6 %		
9/1	4.20	0.00	N	Arm 10 Right	Inf	43.8 %	2175	2175

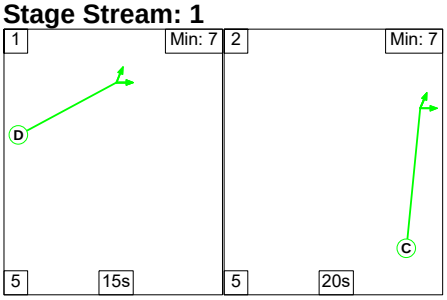
Full Input Data And Results

(Circulatory (SE))				Arm 14 Ahead	Inf	56.2 %		
9/2 (Circulatory (SE))	4.20	0.00	N	Arm 10 Right	Inf	100.0 %	2175	2175
10/1 (Circulatory (SW))	4.20	0.00	N	Arm 15 Ahead	Inf	100.0 %	2175	2175
10/2 (Circulatory (SW))	4.20	0.00	N	Arm 2 Right	Inf	92.3 %	2175	2175
				Arm 15 Ahead	Inf	7.7 %		
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
11/3	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
13/2	Infinite Saturation Flow						Inf	Inf
14/1	Infinite Saturation Flow						Inf	Inf
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

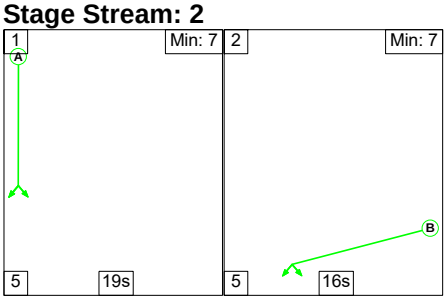
Scenario 1: '2023 Surveyed Flows - AM Peak' (FG1: '2023 Surveyed Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

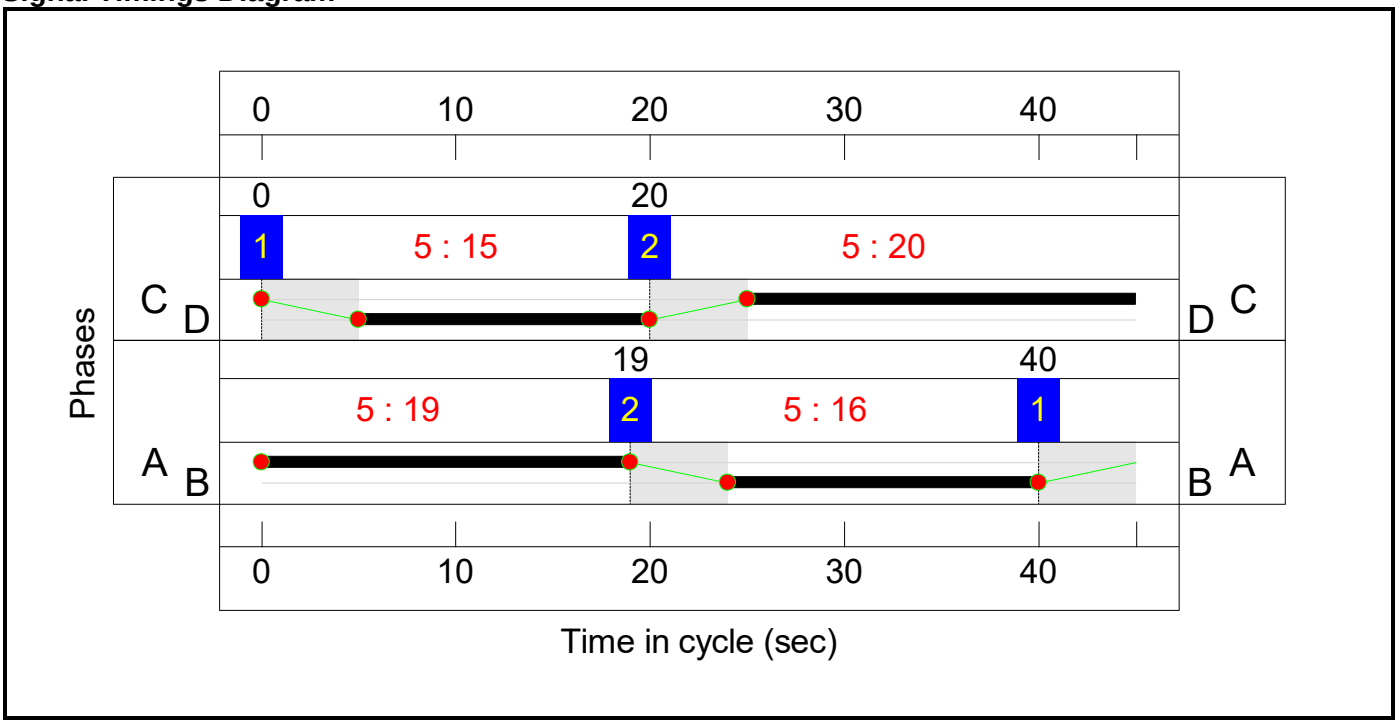
Stage	1	2
Duration	15	20
Change Point	0	20

Full Input Data And Results

Stage Stream: 2

Stage	1	2
Duration	19	16
Change Point	40	19

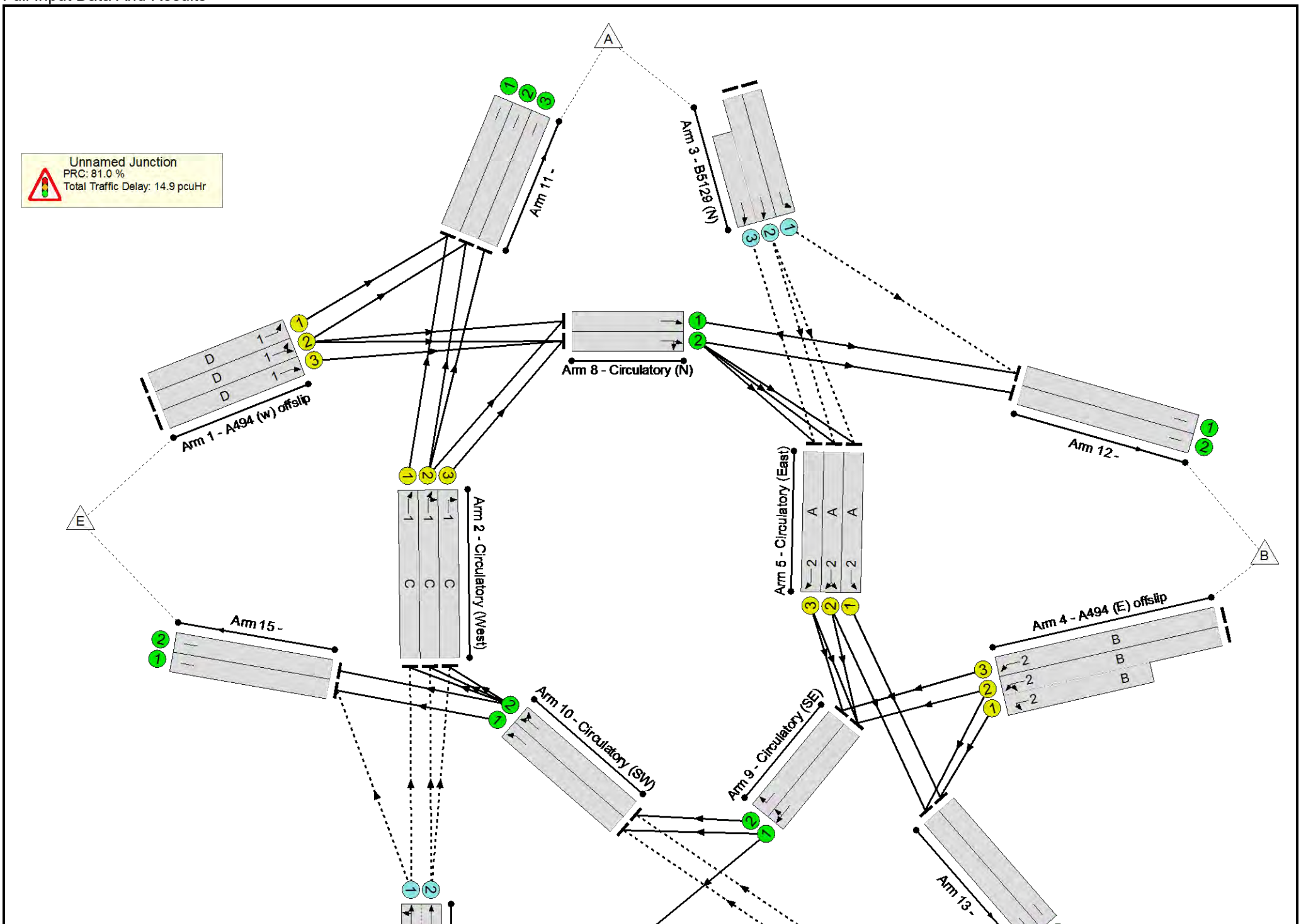
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**49.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**49.7%**
1/1	A494 (w) offslip Left	U	1	N/A	D		1	15	-	227	1965	699	32.5%
1/2	A494 (w) offslip Ahead Left	U	1	N/A	D		1	15	-	276	2105	748	36.9%
1/3	A494 (w) offslip Ahead	U	1	N/A	D		1	15	-	254	2105	748	33.9%
2/1	Circulatory (West) Ahead	U	1	N/A	C		1	20	-	358	2105	982	36.4%
2/2	Circulatory (West) Right Ahead	U	1	N/A	C		1	20	-	354	2105	982	36.0%
2/3	Circulatory (West) Right	U	1	N/A	C		1	20	-	354	2105	982	36.0%
3/1	B5129 (N) Left	O	N/A	N/A	-		-	-	-	257	1935	866	29.7%
3/2+3/3	B5129 (N) Ahead	O	N/A	N/A	-		-	-	-	517	2075:2075	1097	47.1%
4/2+4/1	A494 (E) offslip Ahead Left	U	2	N/A	B		1	16	-	565	2105:1965	1538	36.7%
4/3	A494 (E) offslip Ahead	U	2	N/A	B		1	16	-	272	2105	795	34.2%
5/1	Circulatory (East) Ahead	U	2	N/A	A		1	19	-	311	2105	936	33.2%
5/2	Circulatory (East) Ahead Ahead2	U	2	N/A	A		1	19	-	304	2105	936	32.5%
5/3	Circulatory (East) Ahead	U	2	N/A	A		1	19	-	185	2105	936	19.8%
6/1+6/2	B5129 (S) Ahead Left	O	N/A	N/A	-		-	-	-	688	2025:2155	1384	49.7%
7/1+7/2	A550 Ahead Left	O	N/A	N/A	-		-	-	-	308	1965:2055	1007	30.6%

Full Input Data And Results

8/1	Circulatory (N) Ahead	U	N/A	N/A	-		-	-	-	147	2175	2175	6.8%
8/2	Circulatory (N) Right Ahead	U	N/A	N/A	-		-	-	-	618	2175	2175	28.4%
9/1	Circulatory (SE) Right Ahead	U	N/A	N/A	-		-	-	-	596	2175	2175	27.4%
9/2	Circulatory (SE) Right	U	N/A	N/A	-		-	-	-	272	2175	2175	12.5%
10/1	Circulatory (SW) Ahead	U	N/A	N/A	-		-	-	-	466	2175	2175	21.4%
10/2	Circulatory (SW) Right Ahead	U	N/A	N/A	-		-	-	-	817	2175	2175	37.6%
11/1		U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	341	Inf	Inf	0.0%
11/3		U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
13/2		U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%
14/1		U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	525	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3283**	**0**	**0**	**9.8**	**5.1**	**0.0**	**14.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3283**	**0**	**0**	**9.8**	**5.1**	**0.0**	**14.9**	**-**	**-**	**-**	**-**
1/1	227	227	-	-	-	0.7	0.2	-	0.9	14.4	2.0	0.2	2.3
1/2	276	276	-	-	-	0.8	0.3	-	1.1	14.6	2.5	0.3	2.8
1/3	254	254	-	-	-	0.7	0.3	-	1.0	14.3	2.3	0.3	2.5
2/1	358	358	-	-	-	1.0	0.3	-	1.3	12.7	2.8	0.3	3.1
2/2	354	354	-	-	-	0.9	0.3	-	1.2	12.1	2.8	0.3	3.0
2/3	354	354	-	-	-	0.8	0.3	-	1.1	10.8	2.8	0.3	3.1
3/1	257	257	257	0	0	0.0	0.2	-	0.2	3.0	0.1	0.2	0.3
3/2+3/3	517	517	1034	0	0	0.0	0.4	-	0.5	3.1	0.3	0.4	0.8
4/2+4/1	565	565	-	-	-	1.6	0.3	-	1.9	12.0	2.6	0.3	2.9
4/3	272	272	-	-	-	0.8	0.3	-	1.0	13.5	2.4	0.3	2.7
5/1	311	311	-	-	-	1.1	0.2	-	1.3	15.4	2.9	0.2	3.2
5/2	304	304	-	-	-	0.8	0.2	-	1.0	12.4	2.6	0.2	2.8
5/3	185	185	-	-	-	0.6	0.1	-	0.7	14.1	1.6	0.1	1.8
6/1+6/2	688	688	1376	0	0	0.1	0.5	-	0.6	2.9	1.1	0.5	1.6
7/1+7/2	308	308	616	0	0	0.0	0.2	-	0.2	2.6	0.1	0.2	0.3
8/1	147	147	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
8/2	618	618	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
9/1	596	596	-	-	-	0.0	0.2	-	0.2	1.2	2.5	0.2	2.7
9/2	272	272	-	-	-	0.0	0.1	-	0.1	0.9	0.0	0.1	0.1
10/1	466	466	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
10/2	817	817	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
11/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

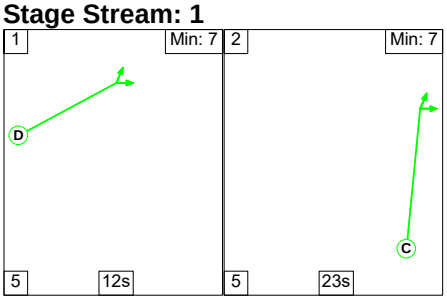
C1	Stream: 1 PRC for Signalled Lanes (%):	144.1	Total Delay for Signalled Lanes (pcuHr):	6.54	Cycle Time (s):	45		
C1	Stream: 2 PRC for Signalled Lanes (%):	144.9	Total Delay for Signalled Lanes (pcuHr):	5.99	Cycle Time (s):	45		
	PRC Over All Lanes (%):	81.0	Total Delay Over All Lanes(pcuHr):	14.92				

Full Input Data And Results

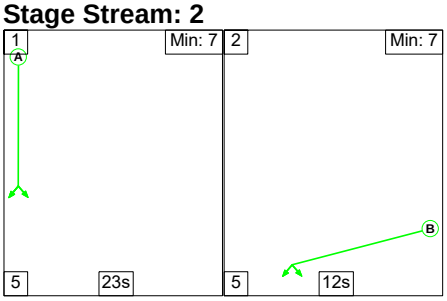
Scenario 2: '2023 Surveyed Flows - PM Peak' (FG2: '2023 Surveyed Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

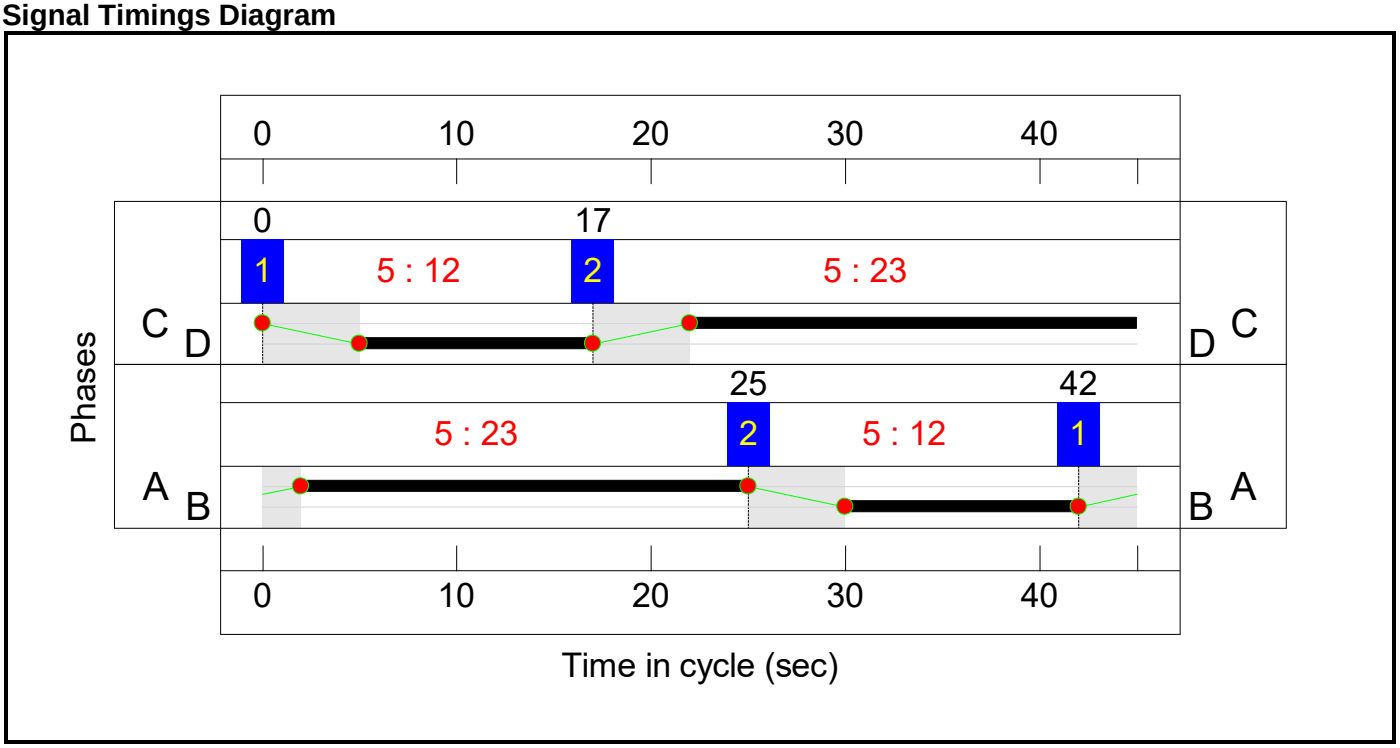
Stage Stream: 1

Stage	1	2
Duration	12	23
Change Point	0	17

Stage Stream: 2

Stage	1	2
Duration	23	12
Change Point	42	25

Signal Timings Diagram

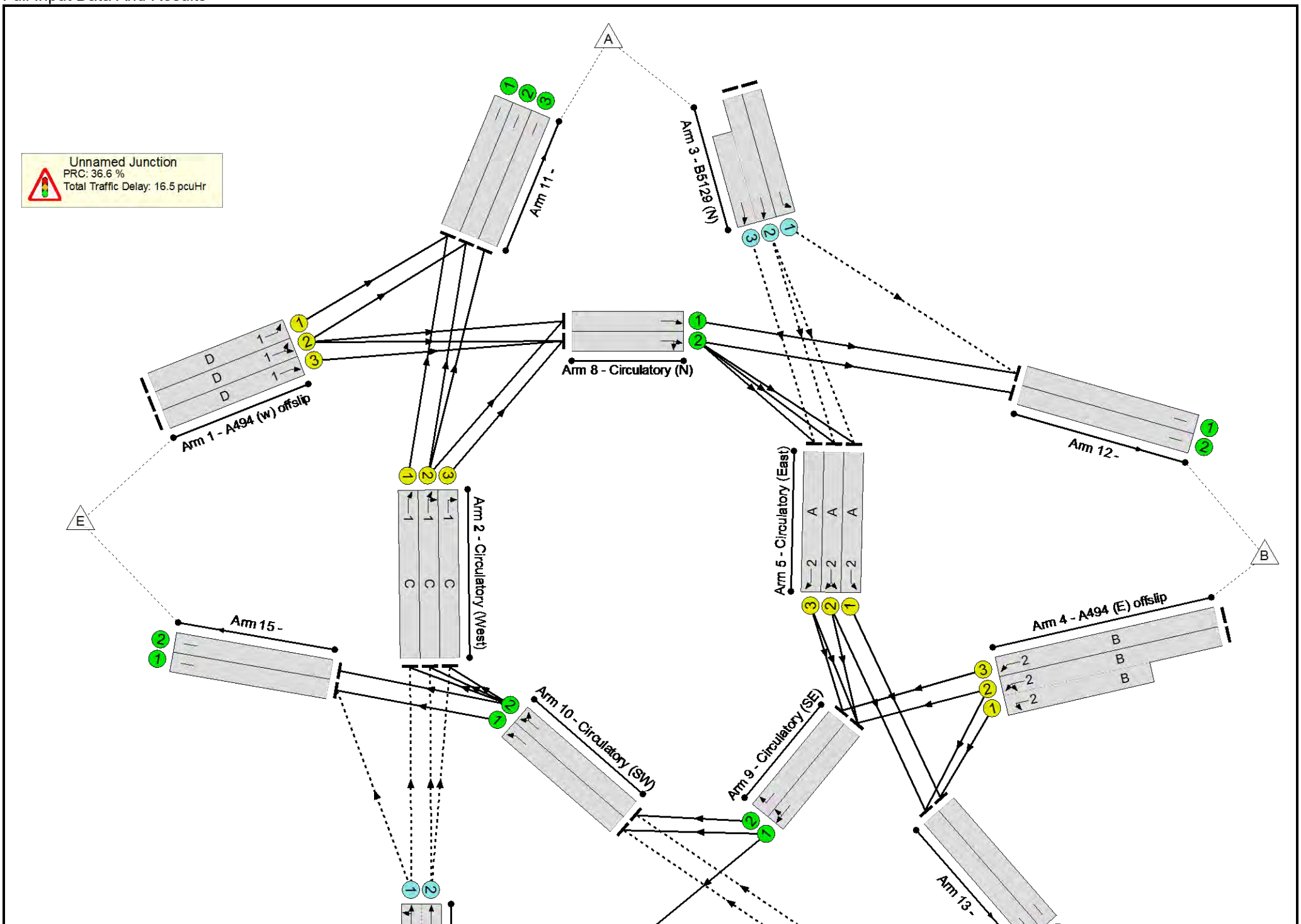


Full Input Data And Results

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.9%**
1/1	A494 (w) offslip Left	U	1	N/A	D		1	12	-	190	1965	568	33.5%
1/2	A494 (w) offslip Ahead Left	U	1	N/A	D		1	12	-	255	2105	608	41.9%
1/3	A494 (w) offslip Ahead	U	1	N/A	D		1	12	-	193	2105	608	31.7%
2/1	Circulatory (West) Ahead	U	1	N/A	C		1	23	-	460	2105	1123	41.0%
2/2	Circulatory (West) Right Ahead	U	1	N/A	C		1	23	-	400	2105	1123	35.6%
2/3	Circulatory (West) Right	U	1	N/A	C		1	23	-	335	2105	1123	29.8%
3/1	B5129 (N) Left	O	N/A	N/A	-		-	-	-	229	1935	897	25.5%
3/2+3/3	B5129 (N) Ahead	O	N/A	N/A	-		-	-	-	769	2075:2075	1380	55.7%
4/2+4/1	A494 (E) offslip Ahead Left	U	2	N/A	B		1	12	-	390	2105:1965	1176	33.2%
4/3	A494 (E) offslip Ahead	U	2	N/A	B		1	12	-	377	2105	608	62.0%
5/1	Circulatory (East) Ahead	U	2	N/A	A		1	23	-	297	2105	1123	26.5%
5/2	Circulatory (East) Ahead Ahead2	U	2	N/A	A		1	23	-	378	2105	1123	33.7%
5/3	Circulatory (East) Ahead	U	2	N/A	A		1	23	-	320	2105	1123	28.5%
6/1+6/2	B5129 (S) Ahead Left	O	N/A	N/A	-		-	-	-	873	2025:2155	1325	65.9%
7/1+7/2	A550 Ahead Left	O	N/A	N/A	-		-	-	-	249	1965:2055	732	34.0%

Full Input Data And Results

8/1	Circulatory (N) Ahead	U	N/A	N/A	-		-	-	-	143	2175	2175	6.6%
8/2	Circulatory (N) Right Ahead	U	N/A	N/A	-		-	-	-	541	2175	2175	24.9%
9/1	Circulatory (SE) Right Ahead	U	N/A	N/A	-		-	-	-	752	2175	2175	34.6%
9/2	Circulatory (SE) Right	U	N/A	N/A	-		-	-	-	445	2175	2175	20.5%
10/1	Circulatory (SW) Ahead	U	N/A	N/A	-		-	-	-	603	2175	2175	27.7%
10/2	Circulatory (SW) Right Ahead	U	N/A	N/A	-		-	-	-	1045	2175	2175	48.0%
11/1		U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	347	Inf	Inf	0.0%
11/3		U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
13/2		U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
14/1		U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	68	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**4011**	**0**	**0**	**9.9**	**6.6**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**4011**	**0**	**0**	**9.9**	**6.6**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
1/1	190	190	-	-	-	0.7	0.3	-	0.9	17.4	1.8	0.3	2.1
1/2	255	255	-	-	-	0.9	0.4	-	1.3	18.1	2.5	0.4	2.9
1/3	193	193	-	-	-	0.7	0.2	-	0.9	16.9	1.9	0.2	2.1
2/1	460	460	-	-	-	1.5	0.3	-	1.8	14.3	4.7	0.3	5.0
2/2	400	400	-	-	-	1.0	0.3	-	1.3	11.3	3.4	0.3	3.7
2/3	335	335	-	-	-	0.5	0.2	-	0.7	7.6	2.1	0.2	2.3
3/1	229	229	229	0	0	0.0	0.2	-	0.2	2.7	0.0	0.2	0.2
3/2+3/3	769	769	1538	0	0	0.0	0.6	-	0.6	3.0	0.4	0.6	1.0
4/2+4/1	390	390	-	-	-	1.4	0.2	-	1.6	14.9	2.0	0.2	2.2
4/3	377	377	-	-	-	1.5	0.8	-	2.3	21.6	4.0	0.8	4.8
5/1	297	297	-	-	-	0.5	0.2	-	0.6	7.7	1.6	0.2	1.8
5/2	378	378	-	-	-	0.6	0.3	-	0.9	8.3	2.5	0.3	2.8
5/3	320	320	-	-	-	0.5	0.2	-	0.7	7.9	2.0	0.2	2.2
6/1+6/2	873	873	1746	0	0	0.2	1.0	-	1.2	4.9	2.0	1.0	3.0
7/1+7/2	249	249	498	0	0	0.0	0.3	-	0.3	3.7	0.0	0.3	0.3
8/1	143	143	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
8/2	541	541	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
9/1	752	752	-	-	-	0.0	0.3	-	0.3	1.4	3.3	0.3	3.5
9/2	445	445	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
10/1	603	603	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
10/2	1045	1045	-	-	-	0.0	0.5	-	0.5	1.6	0.0	0.5	0.5
11/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	68	68	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

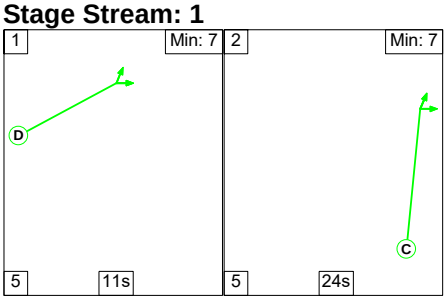
C1	Stream: 1 PRC for Signalled Lanes (%):	114.6	Total Delay for Signalled Lanes (pcuHr):	6.89	Cycle Time (s):	45
C1	Stream: 2 PRC for Signalled Lanes (%):	45.2	Total Delay for Signalled Lanes (pcuHr):	6.09	Cycle Time (s):	45
	PRC Over All Lanes (%):	36.6	Total Delay Over All Lanes(pcuHr):	16.51		

Full Input Data And Results

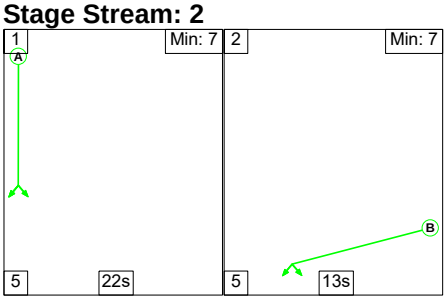
Scenario 3: '2033 Base Flows - AM Peak' (FG3: '2033 Base Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

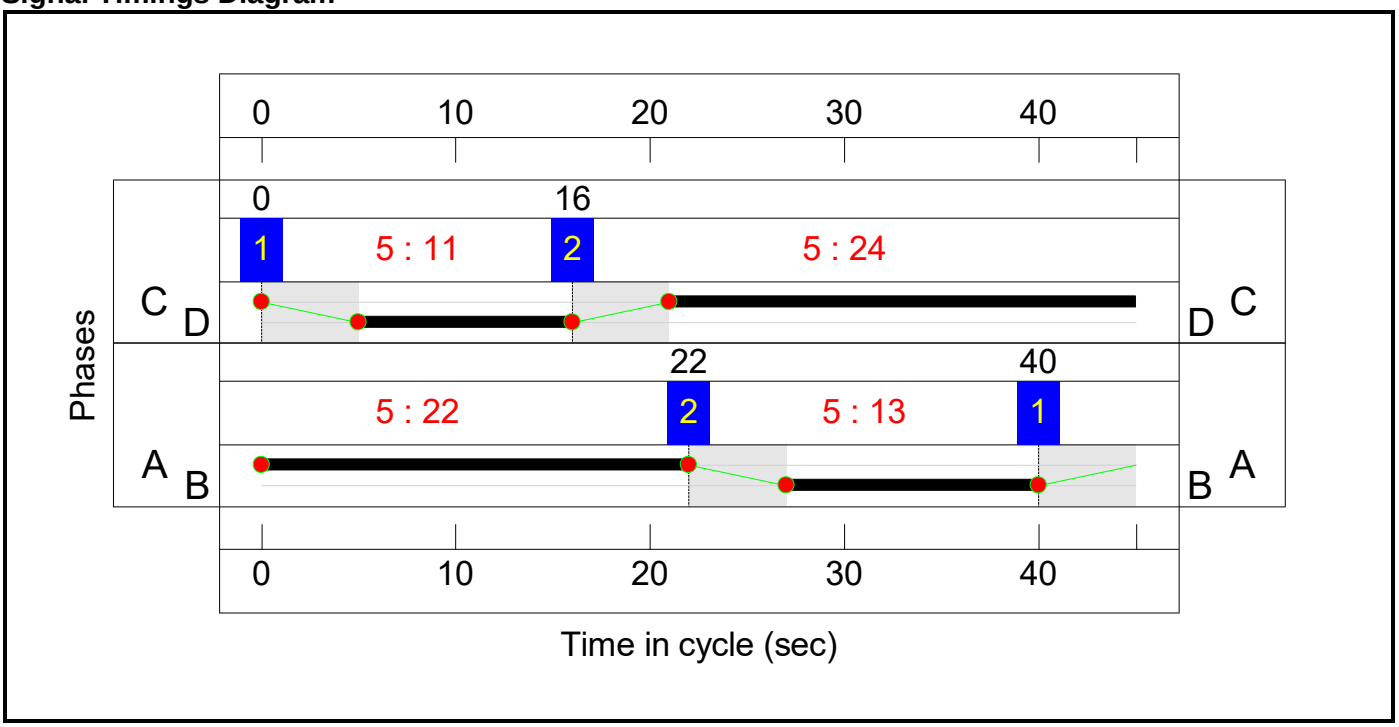
Stage Stream: 1

Stage	1	2
Duration	11	24
Change Point	0	16

Stage Stream: 2

Stage	1	2
Duration	22	13
Change Point	40	22

Signal Timings Diagram

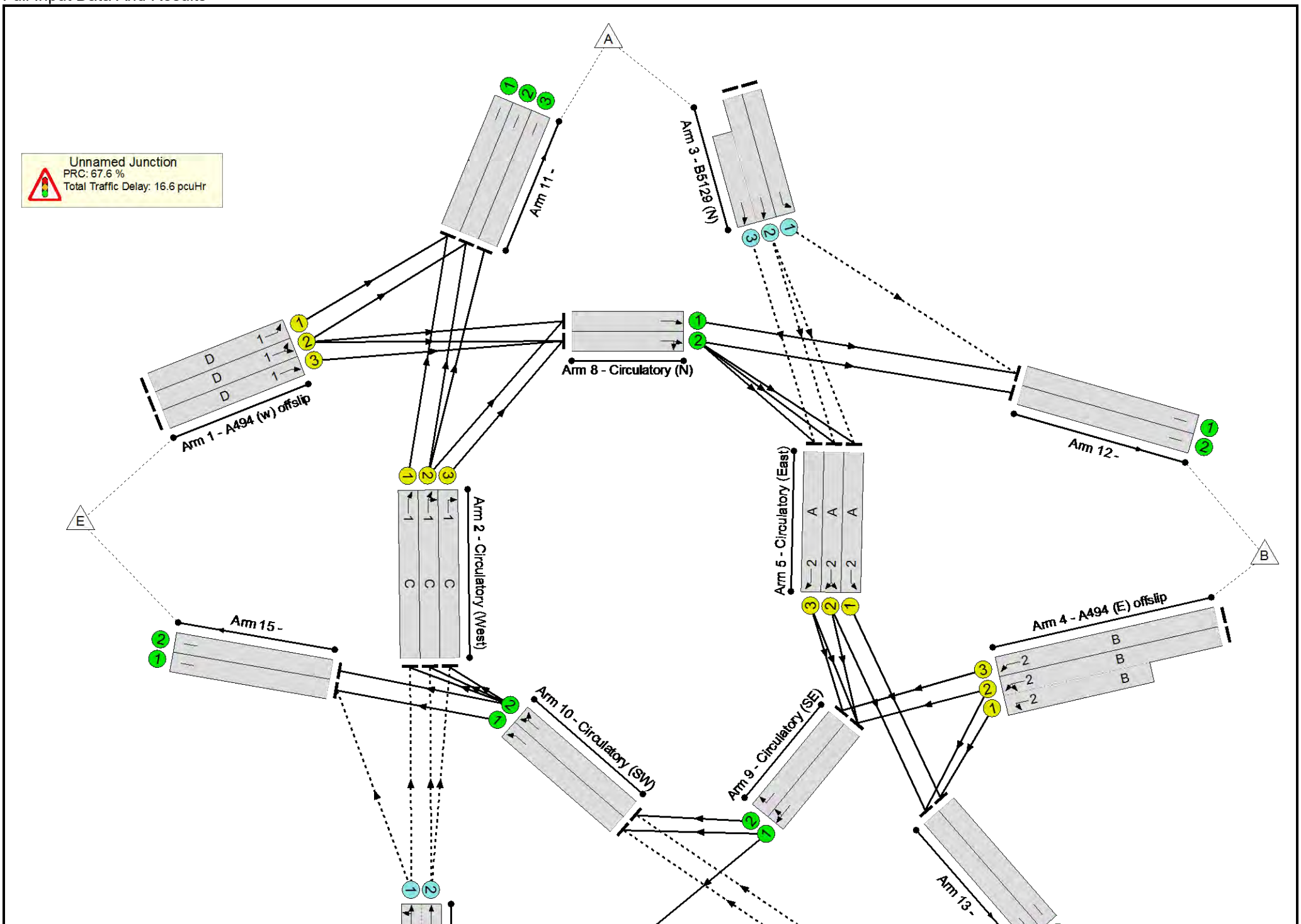


Full Input Data And Results

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**53.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**53.7%**
1/1	A494 (w) offslip Left	U	1	N/A	D		1	11	-	240	1965	524	45.8%
1/2	A494 (w) offslip Ahead Left	U	1	N/A	D		1	11	-	290	2105	561	51.7%
1/3	A494 (w) offslip Ahead	U	1	N/A	D		1	11	-	263	2105	561	46.9%
2/1	Circulatory (West) Ahead	U	1	N/A	C		1	24	-	380	2105	1169	32.5%
2/2	Circulatory (West) Right Ahead	U	1	N/A	C		1	24	-	380	2105	1169	32.5%
2/3	Circulatory (West) Right	U	1	N/A	C		1	24	-	380	2105	1169	32.5%
3/1	B5129 (N) Left	O	N/A	N/A	-		-	-	-	269	1935	846	31.8%
3/2+3/3	B5129 (N) Ahead	O	N/A	N/A	-		-	-	-	541	2075:2075	1055	51.3%
4/2+4/1	A494 (E) offslip Ahead Left	U	2	N/A	B		1	13	-	598	2105:1965	1266	47.2%
4/3	A494 (E) offslip Ahead	U	2	N/A	B		1	13	-	296	2105	655	45.2%
5/1	Circulatory (East) Ahead	U	2	N/A	A		1	22	-	326	2105	1076	30.3%
5/2	Circulatory (East) Ahead Ahead2	U	2	N/A	A		1	22	-	322	2105	1076	29.9%
5/3	Circulatory (East) Ahead	U	2	N/A	A		1	22	-	189	2105	1076	17.6%
6/1+6/2	B5129 (S) Ahead Left	O	N/A	N/A	-		-	-	-	725	2025:2155	1350	53.7%
7/1+7/2	A550 Ahead Left	O	N/A	N/A	-		-	-	-	331	1965:2055	951	34.8%

Full Input Data And Results

8/1	Circulatory (N) Ahead	U	N/A	N/A	-		-	-	-	160	2175	2175	7.4%
8/2	Circulatory (N) Right Ahead	U	N/A	N/A	-		-	-	-	654	2175	2175	30.1%
9/1	Circulatory (SE) Right Ahead	U	N/A	N/A	-		-	-	-	627	2175	2175	28.8%
9/2	Circulatory (SE) Right	U	N/A	N/A	-		-	-	-	296	2175	2175	13.6%
10/1	Circulatory (SW) Ahead	U	N/A	N/A	-		-	-	-	488	2175	2175	22.4%
10/2	Circulatory (SW) Right Ahead	U	N/A	N/A	-		-	-	-	871	2175	2175	40.0%
11/1		U	N/A	N/A	-		-	-	-	620	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
11/3		U	N/A	N/A	-		-	-	-	141	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
13/2		U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
14/1		U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	550	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3463**	**0**	**0**	**10.5**	**6.1**	**0.0**	**16.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3463**	**0**	**0**	**10.5**	**6.1**	**0.0**	**16.6**	**-**	**-**	**-**	**-**
1/1	240	240	-	-	-	0.9	0.4	-	1.3	20.1	2.5	0.4	2.9
1/2	290	290	-	-	-	1.1	0.5	-	1.7	20.7	3.1	0.5	3.6
1/3	263	263	-	-	-	1.0	0.4	-	1.5	19.9	2.7	0.4	3.1
2/1	380	380	-	-	-	1.0	0.2	-	1.2	11.8	3.3	0.2	3.5
2/2	380	380	-	-	-	0.9	0.2	-	1.1	10.4	3.1	0.2	3.3
2/3	380	380	-	-	-	0.5	0.2	-	0.8	7.4	2.5	0.2	2.8
3/1	269	269	269	0	0	0.0	0.2	-	0.2	3.1	0.0	0.2	0.2
3/2+3/3	541	541	1082	0	0	0.0	0.5	-	0.5	3.5	0.5	0.5	1.0
4/2+4/1	598	598	-	-	-	2.1	0.4	-	2.5	15.2	3.1	0.4	3.5
4/3	296	296	-	-	-	1.0	0.4	-	1.4	17.4	3.0	0.4	3.4
5/1	326	326	-	-	-	0.8	0.2	-	1.0	10.8	2.4	0.2	2.6
5/2	322	322	-	-	-	0.6	0.2	-	0.8	9.4	2.3	0.2	2.5
5/3	189	189	-	-	-	0.4	0.1	-	0.5	10.0	1.3	0.1	1.4
6/1+6/2	725	725	1450	0	0	0.1	0.6	-	0.7	3.4	1.6	0.6	2.2
7/1+7/2	331	331	662	0	0	0.0	0.3	-	0.3	2.9	0.2	0.3	0.5
8/1	160	160	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
8/2	654	654	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
9/1	627	627	-	-	-	0.0	0.2	-	0.2	1.2	1.9	0.2	2.1
9/2	296	296	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
10/1	488	488	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
10/2	871	871	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
11/1	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	141	141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

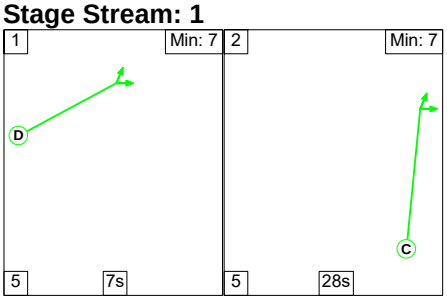
C1	Stream: 1 PRC for Signalled Lanes (%):	74.2	Total Delay for Signalled Lanes (pcuHr):	7.57	Cycle Time (s):	45
C1	Stream: 2 PRC for Signalled Lanes (%):	90.6	Total Delay for Signalled Lanes (pcuHr):	6.30	Cycle Time (s):	45
	PRC Over All Lanes (%):	67.6	Total Delay Over All Lanes(pcuHr):	16.60		

Full Input Data And Results

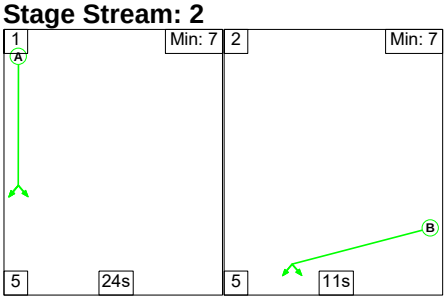
Scenario 4: '2033 Base Flows - PM Peak' (FG4: '2033 Base Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

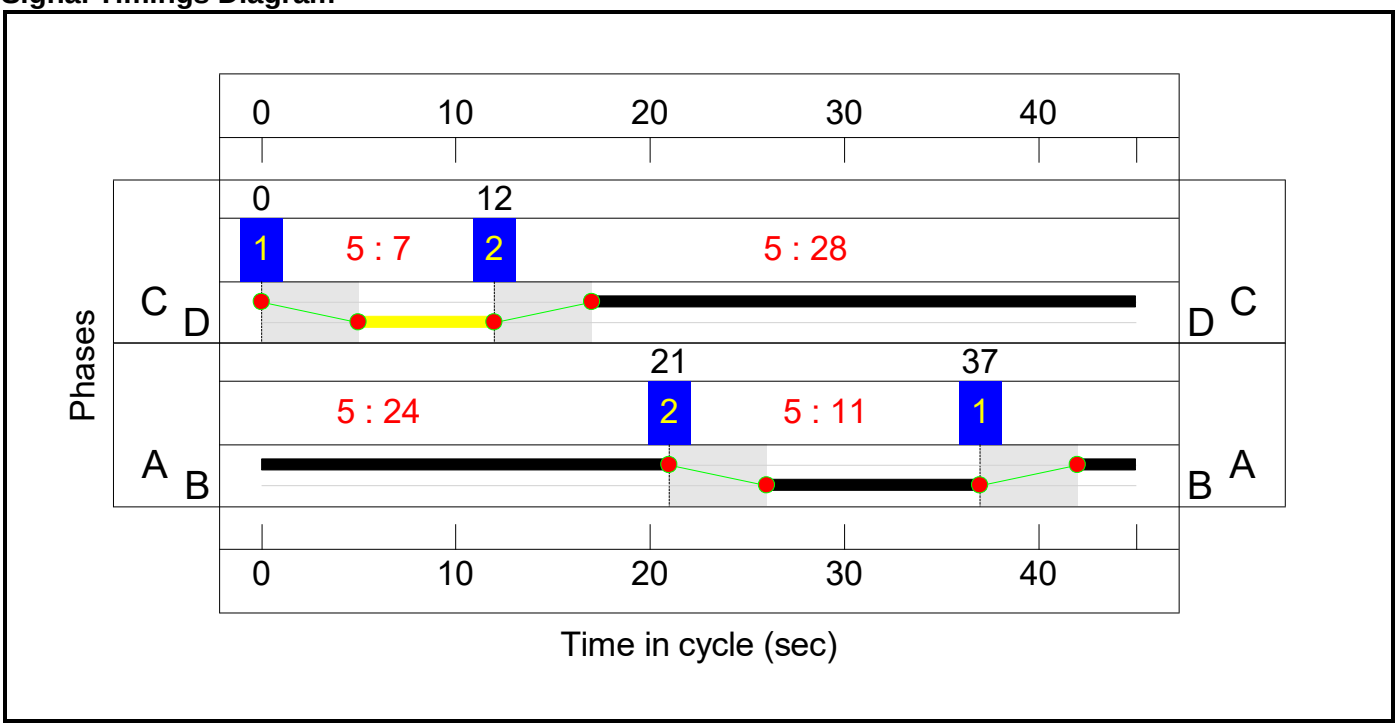
Stage Stream: 1

Stage	1	2
Duration	7	28
Change Point	0	12

Stage Stream: 2

Stage	1	2
Duration	24	11
Change Point	37	21

Signal Timings Diagram

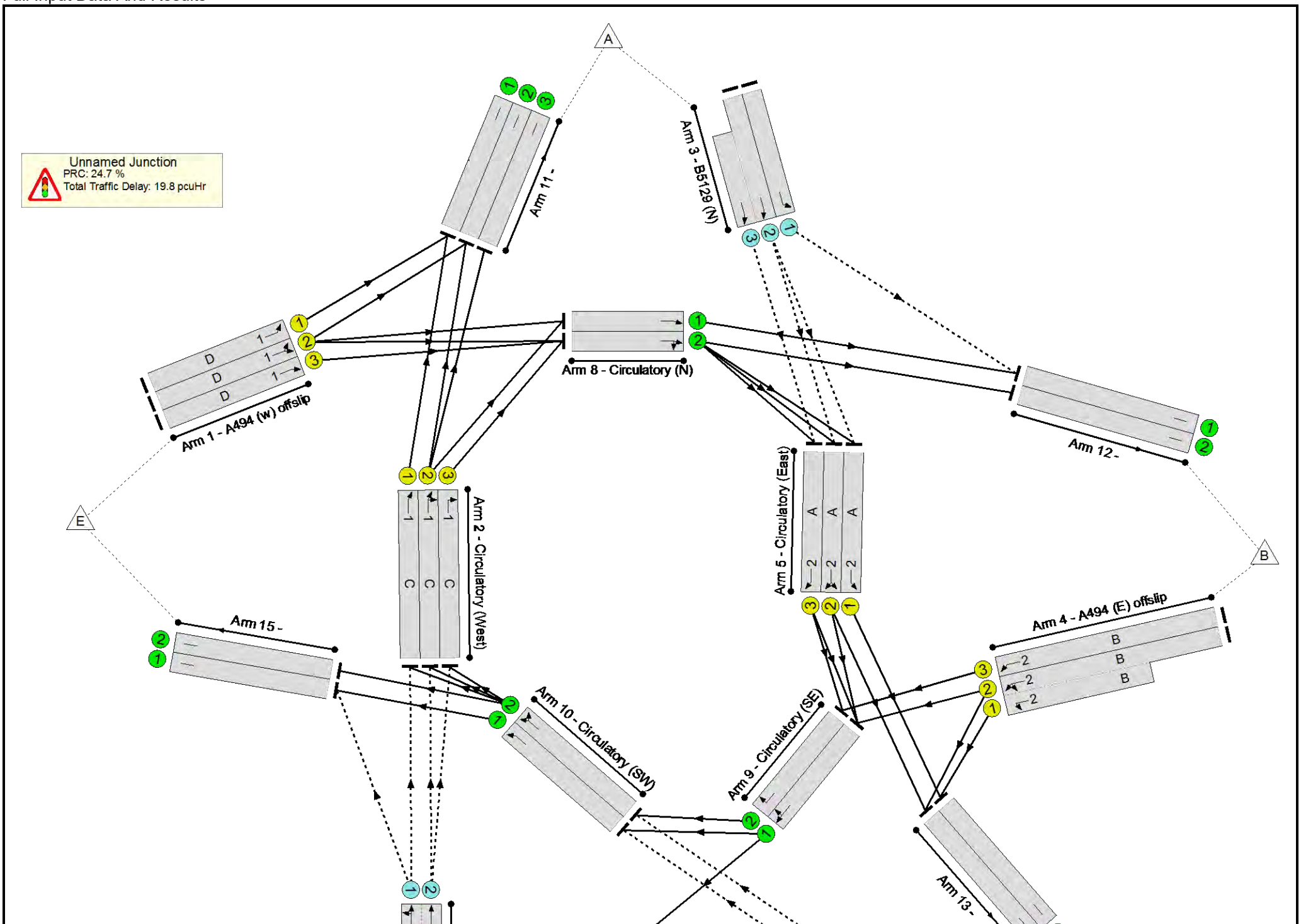


Full Input Data And Results

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
1/1	A494 (w) offslip Left	U	1	N/A	D		1	7	-	201	1965	349	57.5%
1/2	A494 (w) offslip Ahead Left	U	1	N/A	D		1	7	-	266	2105	374	71.1%
1/3	A494 (w) offslip Ahead	U	1	N/A	D		1	7	-	201	2105	374	53.7%
2/1	Circulatory (West) Ahead	U	1	N/A	C		1	28	-	496	2105	1357	36.6%
2/2	Circulatory (West) Right Ahead	U	1	N/A	C		1	28	-	420	2105	1357	31.0%
2/3	Circulatory (West) Right	U	1	N/A	C		1	28	-	348	2105	1357	25.7%
3/1	B5129 (N) Left	O	N/A	N/A	-		-	-	-	240	1935	883	27.2%
3/2+3/3	B5129 (N) Ahead	O	N/A	N/A	-		-	-	-	805	2075:2075	1377	58.5%
4/2+4/1	A494 (E) offslip Ahead Left	U	2	N/A	B		1	11	-	419	2105:1965	1085	38.6%
4/3	A494 (E) offslip Ahead	U	2	N/A	B		1	11	-	403	2105	561	71.8%
5/1	Circulatory (East) Ahead	U	2	N/A	A		1	24	-	306	2105	1169	26.2%
5/2	Circulatory (East) Ahead Ahead2	U	2	N/A	A		1	24	-	400	2105	1169	34.2%
5/3	Circulatory (East) Ahead	U	2	N/A	A		1	24	-	336	2105	1169	28.7%
6/1+6/2	B5129 (S) Ahead Left	O	N/A	N/A	-		-	-	-	916	2025:2155	1269	72.2%
7/1+7/2	A550 Ahead Left	O	N/A	N/A	-		-	-	-	262	1965:2055	683	38.4%

Full Input Data And Results

8/1	Circulatory (N) Ahead	U	N/A	N/A	-		-	-	-	157	2175	2175	7.2%
8/2	Circulatory (N) Right Ahead	U	N/A	N/A	-		-	-	-	564	2175	2175	25.9%
9/1	Circulatory (SE) Right Ahead	U	N/A	N/A	-		-	-	-	808	2175	2175	37.1%
9/2	Circulatory (SE) Right	U	N/A	N/A	-		-	-	-	459	2175	2175	21.1%
10/1	Circulatory (SW) Ahead	U	N/A	N/A	-		-	-	-	646	2175	2175	29.7%
10/2	Circulatory (SW) Right Ahead	U	N/A	N/A	-		-	-	-	1090	2175	2175	50.1%
11/1		U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
11/3		U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	397	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	327	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%
13/2		U	N/A	N/A	-		-	-	-	88	Inf	Inf	0.0%
14/1		U	N/A	N/A	-		-	-	-	447	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**4206**	**0**	**0**	**10.7**	**9.2**	**0.0**	**19.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**4206**	**0**	**0**	**10.7**	**9.2**	**0.0**	**19.8**	**-**	**-**	**-**	**-**
1/1	201	201	-	-	-	0.9	0.7	-	1.6	29.0	2.3	0.7	3.0
1/2	266	266	-	-	-	1.3	1.2	-	2.5	33.7	3.1	1.2	4.3
1/3	201	201	-	-	-	0.9	0.6	-	1.5	27.1	2.2	0.6	2.8
2/1	496	496	-	-	-	1.1	0.3	-	1.4	10.0	4.2	0.3	4.4
2/2	420	420	-	-	-	0.6	0.2	-	0.9	7.3	2.9	0.2	3.1
2/3	348	348	-	-	-	0.3	0.2	-	0.4	4.6	1.7	0.2	1.8
3/1	240	240	240	0	0	0.0	0.2	-	0.2	2.8	0.0	0.2	0.2
3/2+3/3	805	805	1610	0	0	0.0	0.7	-	0.7	3.2	0.6	0.7	1.3
4/2+4/1	419	419	-	-	-	1.6	0.3	-	1.9	16.2	2.2	0.3	2.5
4/3	403	403	-	-	-	1.7	1.3	-	2.9	26.2	4.5	1.3	5.7
5/1	306	306	-	-	-	0.6	0.2	-	0.8	9.4	2.1	0.2	2.3
5/2	400	400	-	-	-	0.7	0.3	-	0.9	8.5	2.7	0.3	3.0
5/3	336	336	-	-	-	0.6	0.2	-	0.8	8.2	2.2	0.2	2.4
6/1+6/2	916	916	1832	0	0	0.3	1.3	-	1.6	6.3	2.3	1.3	3.6
7/1+7/2	262	262	524	0	0	0.0	0.3	-	0.3	4.3	0.0	0.3	0.3
8/1	157	157	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
8/2	564	564	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
9/1	808	808	-	-	-	0.1	0.3	-	0.4	1.6	4.0	0.3	4.3
9/2	459	459	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
10/1	646	646	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/2	1090	1090	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5
11/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/1	397	397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	88	88	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	447	447	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

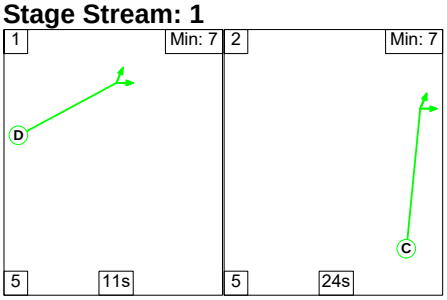
C1	Stream: 1 PRC for Signalled Lanes (%):	26.6	Total Delay for Signalled Lanes (pcuHr):	8.29	Cycle Time (s):	45
C1	Stream: 2 PRC for Signalled Lanes (%):	25.4	Total Delay for Signalled Lanes (pcuHr):	7.33	Cycle Time (s):	45
	PRC Over All Lanes (%):	24.7	Total Delay Over All Lanes(pcuHr):	19.85		

Full Input Data And Results

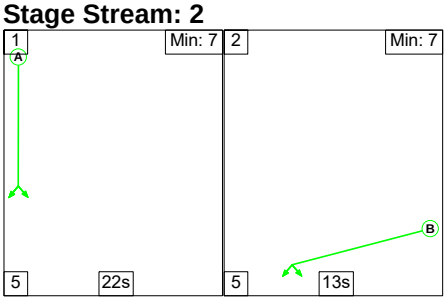
Scenario 5: '2033 With Development Flows - AM Peak' (FG5: '2033 With Development Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

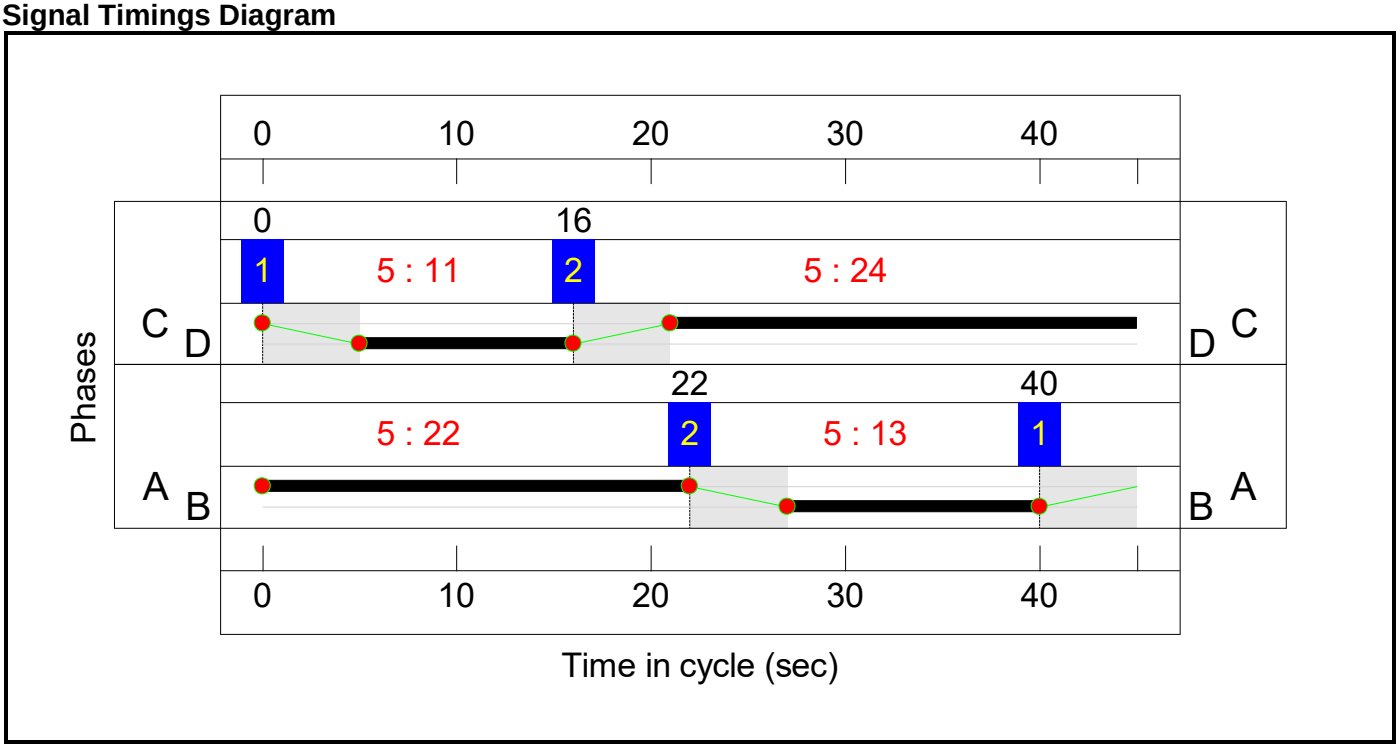
Stage Stream: 1

Stage	1	2
Duration	11	24
Change Point	0	16

Stage Stream: 2

Stage	1	2
Duration	22	13
Change Point	40	22

Signal Timings Diagram

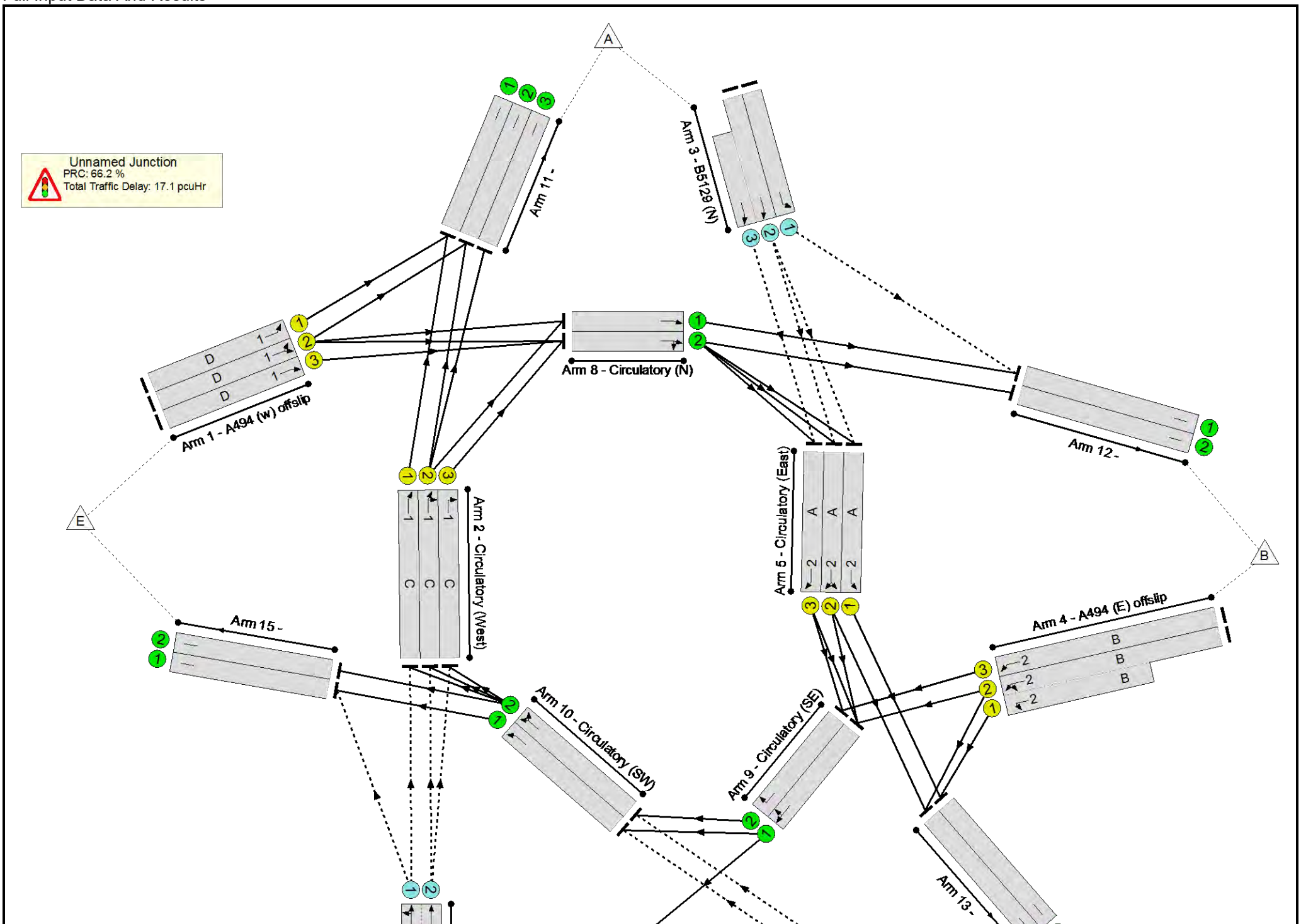


Full Input Data And Results

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**54.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**54.1%**
1/1	A494 (w) offslip Left	U	1	N/A	D		1	11	-	239	1965	524	45.6%
1/2	A494 (w) offslip Ahead Left	U	1	N/A	D		1	11	-	290	2105	561	51.7%
1/3	A494 (w) offslip Ahead	U	1	N/A	D		1	11	-	267	2105	561	47.6%
2/1	Circulatory (West) Ahead	U	1	N/A	C		1	24	-	395	2105	1169	33.8%
2/2	Circulatory (West) Right Ahead	U	1	N/A	C		1	24	-	399	2105	1169	34.1%
2/3	Circulatory (West) Right	U	1	N/A	C		1	24	-	397	2105	1169	33.9%
3/1	B5129 (N) Left	O	N/A	N/A	-		-	-	-	269	1935	829	32.5%
3/2+3/3	B5129 (N) Ahead	O	N/A	N/A	-		-	-	-	543	2075:2075	1067	50.9%
4/2+4/1	A494 (E) offslip Ahead Left	U	2	N/A	B		1	13	-	612	2105:1965	1266	48.3%
4/3	A494 (E) offslip Ahead	U	2	N/A	B		1	13	-	296	2105	655	45.2%
5/1	Circulatory (East) Ahead	U	2	N/A	A		1	22	-	348	2105	1076	32.3%
5/2	Circulatory (East) Ahead Ahead2	U	2	N/A	A		1	22	-	328	2105	1076	30.5%
5/3	Circulatory (East) Ahead	U	2	N/A	A		1	22	-	204	2105	1076	19.0%
6/1+6/2	B5129 (S) Ahead Left	O	N/A	N/A	-		-	-	-	725	2025:2155	1339	54.1%
7/1+7/2	A550 Ahead Left	O	N/A	N/A	-		-	-	-	382	1965:2055	895	42.7%

Full Input Data And Results

8/1	Circulatory (N) Ahead	U	N/A	N/A	-		-	-	-	184	2175	2175	8.5%
8/2	Circulatory (N) Right Ahead	U	N/A	N/A	-		-	-	-	675	2175	2175	31.0%
9/1	Circulatory (SE) Right Ahead	U	N/A	N/A	-		-	-	-	646	2175	2175	29.7%
9/2	Circulatory (SE) Right	U	N/A	N/A	-		-	-	-	296	2175	2175	13.6%
10/1	Circulatory (SW) Ahead	U	N/A	N/A	-		-	-	-	488	2175	2175	22.4%
10/2	Circulatory (SW) Right Ahead	U	N/A	N/A	-		-	-	-	871	2175	2175	40.0%
11/1		U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
11/3		U	N/A	N/A	-		-	-	-	138	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	338	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	643	Inf	Inf	0.0%
13/2		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
14/1		U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	550	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3569**	**0**	**0**	**10.7**	**6.4**	**0.0**	**17.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3569**	**0**	**0**	**10.7**	**6.4**	**0.0**	**17.1**	**-**	**-**	**-**	**-**
1/1	239	239	-	-	-	0.9	0.4	-	1.3	20.1	2.5	0.4	2.9
1/2	290	290	-	-	-	1.1	0.5	-	1.7	20.7	3.1	0.5	3.6
1/3	267	267	-	-	-	1.0	0.5	-	1.5	20.0	2.7	0.5	3.2
2/1	395	395	-	-	-	1.1	0.3	-	1.3	11.9	3.4	0.3	3.7
2/2	399	399	-	-	-	0.9	0.3	-	1.1	10.1	3.2	0.3	3.4
2/3	397	397	-	-	-	0.6	0.3	-	0.8	7.4	2.6	0.3	2.9
3/1	269	269	269	0	0	0.0	0.2	-	0.2	3.2	0.0	0.2	0.2
3/2+3/3	543	543	1086	0	0	0.0	0.5	-	0.5	3.5	0.5	0.5	1.0
4/2+4/1	612	612	-	-	-	2.1	0.5	-	2.6	15.3	3.2	0.5	3.6
4/3	296	296	-	-	-	1.0	0.4	-	1.4	17.4	3.0	0.4	3.4
5/1	348	348	-	-	-	0.8	0.2	-	1.0	10.6	2.6	0.2	2.8
5/2	328	328	-	-	-	0.6	0.2	-	0.9	9.5	2.4	0.2	2.6
5/3	204	204	-	-	-	0.4	0.1	-	0.6	9.9	1.4	0.1	1.5
6/1+6/2	725	725	1450	0	0	0.1	0.6	-	0.7	3.5	1.6	0.6	2.2
7/1+7/2	382	382	764	0	0	0.0	0.4	-	0.4	3.6	0.3	0.4	0.7
8/1	184	184	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
8/2	675	675	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
9/1	646	646	-	-	-	0.0	0.2	-	0.2	1.2	1.9	0.2	2.1
9/2	296	296	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
10/1	488	488	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
10/2	871	871	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
11/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	138	138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/1	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

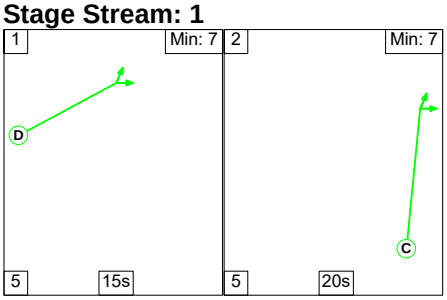
C1	Stream: 1 PRC for Signalled Lanes (%):	74.2	Total Delay for Signalled Lanes (pcuHr):	7.73	Cycle Time (s):	45
C1	Stream: 2 PRC for Signalled Lanes (%):	86.2	Total Delay for Signalled Lanes (pcuHr):	6.49	Cycle Time (s):	45
	PRC Over All Lanes (%):	66.2	Total Delay Over All Lanes(pcuHr):	17.11		

Full Input Data And Results

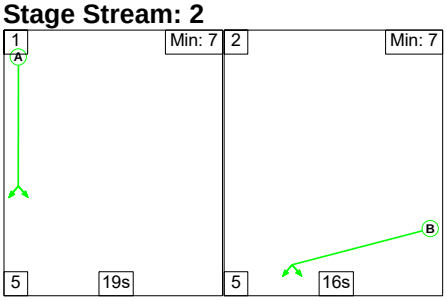
Scenario 6: '2033 With Development Flows - PM Peak' (FG6: '2033 With Development Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

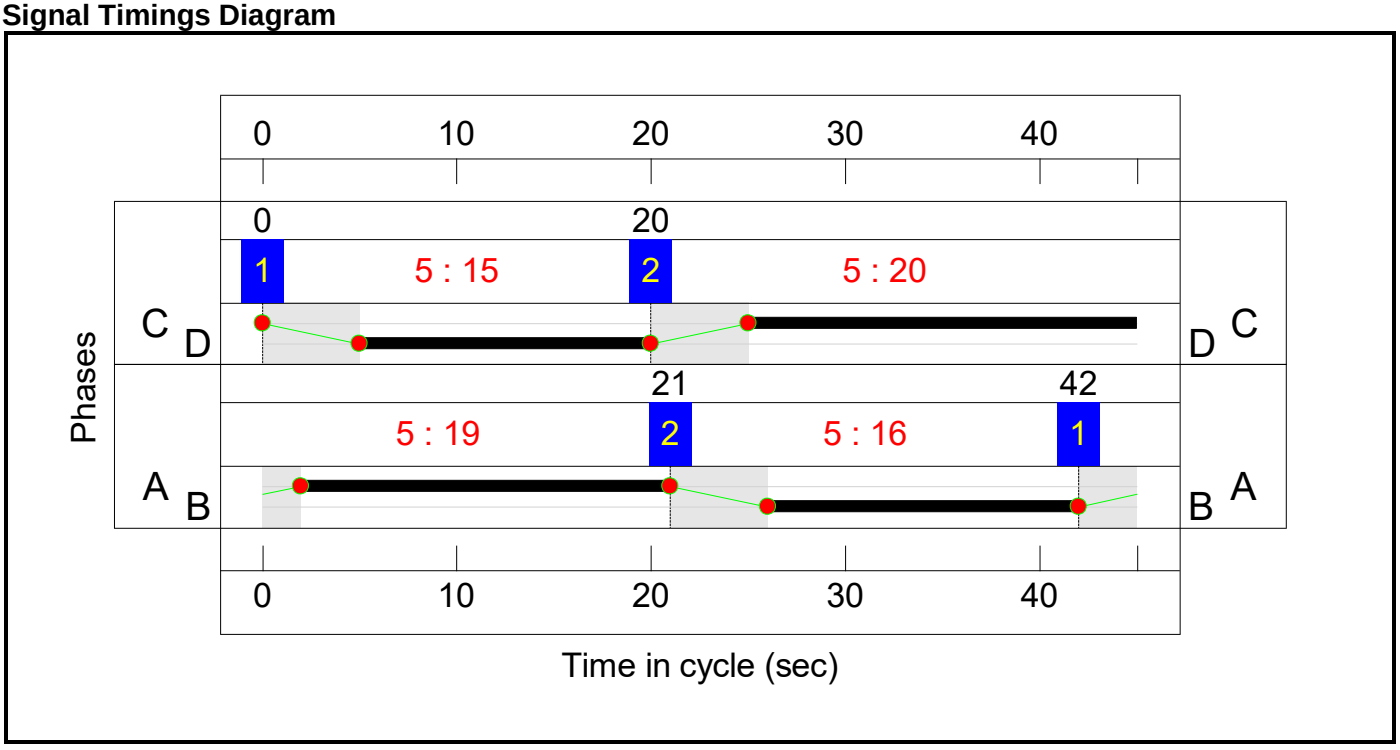
Stage Stream: 1

Stage	1	2
Duration	15	20
Change Point	0	20

Stage Stream: 2

Stage	1	2
Duration	19	16
Change Point	42	21

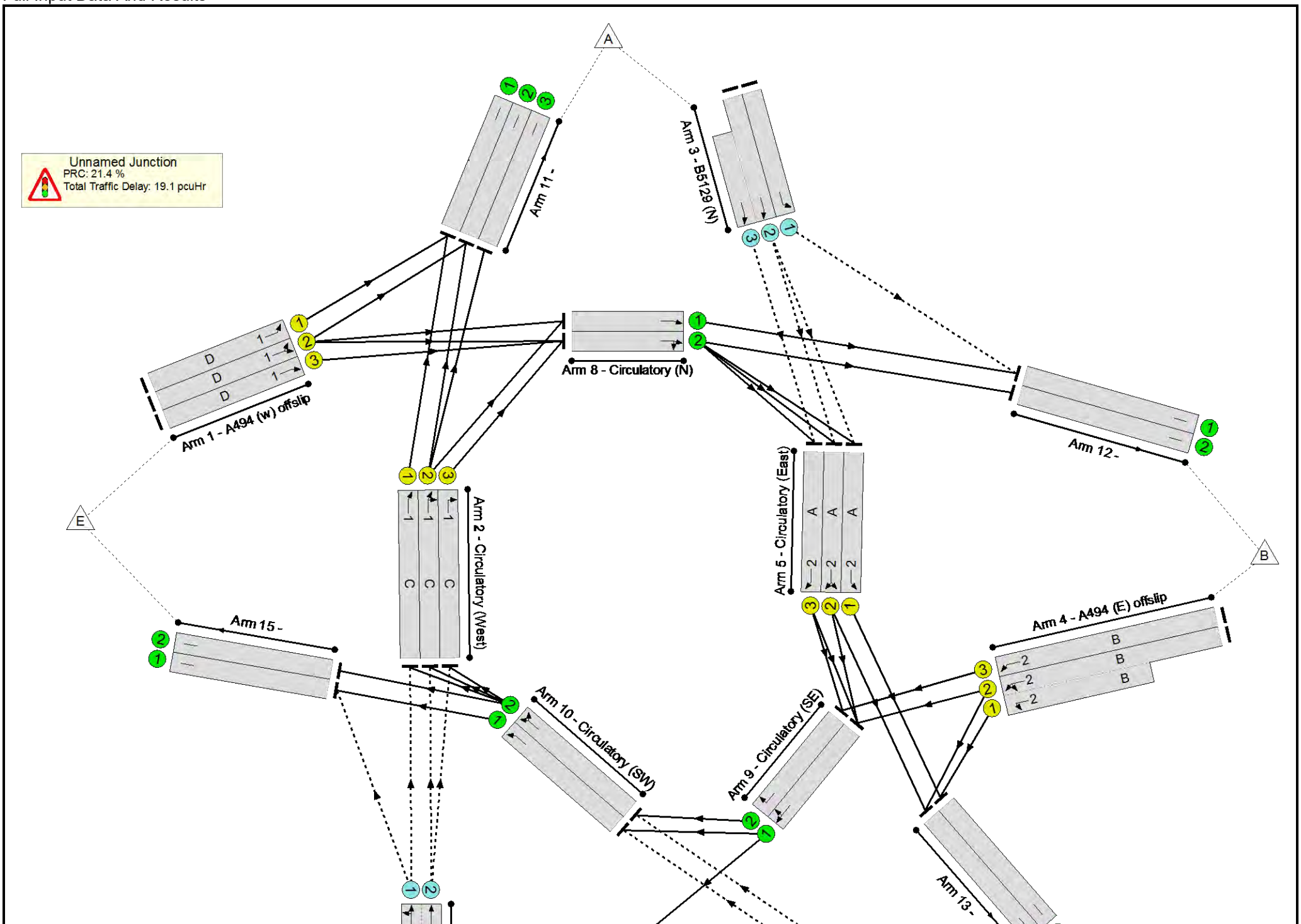
Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

Network Layout Diagram


Unnamed Junction
PRC: 21.4 %
Total Traffic Delay: 19.1 pcuHr
A
B
E
Arm 11 -
Arm 3 - B5129 (N)
Arm 1 - A494 (w) offslip
Arm 8 - Circulatory (N)
Arm 12 -
Arm 2 - Circulatory (West)
Arm 5 - Circulatory (East)
Arm 15 -
Arm 4 - A494 (E) offslip
Arm 10 - Circulatory (SW)
Arm 9 - Circulatory (SE)
Arm 13 -

Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.1%**
1/1	A494 (w) offslip Left	U	1	N/A	D		1	15	-	202	1965	699	28.9%
1/2	A494 (w) offslip Ahead Left	U	1	N/A	D		1	15	-	266	2105	748	35.5%
1/3	A494 (w) offslip Ahead	U	1	N/A	D		1	15	-	208	2105	748	27.8%
2/1	Circulatory (West) Ahead	U	1	N/A	C		1	20	-	491	2105	982	50.0%
2/2	Circulatory (West) Right Ahead	U	1	N/A	C		1	20	-	441	2105	982	44.9%
2/3	Circulatory (West) Right	U	1	N/A	C		1	20	-	356	2105	982	36.2%
3/1	B5129 (N) Left	O	N/A	N/A	-		-	-	-	240	1935	872	27.5%
3/2+3/3	B5129 (N) Ahead	O	N/A	N/A	-		-	-	-	808	2075:2075	1345	60.1%
4/2+4/1	A494 (E) offslip Ahead Left	U	2	N/A	B		1	16	-	452	2105:1965	1538	29.4%
4/3	A494 (E) offslip Ahead	U	2	N/A	B		1	16	-	403	2105	795	50.7%
5/1	Circulatory (East) Ahead	U	2	N/A	A		1	19	-	321	2105	936	34.3%
5/2	Circulatory (East) Ahead Ahead2	U	2	N/A	A		1	19	-	414	2105	936	44.3%
5/3	Circulatory (East) Ahead	U	2	N/A	A		1	19	-	336	2105	936	35.9%
6/1+6/2	B5129 (S) Ahead Left	O	N/A	N/A	-		-	-	-	916	2025:2155	1236	74.1%
7/1+7/2	A550 Ahead Left	O	N/A	N/A	-		-	-	-	286	1965:2055	680	42.1%

Full Input Data And Results

8/1	Circulatory (N) Ahead	U	N/A	N/A	-		-	-	-	169	2175	2175	7.8%
8/2	Circulatory (N) Right Ahead	U	N/A	N/A	-		-	-	-	579	2175	2175	26.6%
9/1	Circulatory (SE) Right Ahead	U	N/A	N/A	-		-	-	-	822	2175	2175	37.8%
9/2	Circulatory (SE) Right	U	N/A	N/A	-		-	-	-	489	2175	2175	22.5%
10/1	Circulatory (SW) Ahead	U	N/A	N/A	-		-	-	-	616	2175	2175	28.3%
10/2	Circulatory (SW) Right Ahead	U	N/A	N/A	-		-	-	-	1120	2175	2175	51.5%
11/1		U	N/A	N/A	-		-	-	-	693	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	362	Inf	Inf	0.0%
11/3		U	N/A	N/A	-		-	-	-	161	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	409	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	540	Inf	Inf	0.0%
13/2		U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
14/1		U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
15/1		U	N/A	N/A	-		-	-	-	648	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	86	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**4260**	**0**	**0**	**11.5**	**7.6**	**0.0**	**19.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**4260**	**0**	**0**	**11.5**	**7.6**	**0.0**	**19.1**	**-**	**-**	**-**	**-**
1/1	202	202	-	-	-	0.6	0.2	-	0.8	14.1	1.8	0.2	2.0
1/2	266	266	-	-	-	0.8	0.3	-	1.1	14.4	2.4	0.3	2.7
1/3	208	208	-	-	-	0.6	0.2	-	0.8	13.7	1.8	0.2	2.0
2/1	491	491	-	-	-	1.8	0.5	-	2.3	16.5	4.5	0.5	5.0
2/2	441	441	-	-	-	1.3	0.4	-	1.7	14.2	3.8	0.4	4.2
2/3	356	356	-	-	-	0.7	0.3	-	1.0	10.0	2.5	0.3	2.8
3/1	240	240	240	0	0	0.0	0.2	-	0.2	2.8	0.0	0.2	0.2
3/2+3/3	808	808	1616	0	0	0.0	0.8	-	0.8	3.4	1.0	0.8	1.8
4/2+4/1	452	452	-	-	-	1.2	0.2	-	1.4	11.5	2.0	0.2	2.2
4/3	403	403	-	-	-	1.2	0.5	-	1.7	15.4	3.8	0.5	4.3
5/1	321	321	-	-	-	0.9	0.3	-	1.1	12.6	2.6	0.3	2.9
5/2	414	414	-	-	-	1.1	0.4	-	1.5	12.7	3.5	0.4	3.9
5/3	336	336	-	-	-	0.9	0.3	-	1.1	12.1	2.7	0.3	3.0
6/1+6/2	916	916	1832	0	0	0.4	1.4	-	1.8	7.1	2.6	1.4	4.0
7/1+7/2	286	286	572	0	0	0.0	0.4	-	0.4	4.6	0.0	0.4	0.4
8/1	169	169	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
8/2	579	579	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
9/1	822	822	-	-	-	0.1	0.3	-	0.4	1.7	5.0	0.3	5.3
9/2	489	489	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
10/1	616	616	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/2	1120	1120	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5
11/1	693	693	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	362	362	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	161	161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/1	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	75	75	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	648	648	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	86	86	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	80.1	Total Delay for Signalled Lanes (pcuHr):	7.63	Cycle Time (s):	45
C1	Stream: 2 PRC for Signalled Lanes (%):	77.6	Total Delay for Signalled Lanes (pcuHr):	6.88	Cycle Time (s):	45
	PRC Over All Lanes (%):	21.4	Total Delay Over All Lanes(pcuHr):	19.13		

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