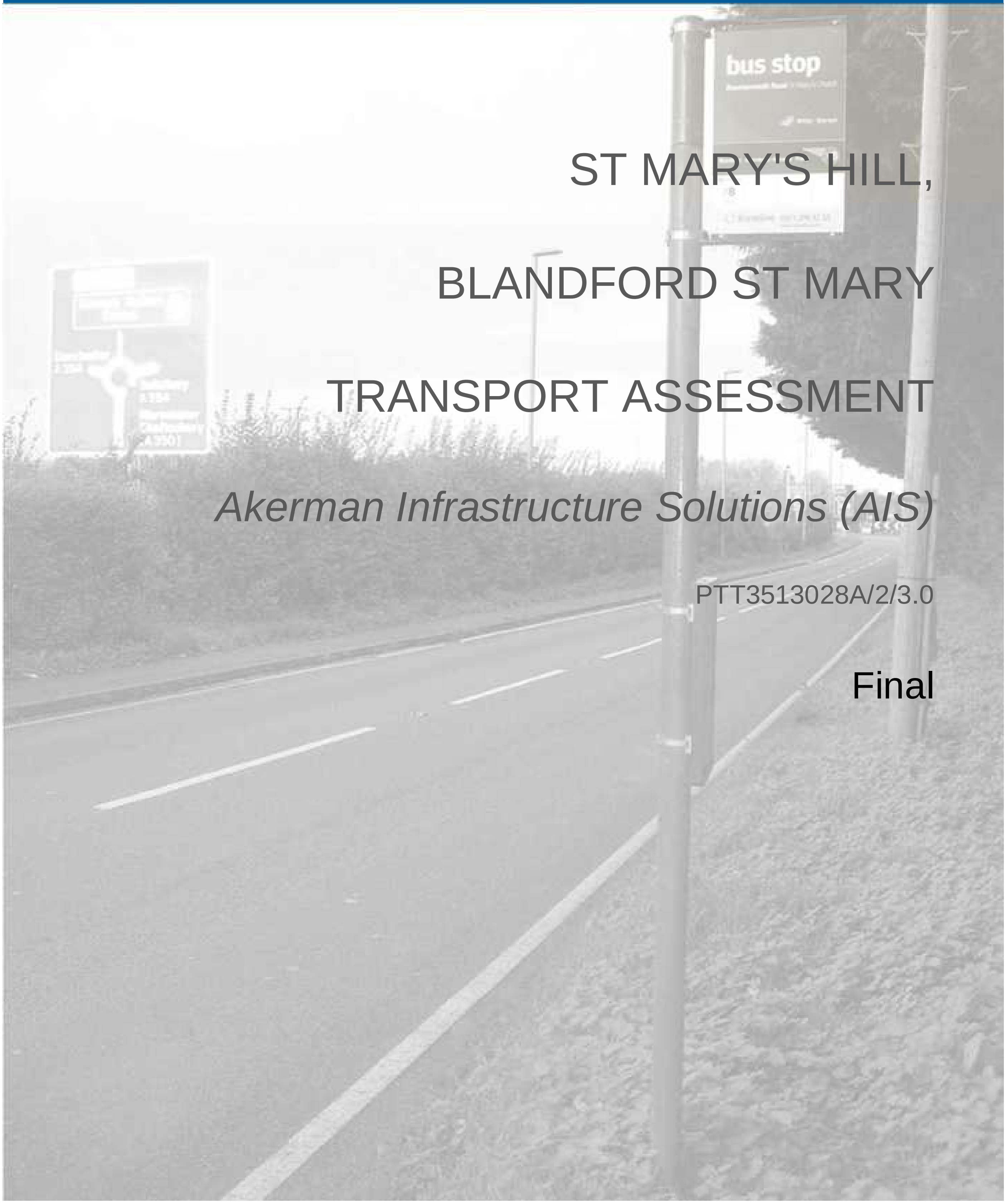
PARSONS BRINCKERHOFF

July 2014



ST MARY'S HILL,

BLANDFORD ST MARY

TRANSPORT ASSESSMENT

Akerman Infrastructure Solutions (AIS)

PTT3513028A/2/3.0

Final

St Mary's Hill, Blandford St Mary
Transport Assessment

PTT3513028A/2/3.0

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EXECUTIVE SUMMARY

Introduction

Parsons Brinckerhoff has been appointed to undertake a Transport Assessment in order to examine the impact of the St Mary’s Hill development on the local highway infrastructure in Blandford St Mary. The requirements and scope of the Transport Assessment were agreed with Dorset County Council through the issue and approval of a scoping report.

The Transport Assessment considers the impact of a proposed development of 350 dwellings on a 27 acre site adjacent to the A354 and A350 and its impact on the highway network in conjunction with the additional impact generated by other committed developments in the area.

The Transport Assessment also considered the current facilities for cyclists and pedestrians and the potential need for improvements to ensure adequate connectivity between the development and the Blandford conurbation. The Transport Assessment concludes that with the exception of the Stour Park/Bournemouth Road roundabout, the existing highway infrastructure can accommodate the combined forecast traffic flows generated through general growth, committed development and the proposed development at St Mary’s Hill.

Findings

Junction model assessments show that the proposed St Marys Hill development will not adversely impact on the local highway network.

Personal Injury Collision data was obtained for both the A350/A354 and Bournemouth Road/Stour Park roundabouts for a five year period between September 2008 and August 2013. A total of 7 personal injury collisions accidents were observed, none of which were pedestrian related. An analysis of the collision activity at both junctions in comparison to national averages concluded that there was no significant road safety issues with the roundabouts, with the number of collisions recorded being significantly less than the national average.

The impact on the A31 trunk road network (at its junctions with the A354 and A350), from the proposed development will be insignificant due to dispersion of traffic between the site and the trunk road.

A toucan crossing will be provided on the A354 to safely facilitate cyclist and pedestrian movements to Blandford Forum. The development is suitably located so that Blandford Forum Town Centre and the local amenities are both within convenient walking distance.

The proposed infrastructure improvements associated with the St Mary’s Hill development (including the controlled pedestrian/cyclist crossing as shown in Appendix 4 of this TA) will improve pedestrian and cycle links between the proposed development, the existing settlements of Charlton Marshall and Spetminster and Blandford Forum. This ‘grey infrastructure’ and in particular the provision of the ‘missing link’ of the Sturminster Trailway (together with the mitigation measures described in Section 7 of this TA) will help to support sustainable growth in Blandford Forum and is consistent therefore with sustainable development objectives and policies 2, 13 and 16 of the North Dorset Local Plan, (Pre-submission, November 2013).

Mitigation Proposals

Continuation and improvement of the Sturminster Trailway along the sites frontage of the A350 including the provision of a toucan crossing on the A354 to facilitate cyclist and pedestrian movements towards Blandford Forum.

Minor improvements (traffic signing and street lighting) will be provided to pedestrian routes from the development to the town centre encouraging walking and cycling as an alternative to other transport modes as well as shared use footway/cycling facilities in various locations. In addition a bus lay-by will be introduced on the A350 (northbound) enabling public transport users to have a safer boarding and alighting area as well as allowing other traffic to move more freely on the main road. An uncontrolled crossing of the A350 adjacent to the existing southeast-bound bus stop will also be provided connecting users of the A350 southbound service to the site.

A separate Travel Plan document has also been produced which sets out the various forms of non car travel accessible to and from the site and how this development proposal, and supporting soft mitigation measures, enhance this. The Travel Plan will identify the appointment of a Travel Plan Coordinator who will monitor the performance of the site, ensuring measures are successfully implemented and targets are achieved.

Conclusion

It is concluded that the proposed development and recommended improvements satisfy all the planning policy requirements and therefore show no reason, on transport and highway grounds, why development at St Marys Hill should not receive conditioned planning consent.

1 INTRODUCTION

1.1 General

1.1.1 Parsons Brinckerhoff has been appointed by Akerman Infrastructure Solutions (AIS) to produce a Transport Assessment and accompanying Travel Plan in support of a planning application to construct 350 dwellings on a site in Blandford St. Mary, south of the A350/A354 roundabout. Blandford St. Mary is a village in North Dorset, on the south bank of the River Stour, opposite the town of Blandford Forum. The location of the proposed development site within Blandford St. Mary can be seen in Figure 3-1.

1.2 Background

1.2.1 In May 2013, Parsons Brinckerhoff was commissioned by AIS to undertake detailed junction modelling of the A350/A354 roundabout and the two future access points to the development site, to give an indication of the impact of building 200 dwellings at the development site and their consequential impact on the A350/A354 roundabout (see Appendix 1).

1.2.2 Since that time, the proposed number of dwellings has increased to 350 dwellings, necessitating a full Transport Assessment. In addition, committed developments previously omitted from the assessment work, namely: Tesco extension; the Hall & Woodhouse Brewery; Asda superstore in Blandford Forum; and Persimmon Homes, have now been taken into consideration in conjunction with the proposed residential development.

1.2.3 Due to the size of the development, it was also considered necessary to produce a Travel Plan (Report Ref PTT3513028A/3/2.0), which has been produced separately to this Transport Assessment.

1.3 Scoping

1.3.1 *National Planning Policy Framework* (NPPF) (2012) outlines the requirement for planning applications for developments likely to create significant amounts of movement to be accompanied by Transport Assessments, to examine the impact the development may have upon the local highway network. The NPPF also suggests a Travel Plan should be provided in conjunction with a Transport Assessment.

1.3.2 According to the NPPF; a Transport Assessment should not only examine the transport implications of the development, but also assess how the development will encourage sustainable modes of travel. In line with the framework, this assessment will scrutinise how suitably located the site is to encourage travelling sustainably.

1.3.3 To agree the contents of the Transport Assessment and Travel Plan, a scoping note was produced for the Transport Assessment and Travel Plan in September 2013, which was approved by Dorset County Council. A copy of the scoping note and any relevant email correspondence is included in this report as Appendix 2.

1.4 Purpose

1.4.1 The purpose of this Transport Assessment is to examine the potential impact the development of 350 dwellings may have upon the local area, in terms of the impacts of the increased trip generation associated with the development. The assessment will consider the effect the greater number of trips may have upon the local highway network, in particular the A350/A354 and Bournemouth Road/Stour Park roundabouts near the site. The assessment will consider the development's trip generation in conjunction with the extra traffic generated by other committed developments.

1.4.2 The assessment will detail the current transport infrastructure near to the site, including the current network for cyclists and pedestrians. As previously mentioned, the impact of the traffic generated by the housing will be examined, and proposed mitigation measures (if required) will be outlined for any issues that may arise from the development.

1.4.3 After consultations with Dorset County Council, the main qualm which arose about the site's location was its connectivity with Blandford Forum town centre for pedestrians. The existing accessibility for potential residents will be examined in this assessment, and the need for improvements, if such a need becomes apparent, will be identified.

1.5 Structure

1.5.1 This Transport Assessment is structured in the following way:

Sections 2 - Policy Background - this section will briefly outline the national, regional and local policies which are relevant to the development, and to which the development must adhere.

Section 3 - Existing Conditions - this chapter describes the current local highway network, public transport provision, and conditions for pedestrians and cyclists. It also has a section about Personal Injury Collisions which have occurred within the past five years in close proximity to the site.

Section 4 - Proposed Development - this section illustrates what the development will involve, and the expected trip generation of the housing development.

Section 5 - Committed Development - this section looks at developments which have been granted planning permission in Blandford Forum and Blandford St. Mary, as the traffic generated by these must be considered in conjunction with that caused by the new housing on the highway network.

Section 6 - Junction Capacity Assessments- this chapter examines the results of the junction modelling of the two roundabouts in the immediate vicinity of the site, and the two proposed access points to the site.

Section 7 - Mitigation – this section sets out any necessary mitigation measures that have been identified as a result of the work undertaken.

Section 8 - Conclusions - the final chapter evaluates the overall impact of the proposed housing development on the local highway network, not only in terms of junction capacities but also for pedestrians and cyclists.

2 POLICY BACKGROUND

2.1 General

2.1.1 This section outlines various national, regional and local transport policies relevant to the development at St Marys Hill.

2.2 National Policy

National Planning Policy Framework (2012)

2.2.1 The *National Planning Policy Framework* (NPPF) was published in March 2012 by the Department of Communities and Local Government, and was designed to consolidate all national policy statements and guidance notes into a single, simpler document.

2.2.2 The NPPF superseded *Planning Policy Guidance 13: Transport* (PPG13) (2001), which first introduced Transport Assessments (TAs) to replace Traffic Impact Assessments, which were primarily focused on car travel. TAs, however, were designed to place emphasis on the more sustainable methods of transport, such as walking, cycling and public transport.

2.2.3 The NPPF echoes PPG13 in that it states planning applications for developments likely to create significant amounts of movement should be supported by a TA or Transport Statement (TS).

2.2.4 At the heart of the NPPF is a focus on promoting sustainable development. Chapter 4 of the framework is titled *Promoting Sustainable Transport* and suggests that new developments should be placed in opportune locations, to facilitate the use of sustainable transport modes, to in turn reduce the need for major transport infrastructure. The framework recommends strategically locating large scale residential developments, such as at Blandford St. Mary, within walking distance of schools and local shops. Here, the NPPF builds upon PPG13, which focused heavily on where new developments should be situated to best integrate planning and transport at the national, regional and local level. Locating a new development near to where there is access to services, jobs and leisure will promote travel by sustainable means, and reduce the need to travel by car.

2.2.5 The NPPF also states that any improvements to the transport network should be cost effective when reducing of the impacts of the development, and that developments should only be refused on transport grounds where this is not the case; where the impacts of the development are so severe that major improvements would be required.

2.2.6 The framework suggests that a Travel Plan (TP) should be required in conjunction with a TA, as they are key tools in facilitating sustainable transport movements from large developments. Sustainable transport measures are set out in the TP which accompanies this planning application.

Guidance on Transport Assessment (2007)

2.2.7 The Department for Transport's *Guidance on Transport Assessment* was published in March 2007, and intended to provide guidance for local authorities and developers on what was involved in the process of creating TAs.

2.2.8 In Appendix B of the document there are suggested thresholds for when a full TA or simplified TS is required, and the recommended levels of detail required in the assessment. The appendix recommends that for new developments where more than 80 dwellings are being constructed, a TA is necessary to address the likely significant transport impacts. Considering the development in question is a proposition to build 350 dwellings, a TA was deemed necessary to address the potential transport implications in Blandford St. Mary.

Guidelines for Providing for Journeys on Foot (2000)

2.2.9 *Guidelines for Providing for Journeys on Foot*, published in May 2000, provides advice on how to implement walking measures as part of an integrated transport network.

2.2.10 *Guidelines for Providing for Journeys on Foot* suggests the desirable, acceptable and preferred maximum walking distances for pedestrians to common facilities. This includes walking to work or school, into a town centre, or to a bus stop or train station. Table 2-1 shows the desirable, acceptable and preferred maximum distances as recommended by the Institution of Highways and Transportation (IHT).

	Town Centres (m)	**Commuting/School (m)**	**Elsewhere (m)**
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Table 2-1: Suggested Acceptable Walking Distance (IHT, 2000)

Guidelines for Planning for Public Transport in Developments (1999)

2.2.11 *Guidelines for Planning for Public Transport in Developments* was published in March 1999 by the Institution of Highways and Transportation (IHT), and includes guidance on how close the nearest bus stop should be from a development. The guidelines recommend that the maximum walking distance to a bus stop should not exceed 400 metres, and preferably be no more than 300 metres.

2.2.12 The guidelines do however stipulate that direct bus routes should not be sacrificed due to walking distances being a little over 400 metres; ergo, bus services should not be altered to suit the development unless the walking distance to the nearest bus stop far exceeds 400 metres.

2.3 Regional Policy

Regional Planning Guidance (RPG 10) for the South West (2001)

2.3.1 Published in September 2001, the *Regional Planning Guidance (RPG 10) for the South West* set out a planning strategy for the region up to 2016 and beyond.

2.3.2 Within the RPG, there is a section which outlines the Regional Transport Strategy (RTS), which was designed to provide a transport framework for Local Transport Plans and development plans in general. The RTS also saw integration of transport and land use planning as key in promoting sustainable travel choices. Policy TRAN 1 aimed to reduce the need to travel by situating developments where there is already a good choice of travel by sustainable means, for example in existing towns where shorter journeys are easily achievable.

2.3.3 Also relevant is Policy Tran 10: Walking, Cycling and Public Transport, which aims to increase the number of people walking, cycling or using buses and trains. This could be achieved, according to the framework, by ensuring new major developments were realistically linked to existing walking, cycling and public transport networks. The framework also builds on this strategy by suggesting existing networks, services or conditions could be further developed to meet the needs of both the current community, and those of the residents of the new housing development.

2.4 Local Policy

Sustainable travel policy requirements

2.4.2 Published for draft consultation in November 2013, the North Dorset Local Plan – 2011 to 2026 came to the end of its pre-submission consultation period in January 2014. Produced by North Dorset District Council, the completed policy document was submitted to the Secretary of State in the spring of 2014.

2.4.3 The vision for development in North Dorset is set out in six objectives, which cover the broad range of issues which need to be addressed. Most relevant to this TA are objectives three and six. Objective Three ('Ensuring the Vitality of the Market Towns') highlights how in order to support the county's market towns, such as Blandford Forum, there should be a focus on improving sustainable transport links and accessibility within the towns. Similarly, Objective Six ('Improving the Quality of Life'), advocates future developments in the district must make a positive contribution to transport infrastructure, either by adding to or enhancing the existing transport network.

2.4.4 Policy 2, 'Core Spatial Strategy', outlines how growth will be concentrated in the four main towns, one of which is Blandford (Forum and St. Mary). The policy delineates how these main towns have the greatest potential for sustainable transport improvements; advising new developments should be located in these towns as they are where homes, jobs and services are most easily accessible by sustainable means.

2.4.5 Policy 13, 'Grey Infrastructure', explains the importance of the North and North East Dorset Transport Study (N&NEDTS) (2009) in shaping the direction of future transport infrastructure development in North Dorset. The findings of the N&NEDTS suggest making best use of the existing transport network with improvements where possible, to encourage modal shift away from the private car to more sustainable modes like walking and cycling. Key destinations in towns should also be made more accessible by sustainable transport modes. The outcomes of the study support Policy 2, which seeks to focus development in the district's four main towns.

2.4.6 The N&NEDTS also earmarked a number of locations where walking and cycling could be improved, one of which is the North Dorset Trailway, which is the ongoing conversion of the now defunct Somerset and Dorset railway line to pedestrian and cycle trailway. The development proposal for Blandford St. Mary also includes plans to complete the section of the Sturminster Trailway between Ward's drive to the south of the proposed development site and Bournemouth Road to the north of Blandford St Mary Roundabout.

2.4.7 The 'Infrastructure' section of Policy 16, 'Blandford', is also relevant in that it describes which grey infrastructure is necessary in the future to support growth in Blandford. In this section, grey infrastructure translates to creating or improving walking and cycling links both within Blandford, and between Blandford and the nearby villages.

Policy Summary

2.4.8 The proposed infrastructure improvements associated with the St Mary's Hill development (including the controlled pedestrian/cyclist crossing as shown in Appendix 4 of this TA) will improve pedestrian and cycle links between the proposed development, the existing settlements of Charlton Marshall and Spetminster and Blandford Forum. This 'grey infrastructure' and in particular the provision of the 'missing link' of the Sturminster Trailway (together with the mitigation measures described in Section 7 of this TA) will help to support sustainable growth in Blandford Forum and is consistent therefore with sustainable development objectives and policies 2, 13 and 16 of the North Dorset Local Plan, (Pre-submission, November 2013).

3 EXISTING CONDITIONS

3.1 General

3.1.1 Blandford St. Mary is a village in central Dorset on the south bank of the River Stour. Immediately north of the River is the town of Blandford Forum. Both the town and the village fall within the North Dorset district of the county, and are situated approximately 18 miles (29km) from the centre of Bournemouth to the south-east, 16 miles (26km) from Dorchester to the south-west, and 21 miles (34km) from Yeovil to the north-east. There are a few small settlements near Blandford St. Mary, most notably the village of Charlton Marshall to the south east of the development site.

3.1.2 A site visit to Blandford St. Mary was undertaken on 7 November 2013 to survey the existing conditions surrounding the site. All photographs in the following section were taken during this site visit.

3.2 Site Location

3.2.1 The development site is situated just south of the village of Blandford St. Mary, and approximately 0.6 miles (1km) south of Blandford Forum. The proposed site is 27 acres of farmland immediately south-west of the roundabout which connects the A354, A350, and Bournemouth Road, the main road through the village. To the south and west of the development site is farmland, and to the east some residential properties situated off the A350.

3.2.2 The proposed residential development is located within a five minute walk to the Tesco superstore 300 metres away, providing the residents with excellent accessibility to local facilities.

3.2.3 There are two proposed access points to the site, one near the roundabout off the A350, and one off the A354.

3.2.4 The development site within Blandford St. Mary is shown in red in Figure 3-1. The proposed access points are indicated by the red arrows.

Figure 3-1: Proposed Development within Blandford Forum

3.3 Pedestrian and Cycle Network

3.3.1 There are no footways on either side of the A354, which runs alongside the northern edge of the site, but the A350 has a footway along the north-east edge of the development. The A354 north of the site can be crossed at the roundabout over the central island (see Figure 3-2), as there are dropped kerbs at this location. Although the A354 has a speed limit of 50mph southwest of the roundabout, vehicles approaching the roundabout slow down a considerable distance before the roundabout. There is no historical evidence that this crossing is unsafe. However, the proximity to the roundabout and the relatively wide width of the crossing might give some users a perceived sense of heightened risk.

Figure 3-2: Crossing on the A354

3.3.2 After crossing the roundabout, pedestrians can continue down Bournemouth Road, which provides access to the Tesco supermarket, Homebase, and central Blandford St. Mary. It is also the direction pedestrians would walk to get to Blandford Forum town centre.

3.3.3 For pedestrians walking to Blandford Forum town centre from the development site, the quickest way would be a traffic free route through Langton Meadows, an open area which crosses over the River Stour into Blandford Forum. This walk is about 0.6 miles (1 km) in length, and took approximately 10-12 minutes to complete during the site visit. This route from the proposed development site involves crossing the A354 and Bournemouth Road via existing uncontrolled crossings located at the west side of Blandford St Mary Roundabout and to the south of the Bournemouth Road/Stour Park roundabout respectively. Pedestrians may be disinclined to take this route to the town centre, however, as there is no lighting through the park. In addition, the signage to the town centre is fairly poor, as there are only signs at the beginning and end of the route through the meadows. The footway/cycleway through Langton Meadows is shown in Figure 3-3.

Figure 3-3: Footpath through Langton Meadows to town centre

3.3.4 The footpaths are generally in adequate condition, and the dedicated footway/cycleway through Langton Meadows; apart from the aforementioned lack of lighting, is well maintained and wide enough to support a number of pedestrians and cyclists.

3.3.5 There are three routes of the National Cycle Network which can be accessed in Blandford Forum; Routes 25, 250 and 253. Route 25 runs from Bournemouth through Blandford Forum and Gillingham and links with Route 24 near Longleat. Route 250 is a fairly short route which runs from near Sturminster Marshall in the south to Sturminster Newton, north of Blandford Forum. Lastly, Route 253 runs in a loop taking in Blandford Forum, Shaftesbury, Gillingham and Sturminster Newton.

3.3.6 There are no dedicated cycle paths around the development site, and it was observed both in the video survey and during the site visit that cyclists feel safer using the footway, despite this being illegal (see Figure 3-4).

Figure 3-4: Cyclist riding on footway on A350

3.3.7 Route 253 runs through Langton Meadows, which provides the quickest route to Blandford Forum town centre, but there is no dedicated cycle lane here, despite the path through the park being wide enough to support both pedestrians and cyclists. The cycle route through the meadows is marked, as shown in Figure 3-5.

Figure 3-5: Marker in Langton Meadows showing NCN Route 253

3.4 Pedestrian Survey

3.4.1 A survey of pedestrian movements crossing the A354 at the Blandford St Mary Roundabout was summarised from a 12 hour video survey undertaken at the roundabout on the 30 April 2013.

3.4.2 A total of 74 people; including all pedestrians and cyclists using the footway, used the crossing between 07:00am and 19:00pm on 30th April 2013. Out of the 74 people crossing the junction, 20 (27%) were cyclists whilst the remaining 54 (73%) were pedestrians.

3.4.3 The 54 pedestrians included walkers, joggers, adults pushing buggies, school children, and a skateboarder.

3.4.4 39 of the crossers were travelling from Blandford St. Mary across the roundabout towards the A350, whilst 35 were making the opposite movement into the village.

3.4.5 The breakdown of movements by hours is shown in Table 3-1.

Hour	***Pedestrians***		***Cyclists***	
	Crossing the A354 (northbound)	Crossing the A354 (southbound)	Crossing the A354 (northbound)	Crossing the A354 (southbound)
07:00-07:59	3	2	3	1
08:00-08:59	**1**	**1**	**0**	**0**
09:00-09:59	2	2	0	0
10:00-10:59	0	2	0	0
11:00-11:59	2	1	0	1
12:00-12:59	5	2	0	0
13:00-13:59	4	2	1	1
14:00-14:59	3	4	1	0
15:00-15:59	2	3	1	0
16:00-16:59	3	3	1	3
17:00-17:59	**0**	**3**	**2**	**1**
18:00-18:59	4	0	1	3
Total:	**29**	**25**	**10**	**10**

Table 3-1: Existing pedestrian and cyclist movements across the A354 at Blandford St Mary Roundabout

3.4.6 A total of two pedestrian movements were observed in the AM peak and a total of 3 pedestrian and 3 cyclists movements were observed in the PM peak.

3.5 Public Transport

3.5.1 Blandford Forum has not had a railway station since 1969, so the nearest railway station is 13.5 miles (22km) away in Holton Heath. Trains leave Holton Heath to travel to Weymouth to the south-west and London Waterloo to the north-east.

3.5.2 There are two bus stops within 250 metres of the development site. The closest is 100 metres from the proposed access point off the A350, whilst the second is 250 metres away, on Bournemouth Road near the entrance to Tesco. A third stop is located directly outside the Tesco supermarket with its own lay-by, but at present this stop appears to not be in operation. *Guidelines for Planning for Public Transport in Developments* (1999) states that the preferred walking distance from a development to a bus stop is 300 metres, with the maximum walking distance 400 metres. Under these guidelines, the development's access points fall within the preferred walking distances.

3.5.3 The location of the Bournemouth Road bus stop is detailed within Figure 3-6 below.

Figure 3-6: Bournemouth Road Bus stop

3.5.4 The bus stop is outside the Tesco supermarket, immediately before the Bournemouth Road/Stour Park roundabout. There is a paved waiting area for pedestrians to stand with a post listing the bus service activity from this stop. To allow passengers to board and alight the bus at this location all buses have to stop in the main carriageway.

3.5.5 The southbound location of the A350 bus stop is detailed within Figure 3-7, below.

Figure 3-7: A350 Bus stop location

3.5.6 This bus stop also has a hard standing area for pedestrians but, given its location alongside the A350 could be regarded as intimidating for some users as it so close to the main road. To allow passengers to board and alight the bus at this location all buses have to stop on the main carriageway.

3.5.7 A northbound bus stop on the A350, adjacent to Wards Drive, is also available to public transport users. This stop however is unmarked with no bus stop post to identify its location to existing and future users. To allow passengers to board and alight the bus at this location all buses have to stop partially on the main carriageway and partially across a private entrance.

3.5.8 These stops are utilised by three services on a regular basis. These are the X8, 83, and 183 services. The X8 service runs hourly to and from Poole Bus Station. The 83 is a service running from Shaftesbury to Wimborne, and back again, via Blandford St. Mary, departing the latter every two hours. Lastly, the 183 service goes to and from Weymouth via Dorchester, again at two hour intervals. These three services also stop in Blandford Forum, for those wanting to make a short bus journey into town. However the infrequency of the services will not attract those wishing to make short bus journeys such as these. Services X8, 83 and 183 are summarised in Table 3-2 below.

Bus Service	Route	Frequency (minutes)		First Bus	Last Bus
		Weekday	Saturday		
X8	Poole Bus Station – Blandford St. Mary	60	60	07.45 (Weekday) 08.50 (Sat)	23.30 (Weekday) 23.30 (Sat)
	Blandford St. Mary – Poole Bus Station	60	60	06.58 (Weekday) 07.48 (Sat)	22.58 (Weekday) 22.58 (Sat)
83	Shaftesbury Town Hall – Blandford St. Mary – Wimborne High Street	120	120	07.00 (Weekday) 07.00 (Sat)	15.00 (Weekday) 17.00 (Sat)
	Wimborne High Street – Blandford St. Mary – Shaftesbury Town Hall	120	120	07.10 (Weekday) 09.15 (Sat)	17.15 (Weekday) 17.15 (Sat)
183	Weymouth (King's Statue) – Dorchester – Blandford St. Mary	120	120	09.10 (Weekday) 09.10 (Sat)	17.15 (Weekday) 17.20 (Sat)
	Blandford St. Mary – Dorchester – Weymouth (King's Statue)	120	120	07.51 (Weekday) 07.51 (Sat)	15.55 (Weekday) 15.39 (Sat)

Table 3-2: Summary of Bus Services serving Blandford St. Mary

3.5.9 As Table 3-2 demonstrates, there will usually be three buses departing from and arriving in Blandford St. Mary per hour, so during the AM peak from 8am to 9am there will be three services operating. Similarly, in the PM peak from 5pm to 6pm there will be three buses arriving and departing from the village.

3.5.10 Further from the development site, in Blandford Forum itself, residents will be able to access a number of other services, such as the 368 service to Sherborne and Yeovil, the 310 to Sturminster Newton, 309 to Gillingham and Shaftesbury, the 311 service to Dorchester, and the 185 serving Blandford Military Camp, approximately 3 miles (4.8km) outside of Blandford Forum.

3.6 Highway Network

3.6.1 Blandford Forum and Blandford St. Mary are primarily served by the A350 and A354. The A350 serves Warminster and Shaftesbury to the north, and Poole and Bournemouth to the south-east. The A354 provides access to Salisbury in the north-east and Dorchester in the south-west.

3.6.2 In addition, Blandford Forum and Blandford St. Mary can also be accessed by the A357 and B3082. These more minor roads connect the town and village to Sherborne, Wimborne Minster, and Yeovil, via the A30.

<u>A350</u>

3.6.3 The A350 runs adjacent to the development in the north east of the site, and one of the two proposed access points will be from this road, with an existing 40mph speed limit from the roundabout past the development. The A350 has a footway along one side only, with the other side lined by trees, although there is a small paved area where the bus stop on the A350 is located, approximately 140 metres from the roundabout. At the entry of the A350/A354 roundabout, the A350 flares from one lane into two on the approach, although there no road markings to specify which lane to turn right from, as Figure 3-8 demonstrates.

Figure 3-8: A350 Approach to Roundabout

<u>A354</u>

3.6.4 The A354 runs parallel to the entire north face of the development site as it approaches the A350/A354 roundabout from the south west, and has a 50mph speed limit. There is a crossing on the A354 in close proximity to the roundabout which will serve the development, but there are no footways on either side of the A354 as you move away from the roundabout. Like the A350, the A354 is single lane carriageway, but visibility is excellent for vehicles exiting the roundabout, so overtaking is common moving away from the roundabout, as was observed during the site visit. Approaching the roundabout, cars slow down considerably as the single lane becomes two at the entry to the roundabout. Again, these lanes are not marked with which specific destinations, as Figure 3-9 shows.

Figure 3-9: A354 Approach to Roundabout

3.6.5 As you move away from the A350/A354 roundabout in a north easterly direction, the speed limit of the A354 changes from 50mph to the national speed limit. There is a footway along the northern side of the A354 but it becomes very narrow and ends about 700 metres from the roundabout. It is therefore unlikely to be used.

<u>A350/A354 Roundabout</u>

3.6.6 The A350/A354 roundabout is directly adjacent to the northern corner of the development. It has a diameter of approximately 40 metres, and the central island is about 18 metres in diameter. The circulatory carriageway is unmarked, as Figure 3-9 shows, but there is space for two cars to use it.

<u>Bournemouth Road</u>

3.6.7 Bournemouth Road goes north west from the A350/A354 roundabout into the village of Blandford St. Mary. The road has a 30mph speed limit and has a maximum width of about 7 metres. Both sides of the road have footways leading from the A350/A354 roundabout. As Bournemouth Road approaches the Bournemouth Road/Stour Park roundabout, 100 metres from the A350/A354 roundabout, it flares into two lanes.

<u>Bournemouth Road/Stour Park Roundabout</u>

3.6.8 The Bournemouth Road/Stour Park roundabout is smaller than the A350/A354 roundabout, with a diameter of approximately 35 metres. The central island is also comparatively smaller, with an estimated diameter of only 11 metres. Like the A350/A354 roundabout, however, the roundabout's lanes should be wide enough to allow for two cars to go round it at once. The Bournemouth Road/Stour Park roundabout is situated approximately 150 metres from the development site itself.

Stour Park

3.6.9 Stour Park leads away from the roundabout in a north easterly direction towards the Tesco Superstore, Homebase and the entry to the Hall & Woodhouse Brewery. Tesco and Homebase are accessed from a mini roundabout located approximately 50 metres from the Bournemouth Road/Stour Park roundabout. In between the two roundabouts, there is a dual carriageway with a central reservation with dropped kerbs at both ends to provide crossing points for pedestrians wanting to cross the road to access Tesco or Homebase, which are on opposite sides of Stour Park. After the mini roundabout, however, Stour Park continues towards the brewery as an unmarked single carriageway. Stour Park has a footway on both sides.

Birch Avenue

3.6.10 Birch Avenue is the fourth arm of the Bournemouth Road/Stour Park Roundabout, which leads into a residential area and as a result has a speed limit of 20mph. Both sides of the road have footways, and like all other approaches to the Bournemouth Road/Stour Park roundabout, the road flares to two lanes upon entry.

3.7 Collisions Analysis

3.7.1 Personal Injury Collision (PIC) data was obtained for both the A350/A354 and Bournemouth Road/Stour Park roundabouts for a five year period between September 2008 and August 2013. Data was collected for an area of 100 metres either side of each of these junctions, and a total of 7 PICs were identified. These are summarised in Table 3-3.

Collision Ref.	Date	Severity	Weather Conditions	Light or Dark
1	22/09/2008	Serious	Dry	Light
2	08/05/2009	Slight	Dry	Light
3	17/07/2009	Slight	Dry	Light
4	09/02/2010	Slight	Dry	Dark
5	27/02/2011	Slight	Wet/Damp	Light
6	13/04/2011	Slight	Dry	Dark
7	21/07/2011	Slight	Dry	Light

Table 3-3: Summary of collisions in study area 2008 - 2013.

3.7.2 Appendix 3 shows when and where the incidents occurred, and the severity of the collisions. As the collision plot shows, 6 out of 7 of the collisions that have occurred in the past five years happened near the A350/A354 roundabout outside of the development site, either on one of the four approaches to the roundabout, or on the roundabout itself. None of the collisions involved pedestrians at A350/A354 roundabout.

3.7.3 Of the 7 collisions, none were fatal, one was serious, and 6 were slight in severity. The only serious collision was in 2008, on the Bournemouth Road/Stour Park roundabout; where a car travelling south-east hit a cyclist head on. This collision occurred in dry and light conditions, with the cause of the crash being cited as the driver of the car failing to look properly.

3.7.4 The 6 slight collisions all occurred at the roundabout near the development site, where the A350 and A354 meet. One of these was on the north-east arm of the A354, one on the A350 arm, with the other 4 occurring in the roundabout's circulatory carriageway.

3.7.5 The nature and causes of the 6 collisions which occurred on or near the A350/A354 roundabout are varied. One was a single vehicle collision, and involved skidding, as the car involved accelerated away from the roundabout too quickly in wet conditions, culminating in the driver losing control and skidding into a tree on the nearside.

3.7.6 Three of the collisions which occurred on the circulatory carriageway of the A350/A354 roundabout involved vehicles pulling out onto the roundabout without looking properly, and colliding with vehicles already on the roundabout. All three of the collisions involved two cars and occurred in dry conditions. One of them occurred when it was dark.

3.7.7 Collision 3 involved one car and two motorcycles, and was caused by the car performing a U-turn which led to one motorcycle losing its rider, with the second colliding with the car. This incident occurred in dry and light conditions, with the driver's poor manoeuvring cited as the cause.

3.7.8 The final collision, collision 4, occurred in the dark, in dry conditions. The collision was caused by a car towing a trailer going too fast into the roundabout, causing the trailer to overturn and collide with a light goods vehicle already on the roundabout.

3.7.9 Of the 7 collisions, 5 occurred in daylight, with the remaining 2 occurring in the hours of darkness when the street lighting was lit. 6 out of 7 of the collisions occurred when the road was dry and only 1 when it was wet.

3.7.10 In order to fully analyse the collision data, COBA analysis was undertaken for the two roundabouts in the study area. Using COBA analysis of the turning counts for the two roundabouts, it was possible to calculate a national average for a roundabout with the same turning counts.

	A350/A354 Roundabout	**Bournemouth Road/Stour Park Roundabout**
Average Number of Collisions at Roundabout (per year)	1.2	0.2
National Average Number of Collisions (per year)	2.0	0.7

Table 3-4: COBA Analysis of Roundabouts

3.7.11 As Table 3-4 demonstrates, the annual average number of collisions at both roundabouts was lower than the national average for a similar roundabout with the same turning counts. At the A350/A354 roundabout, there were 6 collisions over the five-year period, which equates to 1.2 collisions on average per year. The national average, however, would be 2 collisions per year, or 10 over a five year period.

3.7.12 The annual average number of collisions on Bournemouth Road/Stour Park roundabout is also lower than the national average calculated by the COBA analysis. In the five-year period from which the collision data was taken, there was only 1 collision, equating to 0.2 collisions on average per year. The national average however would be 0.7 collisions per year, which equates to 3.5 collisions over a five-year period.

3.7.13 To summarise, 7 collisions in the past 5 years in the vicinity of the development site does not suggests there is not an existing road safety problem, which is supported by the COBA analysis undertaken above.

3.8 Summary

3.8.1 The development site is suitably located so that Blandford Forum town centre and the local amenities (such as the Tesco supermarket) are both within walking distance. There is no train station in Blandford, but bus stops providing services to Poole, Dorchester, Shaftesbury and elsewhere are easily accessible to residents. Bus stops are located in close proximity to the site but in some cases require improvement.

3.8.2 One issue which is apparent is whether it is safe for pedestrians to cross the A350/A354 roundabout from the proposed development site in the direction of Blandford Forum. During the site visit it was observed that visibility was good and that vehicle speeds drop as they approach the roundabout. The observations, coupled with the collision data which showed no collisions involving pedestrians over a five-year period, suggests that the existing crossing provides safe passage over the A354 towards the town centre.

3.8.3 Three National Cycle Networks are close to the development site, but there are no cycle paths, which may need to be introduced to encourage cyclists, given the fast speed limits near the site.

3.8.4 Footways are generally adequate; however the quickest route to Blandford Forum town centre is through an unlit park. To encourage pedestrians to use this route, it may be necessary to introduce some lighting. Additionally, improved signposting to the town centre would improve the walking route.

3.8.5 Analysis of the collision data does not suggest either the A350/A354 roundabout or the Bournemouth Road/Stour Park roundabout is particularly dangerous. Fewer collisions have occurred over the five year period in the study area than the national average would suggest, according to COBA analysis.

4 PROPOSED DEVELOPMENT

4.1 General

4.1.1 The development proposal is for 350 residential dwellings on a site to the south of the A350/A354 Blandford St Mary Roundabout, south of Blandford Forum.

4.1.2 This section details the access arrangements for the site as well as the parking assumptions for the proposed development. The number of trips that will be generated by the proposed development in the AM (08.00-09.00) and PM (17.00-18.00) peak hours, as well as details of the mode share of trips generated and the distribution and assignment of trips onto the local highway network.

4.2 Access Arrangements

4.2.1 Vehicular access to the site will be provided via purposely constructed priority junctions on the A354 to the north of the site and the A350 to the east. A drawing included with this TA as Appendix 4 shows the proposed junction layouts.

4.2.2 Junction capacity assessments have been undertaken for the site accesses; the results are presented in Section 6 of this report.

A354 Vehicular Access

4.2.3 A priority junction on the A354 with a dedicated right turn lane to the development will provide access to and from the northern side of the proposed development as shown in the drawing included with this TA as Appendix 4.

A350 Vehicular Access

4.2.4 A priority junction on the A350 with a dedicated right turn lane to the development will provide access to and from the eastern side of the proposed development. The proposed access arrangement is shown on a drawing included with this TA as Appendix 4.

4.2.5 Appendix 4 also identities the location of the proposed bus lay-by, which is discussed in further detail in Section 7 of this report.

4.3 Parking

4.3.1 Parking provision for the proposed development will be provided in accordance with Dorset County Council's residential car parking standards as set out in 'The Bournemouth, Poole and Dorset Residential Car Parking Strategy: Residential Car Parking Provision, Local Guidance for Dorset' (May 2011).

4.3.2 The Bournemouth, Poole and Dorset Residential Car Parking Strategy – Part 2 (May 2011) classifies the area of the proposed development as 'Hamlet & Isolated Dwellings – Sparse'. Parking provision for residential developments in North Dorset District that fall within the 'Hamlet & Isolated Dwellings – sparse' category are shown in Table 4-1 overleaf.

	Unallocated demand figures		
	0 allocated	**1 allocated**	**2 allocated**
Number of Bedrooms	**Hamlet & Isolated Dwelling**		
	Village		
1	1.3	0.4	*
2	1.3	0.4	0.1
3	1.8	0.8	0.2
4+	2.3	1.3	0.5

Table 4-1: Parking Standards

(Source: Table B7: North Dorset Houses, 'The Bournemouth, Poole and Dorset Residential Car Parking Strategy: Residential Car Parking Provision, Local Guidance for Dorset' (May 2011).
** Number of allocated parking spaces is too great and should not be provided*

4.4 Trip Generation

4.4.1 The number of trips that will be generated by the proposed development has been determined from person trip rates extracted from the TRICS database (TRICS 2013(a)v6.11.2) for similar developments. The trip rates that have been applied are person trip rates per dwelling and are shown in Table 4-2 below. These trip rates were included in the Scoping Note for this TA and have previously been agreed by Dorset County Council via an email dated 15 October 2013 (see Appendix 2).

TRICS Person Trip Rates – Mixed Private / Non-Private Housing			
Time	**Arrivals**	**Departures**	**Total**
08.00-09.00	0.210	0.642	0.852
17.00-18.00	0.498	0.254	0.752

Table 4-2: Person Trip Rates

4.4.2 Table 4-3 below shows the total number of person trips that will be generated in the AM and PM peaks by the proposed 350 dwellings.

Total number of person trips generated			
Time	**Arrivals**	**Departures**	**Total**
08.00-09.00	73	225	298
17.00-18.00	174	89	263

Table 4-3: Total Person Trips Generated

4.5 Mode Share

4.5.1 The mode share of trips has been determined by applying mode share percentages as provided by the TRICS database for similar developments to the development proposed. This approach was agreed by DCC (see Appendix 2) as it takes into account 'all purpose' trips rather than focusing solely on work trips which would be the case if census data was used to determine mode share. The mode share of proposed development trips is shown in Table 4-4 below.

Mode Share (Arrival and Departure)		
Mode	**Share (%)**	**Number of Trips**
Vehicle Occupants	68.5	385
Cyclists	3.0	17
Public Transport	6.1	35
Pedestrians	22.4	124

Table 4-4: Mode Share – AM and PM Peak Hours Combined

4.5.2 The mode share of trips arriving and departing in the AM and PM peak hours is shown in Table 4-5. The proposed development will generate 94 and 83 non-car trips in the AM and PM peaks respectively of which approximately 20% are predicted to use public transport.

Mode Share (Arrival and Departure)			
Mode	**Share (%)**	**AM Trips (08.00-09.00)**	**PM Trips (17.00-18.00)**
Vehicle Occupants	68.5	204	180
Cyclists	3.0	9	8
Public Transport	6.1	18	16
Pedestrians	22.4	67	59
Total	100%	298	263

Table 4-5: Mode Share – AM and PM Peak Hours

4.6 Existing Traffic Flows

4.6.1 A full 12 hour (7am – 7pm) traffic count at Blandford Forum roundabout was undertaken on 30 April 2013. This traffic count was used as the base for the site access and A350/A354 Roundabout capacity assessments. As agreed with DCC in Appendix 2, the Bournemouth Road/Stour Park Roundabout capacity assessment was based on a traffic count undertaken in 2006 for the Brewery TA. Due to multiple data sources being used both data sets are normalised to a common year. The developed network uses consistent junction counts from the April 2013 data which is taken as the constraint and any other data is factored to that level of traffic. The existing AM and PM peak hour traffic flows are shown on traffic flow figures contained in Appendix 5 of this report.

4.7 Trip Distribution and Assignment

4.7.1 The distribution of trips from the site accesses has been determined from existing traffic flows on the A350 and A354 which were counted on the 30th April 2013 as part of a traffic count at the A350/A354 Roundabout. The 30th April traffic count was also used to determine the directional split of future development trips at the roundabout. As part of the TA scoping it was agreed with DCC that the directional split of trips at the Bournemouth Rd/Stour Park Roundabout would be determined from the traffic count undertaken to support the Brewery planning application in 2006 (planning application ref 2/2006/1353). The Brewery traffic count was also used for the Blandford St. Mary Tesco extension TA (planning application 2/2010/1222/PLNG).

4.8 Future Traffic Flows

4.8.1 Future traffic flows for assessment years of 2014 (assumed application year) and 2025 (10 years post residential occupation of the site) have been calculated by applying background growth factors, development flows and committed development flows to the 2013 base traffic flows. Details of how background growth factors have been applied are provided in section 6 (Junction Capacity Assessments). Future traffic flows, with and without development, are shown on traffic flow figures in Appendix 5 of this report.

5 COMMITTED DEVELOPMENT

5.1 General

5.1.1 This section describes committed developments in Blandford St. Mary, near the proposed housing site and the impact these developments may have in terms of increased traffic in Blandford St. Mary in combination with the traffic generated by the proposed residential development.

5.1.2 The committed developments included in this TA have been agreed by DCC (see Appendix 2). In March 2013 the proposed ASDA development, located adjacent to the A350/Higher Shaftesbury Road Junction, received planning consent.

5.2 ASDA Planning Consent

5.2.1 North Dorset District Council Recently granted planning consent for an ASDA Superstore (2/2011/1439/PLNG) on land off Blandford Heights/Shaftesbury Lane. This development will inevitably divert traffic from the St Mary's Hill area and alter the capacity of the the Stour Park/Bournemouth Road roundabout. It is considered the arrival of a new ASDA store will not only reduce the likelihood of the consented Tesco Store Extension coming forward but will take custom away from the existing Tesco store, and therefore, reduce trips to and from Stour Park/Bournemouth Road roundabout.

5.2.2 The Planning and Retail Statement prepared by RPS for the Proposed Mixed Use Development (ASDA) at Shaftesbury lane, Blandford Forum sets out in paragraph 8.27 that *"It can be seen that the new ASDA is expected to derive the majority (16.9m or 76%) of its convenience turnover from existing stores in Blandford. The largest single trade draw is from the Tesco at Stour Park, on the basis that it is the dominant superstore in the town and ASDAs closest competitor. This is expected to suffer a trade diversion of £14.2m, which will result in an impact of -30.6%".*

The assessment of the Stour Park/Bournemouth Road roundabout, therefore, includes a 30% reduction of the base (2014) traffic either entering or leaving the Tesco access assuming that these trips will now divert from the Tesco store to the ASDA store.

5.3 Tesco Extension

5.3.1 Tesco Stores Ltd has a planning application in place to extend their store in Blandford St. Mary, which is located 250 metres north of the proposed residential development. The proposed extension entails expanding the store westwards from 2,273m² to 3,941m², taking up the area currently being utilised as the service yard. To accompany the extension, Tesco also plan to increase car parking provision by 113 spaces, from 323 to 436 spaces. This would be achieved by occupying the vacant land immediately north of the store, where they would also move the service yard.

5.3.2 The expansion of the store and car park would in turn necessitate an improvement to the accessibility to the site for cars, pedestrians and service vehicles. The developers plan to remove the existing service access off Stour Park and create a new access off the side road north of the store. Expansion of the store into the existing service yard would also result in the loss of the current pedestrian access to the store off Stour Park. A new pedestrian access leading directly from the entrance to Stour Park has therefore been proposed.

5.3.3 Improvements to Stour Park and Bournemouth Road have also been proposed in conjunction with the expansion of the store. Proposed zebra crossings north of the roundabout on Bournemouth Road, and in between the same roundabout and the mini roundabout outside of the Tesco score, would make pedestrian access to the store from the south safer. Creating new zebra crossings here would also require modifications to the central reserve on Stour Park.

5.3.4 To accompany the increase in parking space availability, an additional 23 cycle parking spaces has been proposed, in keeping with the minimum requirement of one cycle parking space per 5 car parking spaces, outlined in North Dorset's Core Strategy.

5.3.5 Lastly, the developers also plan to provide additional on-site signage to raise awareness of the route to Blandford Forum town centre, across Langton Meadows. This would not only benefit shoppers at Tesco, but also the residents of the proposed development who wish to take the quickest route into Blandford Forum town centre through the meadows.

Proposed Trip Generation

5.3.6 The proposed number of trips generated by the Tesco's extension in the AM and PM peak hours is shown in Table 5-1 below.

AM Peak		PM Peak	
Arriving	**Departing**	**Arriving**	**Departing**
37	72	73	76

Table 5-1: Vehicle trips generated by the Tesco's extension

(Source: Table A2.4 in 'Addendum Transport Assessment/ Travel Plan Report' (Tesco Stores Ltd, Tesco Blandford Forum, May 2011)

5.4 Brewery Mixed Use Planning Permission

5.4.1 Hall & Woodhouse Ltd, who own the brewery site in Blandford St. Mary, have planning permission for a comprehensive development on their existing site. The brewery is immediately south of the River Stour, with Blandford Forum town centre on the opposing side. In relation to the proposed residential development, the brewery is approximately 315 metres north of the site.

5.4.2 The development proposal involves considerable change to the current site, evolving from a processing site to a mixed use development. The developers intend to replace the current brewery itself, in turn upgrading the brewing process, which, with modern techniques, would require less space. In addition, a new distribution centre is planned, as well as new offices for Hall & Woodhouse. Also planned is 2975m^2 of light industrial sheds, 4829m^2 of commercial space, 195 residential units, and some 1225m^2 of mixed use employment area. To increase connectivity to the town centre, the creation of a number of footpath and cycleway links through the site will connect to the existing pedestrian links through Langton Meadows.

5.4.3 In order to provide enough space to complete the intended developments, demolition of many of the existing storage and distribution buildings would be needed, whilst others would need to be converted, such as the existing offices into housing.

5.4.4 One new vehicular access point to the site has been proposed, bringing the total to 4, with numerous other pedestrian and cycle entrances and exits to be created. The new vehicle access point will be in the north-east corner onto Stour Meadows, adding to the current goods access point onto Stour Meadows, the existing access point off Bournemouth Road, and the existing gated access onto Bournemouth Road. With the exception of the goods access point off Stour Meadows, the other three access points will be linked by roads through the site. These roads will be managed by traffic calming features.

5.4.5 In addition to pedestrian links alongside the roads within the site, there will also be new links onto Mortain Bridge which provides a route into Blandford Forum, and links to Langton Meadows, through which pedestrians can access the town centre. This in turn may benefit the residents of the proposed development, as pedestrian and cycle networks between the housing and the town centre will be augmented.

Proposed Trip Generation

5.4.6 The proposed development at the Brewery site is anticipated to generate the incremental traffic flows as shown in Table 5-2 overleaf.

AM Peak		PM Peak	
Arriving	**Departing**	**Arriving**	**Departing**
138	91	81	126

Table 5-2: Vehicle trips Generated by the Brewery Development

(Source: Table 4, 'The Brewery, Blandford St Mary, Transport Assessment', 2006)

5.5 Black Lane Housing Development

5.5.1 Persimmon Homes have submitted a planning application to develop 85 homes in Blandford Forum on a 3.11 hectares area of land located off Wimborne Road and Black Lane. The site has the A354 running along its eastern side, the B3082 (Wimborne Road) along its southern side, a school and adult learning centre to its west, and Black Lane to the North. This puts the Persimmon Homes housing development approximately 0.75 miles (1.2km) north-east of the residential development, just off the B3082/A354 roundabout.

5.5.2 A new access point off Wimborne Road has been proposed to serve the new housing development. The new junction will be designed to suit the needs of the development, such as access for refuse vehicles. A possible new pedestrian/cycle way has been discussed that would run along the northern side of Wimborne Road to the junction with Black Lane, and then further along Black Lane.

5.5.3 The existing Wimborne Road/Black Lane junction will also be modified, with the existing turning facility being closed and new crossing facilities installed to make walking to Blandford Forum town centre simpler for pedestrians.

5.5.4 Persimmon Homes' housing will have its own parking either to the side or rear, with some casual parking provision planned to cater for visitors. The houses will also be able to accommodate cycle parking either in sheltered parking area or in secured rear gardens.

Proposed Trip Generation

5.5.5 The proposed development of 85 residential dwellings on Black Lane is anticipated to generate the following number of trips in the AM and PM peak hours.

AM Peak		PM Peak	
Arriving	**Departing**	**Arriving**	**Departing**
22	79	57	35

Table 5-3: Vehicle trips generated by the Black Lane Development

(Source: Table 6.2, Land of Wimborne Road Transport Assessment, May 2001)

5.6 Summary of Additional Traffic from Committed Developments

5.6.1 The sum of committed development trips impacting on the A354/A350/Bournemouth Road Roundabout and the Stour Park/Bournemouth Road/Birch Avenue Roundabout has been determined from distribution diagrams in the committed development TAs and added to the proposed development flows for the purposes of junction assessments. Table 5-4 shows the number of committed development trips expected to impact on the assessment roundabouts.

A354/A350/Bournemouth Road Roundabout		Stour Park/Bournemouth Road/Birch Avenue Roundabout	
AM	**PM**	**AM**	**PM**
241	240	283	286

Table 5-4: Summary of committed developments trips impacting on assessment roundabouts

6 JUNCTION CAPACITY ASSESSMENTS

6.1 General

6.1.1 This section of the TA details the results of the junction capacity assessments. Modelling work was originally undertaken in May 2013 on a parameter of 200 dwellings (see Appendix 1). This has since been revised to 350 dwellings and all modelling work undertaken for this report considers the scenario of 350 dwellings. The following junctions were identified in the TA scoping and agreed with DCC to be the junctions most likely to be impacted by the proposed development.

- A354/A350/Bournemouth Road Roundabout - ARCADY
- Stour Park/Bournemouth Road/Birch Avenue Roundabout - ARCADY
- A354 Site Access - PICADY
- A350 Site Access - PICADY

6.1.2 The junctions have been assessed using JUNCTION 8 which is a software package that includes ARCADY (Assessment of Roundabout Capacity and Delay) to access roundabout capacity and PICADY (Priority Intersection Capacity and Delay) to assess priority junctions.

6.1.3 Junction performance can be measured using Ratio of Flow to Capacity (RFC), with a value of 100% being the maximum theoretical capacity of an approach to a junction. However, in reality, junction performance normally starts to be affected when the RFC reaches 85%. Therefore, for the purposes of this capacity assessment, 85% is considered to indicate the point where junction performance begins to breakdown. However, the requirement for any mitigation must also consider queue lengths which are also an indication of junction performance. For example, the RFC on a particular approach may be above 85% but the queue length may be considered to be acceptable.

6.2 Assessment Years and Development Scenarios

6.2.1 Junction capacity assessments have been undertaken in the AM (08.00-09.00) and PM (17.00-18.00) peak hours for the following years:

- 2013 - Base Year – ARCADY assessments only due to PICADY assessments only being required for new site accesses
- 2014 without development (committed development included) – Application year
- 2014 with development (committed development included) – Application year
- 2025 without development (committed development included) – 10 years post opening year
- 2025 with development (committed development included) – 10 years post opening year

6.3 Background Traffic Growth

6.3.1 Background traffic growth has been calculated using growth factors obtained from the Department for Transport's Trip End Model Presentation Programme (TEMPRO) which is the output of their National Trip End Model (NTEM). The growth factors shown in Table 6-1 and Table 6-2 have been adjusted with National Transport Model

(NTM) traffic growth calculations in line with the Department for Transport's Transport Appraisal Guidance (TAG) unit 3.15.2.

6.3.2 The growth factors have also been manually adjusted in accordance with Section 5.7 of TAG Unit 3.15.2 so as to avoid double counting as a result of identified committed development. As the Brewery development and the Black Lane development (committed developments) have been explicitly modelled, the TEMPRO housing predications have been reduced accordingly.

6.3.3 TEMPRO shows that the number of jobs generated between 2013 and 2025 in the Blandford Forum area would only be 22. Due to the small number of jobs forecast, manual adjustments to take account of new jobs generated by the Tesco's extension (65 full-time jobs) have not been made. This will help to ensure a conservative assessment.

2013-2014 TEMPRO Growth Factors			
Peak	**Area Description**	**Area**	**All purposes: Local Growth Factor**
AM	19UE1	Blandford Forum	1.001
PM	19UE1	Blandford Forum	1.002

Table 6-1: 2013-2014 TEMPRO Growth Factors

2013-2025 TEMPRO Growth Factors			
Peak	**Area Description**	**Area**	**All purposes: Local Growth Factor**
AM	19UE1	Blandford Forum	1.096
PM	19UE1	Blandford Forum	1.110

Table 6-2: 2013-2025 TEMPRO Growth Factors

6.4 ARCADY Assessments

6.4.1 The results of the ARCADY junction capacity assessments are presented below. For the purpose of comparison between demand scenarios, the summary results are presented collectively for the AM and PM peak hours. The ARCADY output reports are included with this TA as Appendix 7.

A354/A350/Bournemouth Road Roundabout

6.4.2 A summary of the key performance indicators is shown in Table 6-3 below. For ease of reference RFCs below 50% are coloured green, RFC's between 50%-85% are coloured amber and any value above 85% is coloured red.

6.4.3 It can been seen from the summary results in Table 6-3 that the roundabout is forecast to operate within capacity over the assessment period in both the AM and PM peak hours. Traffic generated by the proposed developments is shown to only marginally impact the junction with a difference in RFC values on the A354 western approach in the AM peak, for example, only being 0.1% higher in 2025 than without development.

	AM			PM		
	Max Queue (PCU)	Delay (s) /veh	RFC	Max Queue (PCU)	Delay (s) /veh	RFC
2013 Base Year						
A354 (E)	1.41	4.77	0.57	1.51	5.13	0.60
A350 (S)	1.17	6.80	0.53	1.21	7.09	0.55
A354 (W)	0.59	3.86	0.36	0.56	4.04	0.34
Bournemouth Rd	0.67	4.69	0.40	1.32	6.38	0.57
2014 Without Development						
A354 (E)	1.70	5.44	0.62	1.85	5.98	0.65
A350 (S)	1.64	8.64	0.62	1.67	8.94	0.62
A354 (W)	0.76	4.53	0.42	0.70	4.64	0.39
Bournemouth Rd	0.78	4.99	0.43	1.89	8.01	0.66
2014 With Development						
A354 (E)	1.76	5.58	0.63	2.01	6.37	0.67
A350 (S)	1.96	9.73	0.66	1.91	9.86	0.66
A354 (W)	0.89	4.97	0.46	0.75	4.81	0.41
Bournemouth Rd	0.84	5.27	0.45	2.06	8.58	0.68
2025 Without Development						
A354 (E)	2.24	6.60	0.68	2.67	7.86	0.73
A350 (S)	2.35	11.41	0.70	2.56	12.64	0.72
A354 (W)	0.95	5.24	0.48	0.90	5.46	0.46
Bournemouth Rd	1.08	6.02	0.51	2.84	11.10	0.74
2025 With Development						
A354 (E)	2.32	6.79	0.69	2.94	8.54	0.75
A350 (S)	2.89	13.38	0.74	3.04	14.55	0.76
A354 (W)	1.13	5.84	0.52	0.97	5.70	0.47
Bournemouth Rd	1.16	6.43	0.53	3.17	12.21	0.76

Table 6-3: A354/A350 Roundabout Summary of Key Performance Indicators

<u>Stour Park/Bournemouth Road/Birch Avenue Roundabout</u>

6.4.4 A summary of the key performance indicators is shown in Table 6-4 below. The results demonstrate that all approaches in all scenarios are operating below 85%. Previously the forecast 2025 PM peak assessment work was causing issues with the Stour Park/Bournemouth Road roundabout (north approach). The slight reduction in traffic flow has improved the performance of the junction and removed the previously identified capacity and queuing issue.

	AM			PM		
	Max Queue (PCU)	Delay (s) / veh	RFC	Max Queue (PCU)	Delay (s) / veh	RFC
2014 Without Development						
Arm 1 (Stour Rd)	0.27	2.98	0.20	0.64	3.91	0.37
Arm 2 (Bournemouth Rd S)	1.23	6.76	0.56	1.53	7.49	0.58
Arm 3 (Birch Avenue)	0.14	4.76	0.11	0.10	4.73	0.08
Arm 4 (Bournemouth Rd N)	0.68	5.90	0.39	0.86	6.30	0.44
2014 With Development						
Arm 1 (Stour Rd)	0.27	2.99	0.20	0.65	3.97	0.38
Arm 2 (Bournemouth Rd S)	1.54	7.16	0.58	1.60	7.69	0.59
Arm 3 (Birch Avenue)	0.15	4.88	0.12	0.10	4.79	0.08
Arm 4 (Bournemouth Rd N)	0.70	6.00	0.39	0.90	6.44	0.45
2025 Without Development						
Arm 1 (Stour Rd)	0.30	3.08	0.22	0.74	4.22	0.41
Arm 2 (Bournemouth Rd S)	1.68	7.60	0.60	1.97	8.85	0.64
Arm 3 (Birch Avenue)	0.16	5.04	0.13	0.12	5.09	0.10
Arm 4 (Bournemouth Rd N)	0.79	6.35	0.42	1.06	7.06	0.50
2025 With Development						
Arm 1 (Stour Rd)	0.31	3.13	0.23	0.76	4.29	0.42
Arm 2 (Bournemouth Rd S)	1.97	8.39	0.64	2.05	9.09	0.65
Arm 3 (Birch Avenue)	0.17	5.24	0.14	0.12	5.14	0.10
Arm 4 (Bournemouth Rd N)	0.84	6.61	0.44	1.09	7.19	0.50

Table 6-4: Stour Park/Bournemouth Road Roundabout Key Performance indicators

6.5 PICADY Assessments

6.5.1 PICADY assessments have been undertaken on the two priority junctions that are proposed to provide access to the site. The key junction performance indicators are shown in the tables below (the full results are included with this TA as Appendix 6). As with the ARCADY assessment, RFC values are coloured according to value. In this instance all RFC's are below 50% and therefore are coloured green.

A354 Site Access

6.5.2 Table 6-5 shows that the A354 site access junction would operate within capacity in 2014 and 2025. The modelling shows that there would be no queue to exit or enter the proposed development in the application year or 10 years after opening.

	AM			PM		
	Max Queue (PCU)	Max Delay (s) /veh	Max RFC	Max Queue (PCU)	Max Delay (s) /veh	Max RFC
2014						
Site Access – A354 (West)	0.08	6.72	0.07	0.03	6.21	0.03
Site Access – A354 (East)	0.13	11.25	0.12	0.05	10.20	0.04
Right turn into site access from A354	0.03	6.49	0.02	0.06	6.71	0.06
2025						
Site Access – A354 (West)	0.08	6.97	0.07	0.03	6.43	0.03
Site Access – A354 (East)	0.15	12.41	0.13	0.05	11.21	0.05
Right turn into site access from A354	0.03	6.69	0.03	0.06	6.95	0.06

Table 6-5: A354 Site Access Junction Key Performance Indicators

A350 Site Access

6.5.3 Table 6-6 shows the key performance indicators for the A350 site access junction. It can be seen that the modelling does not forecast there to be any capacity problems in either the 2014 of 2025 forecast years. As with the A354 access, the modelling shows that there would be no queues to exit or enter the proposed development.

	AM			PM		
	Max Queue (PCU)	Max Delay (s) /veh	Max RFC	Max Queue (PCU)	Max Delay (s) /veh	Max RFC
2014						
Site Access – A350 (North)	0.10	8.33	0.09	0.04	7.61	0.04
Site Access – A350 (South)	0.19	16.87	0.16	0.07	16.17	0.07
Right Turn into site from A350	0.03	7.48	0.03	0.07	7.81	0.07
2025						
Site Access – A350 (North)	0.11	8.77	0.10	0.04	7.98	0.04
Site Access – A350 (South)	0.22	19.48	0.18	0.09	19.00	0.08
Right Turn into site from A350	0.03	7.79	0.03	0.07	8.18	0.07

Table 6-6: A350 Site Access Junction Key Performance Indicators

6.6 Impact on the Trunk Road

6.6.1 It is considered that the Highways Agency may have concerns regarding the impact of the proposed development on the A31/A350 junction and A31/A354 junction. For this reason a brief assessment has been undertaken to satisfy any concerns.

A31/A350 Junction

6.6.2 This junction is located 7 miles from the proposed development. In the AM peak a total of 13 trips arrive from the south and 37 depart from the site to the south. Assuming all trips used this junction when travelling from or to the site a total of 50 two way trips will impact at the A31/A350 junction in the AM peak. In the PM peak the two way total is 45. However, considering the junction is 7 miles away and there will be a significant dispersion of the traffic between the site and the junction it is not considered that these trips will have an impact on the safe and efficient operation of the A31/A350 junction.

A31/A354 Junction

6.6.3 This junction is located 10 miles from the proposed development. In the AM peak a total of 13 trips arrive from the west and 38 depart from the site to the west. Assuming all trips used this junction when travelling from or to the site a total of 51 two way trips will impact at the A31/A354 junction in the AM peak. In the PM peak the two way total is 44. However, considering the junction is 10 miles away and there will be a significant dispersion of the traffic between the site and the junction to other local roads on the network it is not considered that these trips will have an impact on the safe and efficient operation of the A31/A354 junction.

6.6.4 Further information is not available to inform our assessment above and due to the sites distance from the trunk road junction it is considered that it would be unfair to expect the applicant to undertake extensive surveys to ascertain a detailed impact at either of the trunk road junctions.

6.7 Summary

6.7.1 Junction capacity assessments have been undertaken for the two site access junctions, A354/A350/Bournemouth Road Roundabout and Stour Park/Bournemouth Road/Birch Avenue Roundabout to access junction capacity/performance with and without proposed development trips in 2014 and 2025.

6.7.2 The junction assessments show that the proposed site accesses and the A354/A350/Bournemouth Road Roundabout will operate without capacity issues, with and without proposed development trips, in 2014 and 2025.

6.7.3 The Stour Park/Bournemouth Road/Birch Avenue Roundabout, however, is shown to experience capacity problems in the PM peak in 2025 although these capacity problems would not be as a direct result of the proposed development trips.

6.7.4 The impact of proposed development trips on the A31 Trunk Road is considered to be negligible due to the distance and dispersion of traffic from the site to the A354/A31 and the A350/A31 junctions.

7 MITIGATION

7.1 General

7.1.1 This section details the measures identified through this TA to mitigate/reduce the impact of the proposed development on the adjacent highway network. The measures detailed below have been identified in accordance with national, regional and local policies. The measures are therefore consistent with an overriding objective to reduce the need to travel by private vehicle, do not favour highway users, and are commensurate to the scale of the proposed development.

7.1.2 The identified measures fall into either the 'soft' measures category of 'hard' measures category. 'Soft' measures are initiatives that attempt to change travel behaviour such as public transport information in a home welcome pack. 'Hard' measures are physical infrastructure works such as the construction of a shared use footway/cycling facility.

7.2 Soft Measures

7.2.1 The 'soft' measures identified through this TA are detailed in the Travel Plan which accompanies this TA. The proposed soft measures are as follows:

- Welcome Pack – this will detail information on public transport, local cycling and pedestrian routes as well as access to local facilities and amenities
- Travel Plan Coordinator

7.3 Hard Measures

7.3.1 The 'hard' measures identified will contribute to improving pedestrian connectivity within the development site itself and between the development site and Blandford Forum. They will also improve access to and the attractiveness of public transport. The 'hard' measures that could be implemented with this development are as follows:

- A bus lay-by on the A350 designed in conjunction with the proposed site access
- An uncontrolled crossing on the A350 adjacent to the Lower Blandford St Mary, Moose Hall (southbound) bus stop.
- The continuation and improvement of the Sturminster Trailway along the sites frontage of the A350 (including the provision of a toucan crossing on A354 which will facilitate cyclist and pedestrian movements towards Blandford Forum).
- A signage strategy and lighting improvements to encourage use for pedestrians and cyclists through Langton Meadows

Bus lay-by on the A350

7.3.2 The development proposal includes a bus lay-by scheme designed in conjunction with the A350 site access (see Appendix 4). The proposed scheme will provide a safer/more attractive and closer alternative to the existing unmarked bus stop located adjacent to Ward's Drive on the eastern corner of the proposed site. A dedicated bus lay-by with a bus shelter will make waiting for buses safer and more comfortable. In addition, removing stopped buses from the highway will reduce the potential hazard caused by vehicles passing stationary buses.

Uncontrolled crossing on the A350

7.3.3 An uncontrolled crossing will be provided on the A350 adjacent to the Moose Hall southeast-bound bus stop. The crossing will be designed in accordance with the guidance in Local Transport Note 2/95 'The Design of Pedestrian Crossings'. Dropped kerbs and tactile paving will facilitate the safe movement of pedestrians across the A350 to the southeast-bound bus stop.

Continuation and Improvement to the Sturminster Trailway

7.3.4 To encourage walking and cycling form the site and within North Dorset District in general, the development proposal includes a scheme to complete the Sturminster Trailway link between Ward's drive and Blandford St Mary Roundabout. This scheme would be consistent with Policy 16 of the Draft North Dorset Local Plan – 2011 to 2026, Pre-submission Document, November 2013.

7.3.5 This will provide a continuous off-road trailway between Spetisbury and Stalbridge. Completion of the Sturbridge Trailway around the proposed development site will help to encourage walking and cycling trips to Blandford Forum, thereby reducing the need to travel by car.

7.3.6 The proposed scheme, associated with the development, will also include improvements to the existing A354 uncontrolled crossing on the western side of Blandford St Mary Roundabout. The proposed upgrade of the uncontrolled crossing will be undertaken in accordance with the guidance in Local Transport Note 2/95 'The Design of Pedestrian Crossings'. The crossing will be upgraded to the standard specified in Local Transport Note 2/95 to improve pedestrian safety and will also accord with the guidance in the Design Manual for Roads and Bridges (DMRB), TD16/07 'Geometric Design of Roundabouts'.

7.3.7 Assessment work undertaken of traffic flows and pedestrian movements on the A354 in the vicinity of the A354 pedestrian crossing shows that a controlled toucan crossing would be the most appropriate pedestrians crossing option to implement. A preliminary drawing of the proposed option is included with this TA as Appendix 4.

Signing strategy

7.3.8 The proposed development will include a signing strategy for pedestrians and cyclists from the development to Blandford Forum and the Tesco's superstore. It was observed during the site visit that Blandford Forum was not well sign posted for pedestrians and cyclists. This was particularly the case for the most direct route to Blandford Forum through Langton Meadows. It was also observed that there was no lighting through Langton Meadow. To address these deficiencies and encourage more people to walk and cycle to Blandford forum and nearby facilities and amenities, the development proposal will include a signing and lighting strategy, making it clear to pedestrians and cyclists the route from the proposed development to Blandford Forum.

7.3.9 It is proposed that a new signing strategy is introduced at this footpath to clearly show pedestrians how far it is to locations such as the town centre (in minutes) when taking this route. In addition lighting will be introduced to make the route more desirable at all times of the day. Path lighting options that could be considered include:

- **Lighting columns** - technology is considered to be advancing at a fast pace, and more conventional light sources are increasingly being replaced by Light

Emitting Diodes (LED's), which are more efficient in terms of energy use and more durable, however they could potentially be significantly more expensive than conventional lighting units.

- **Lighting units fitted in bollards** - the bollards spill light down across the path and the lower level of the lighting from these types of units reduces light pollution. More recent developments make use of LED Solar powered versions are also available for use in areas where wiring is not feasible or inconvenient, or where security concerns demand lighting that is off-grid. It should be noted that SCC have indicated that they would not accept responsibility for maintaining this type of low level lighting bollards due to the inherent vandalism likely to occur.
- **Surface mounted solar studs** - used as a brighter alternative to road studs these are increasingly being used as a way of providing lighting on traffic free routes in urban and urban fringe areas. This type of studs is potentially sufficient to make a path more attractive at night, particularly at dusk when there is a small amount of daylight. Whilst waymarking a path with studs in itself offers little in the way of increased personal security, the resultant increase in patronage may make people feel more secure.

8 CONCLUSIONS

8.1 General

8.1.1 Parsons Brinckerhoff was appointed to undertake a Transport Assessment in order to examine the impact of the St Mary's Hill development on the local highway infrastructure in Blandford St Mary.

8.1.2 The Transport Assessment considered the impact of a proposed development of 350 dwellings on a 27 acre site adjacent to the A354 and A350 and its impact on the highway network in conjunction with the additional impact generated by other committed developments in the area.

8.1.3 The Transport Assessment also considered the current facilities for cyclists and pedestrians and the potential need for improvements to ensure adequate connectivity between the development and the Blandford conurbation. The Transport Assessment concluded that with the exception of the Stour Park/Bournemouth Road roundabout, the existing highway infrastructure can accommodate the combined forecast traffic flows generated through general growth, committed development and the proposed development at St Mary's Hill.

8.2 Summary of Key Findings

8.2.1 Junction model assessments show that the proposed St Marys Hill development will not adversely impact on the local highway network.

8.2.2 Personal Injury Collision data was obtained for both the A350/A354 and Bournemouth Road/Stour Park roundabouts for a five year period between September 2008 and August 2013. A total of 7 personal injury collisions accidents were observed, none of which were pedestrian related. An analysis of the collision activity at both junctions in comparison to national averages concluded that there was no significant road safety issues with the roundabouts, with the number of collisions recorded being significantly less than the national average.

8.2.3 The impact on the A31 trunk road network (at its junctions with the A354 and A350), from the proposed development will be insignificant due to traffic dispersing between the site and the trunk road.

8.2.4 The pedestrian route from the site to Blandford Forum crosses the A354. The development is suitably located so that Blandford Forum Town Centre and the local amenities are both within convenient walking distance. This coupled with the proposed pedestrian improvements from other committed developments as set in section 5 of this report is likely to improve safety and convenience for pedestrians.

8.2.5 Dorset County Council has expressed concern that the existing pedestrian crossing over the A354 is not adequate for pedestrians to cross due to the strategic nature of the A354. During the site visit in November 2013 it was observed that the crossing point operated safely and efficiently, with cars slowing down before the roundabout and good visibility for pedestrians waiting to cross. These observations, coupled with the collision data which showed no collisions involving pedestrians over a five-year period and a less than average number of collisions at the junction, suggests the crossing currently provides safe passage over the A354 towards the town centre. However, the proximity to the roundabout and the relatively wide width of the crossing might give some users a perceived sense of heightened risk.

8.2.6 The National Planning Policy Framework published in March 2012 by the Department of Communities and Local Government states that any improvements to the transport network should be cost effective against the impacts of the development. Developments should only be refused on transport grounds where this is not the case, where the residual impacts of the development are too severe. It is therefore considered that any mitigation proposals that are not proportionate to the impact of this residential proposal are not justified.

8.3 Summary of Mitigation

8.3.1 It is appreciated that the increased pedestrian movements from the site will increase the demand of the existing uncontrolled crossing on the A354 western approach to the junction. Following consultation with Dorset County Council a toucan crossing will be implemented on the A354 which will contribute to completing the Sturminster Trailway and facilitate cyclist and pedestrians movements to Blandford Forum.

8.3.2 Minor improvements (signing and lighting) will be provided to pedestrian routes from the development to the town centre encouraging walking and cycling as an alternative to other transport modes as well as shared use footway/cycling facilities in various locations. In addition, a bus lay-by will be introduced on the A350 (northbound) enabling public transport users to have a safer boarding and alighting area as well as allowing other traffic to move more freely on the main road. An uncontrolled crossing of the A350 adjacent to the existing southeast-bound bus stop will also be provided.

8.3.3 A separate Travel Plan document has also been produced which sets out the various forms of non-car travel accessible to and from the site and how this development proposal, and supporting soft mitigation measures, enhance this. The Travel Plan will identify the appointment of a Travel Plan Coordinator who will monitor the performance of the site, ensuring measures are successfully implemented and targets are achieved.

8.4 Recommendations

8.4.1 It is concluded that the proposed development and recommended improvements satisfy all planning policy requirements and therefore there is no reason, on transport and highway grounds, why development at St Marys Hill should not receive conditioned planning consent.

Appendix 1 – Initial Modelling Work (May 2013)

PARSONS BRINCKERHOFF

June 2013

BLANDFORD FORUM JUNCTION MODELLING

AIS Ltd

3513028A

FINAL

Blandford Forum Junction Modelling

3513028A/1/1

Prepared for
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1 BACKGROUND

1.1 Introduction

1.1.1 Parsons Brinckerhoff (PB) has been commissioned by Akerman Infrastructure Solutions (AIS) to prepare this report, which assesses the traffic impact of building 200 dwellings on a site to the south of the A350/A354 Blandford St Mary Roundabout, south of Blandford Forum, Dorset.

1.1.2 Study Area

1.1.3 The study area for this report is illustrated in Figure 1.

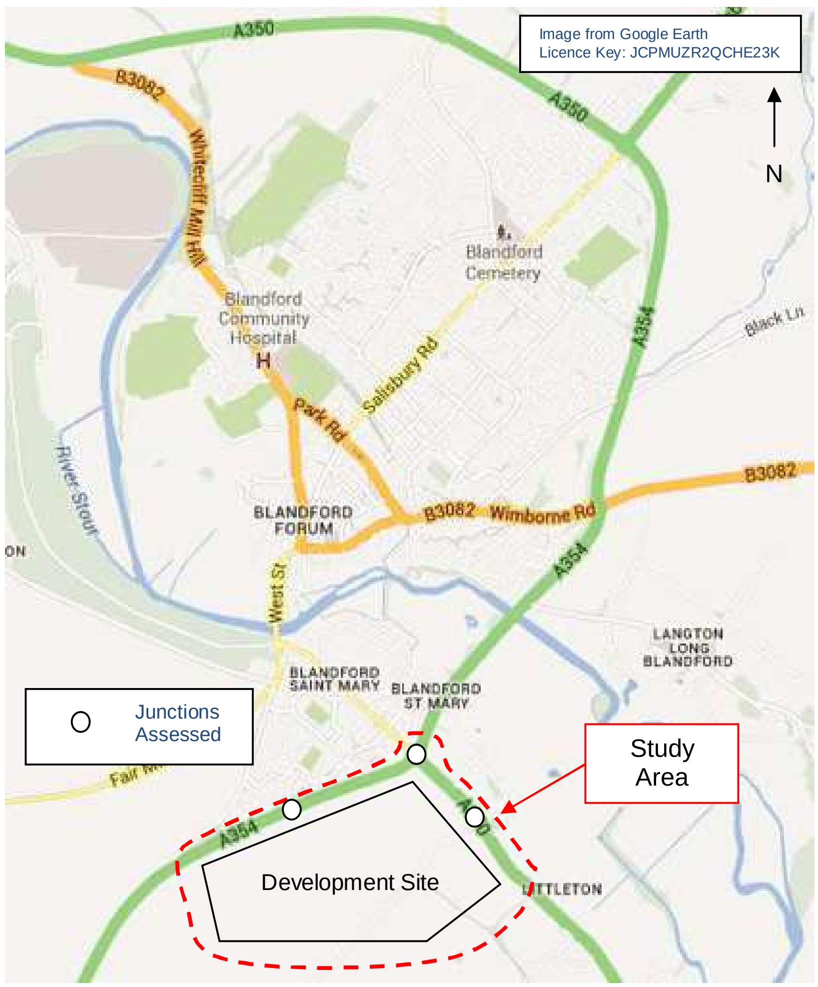


Figure 1 – Report Study Area

1.1.4 For the purposes of assessment the report will consider the traffic impact on the following junctions:

- Blandford St Mary Roundabout (A350/A354 Junction)
- Proposed Site Access onto the A350
- Proposed Site Access onto the A354 Junction

1.2 Scope of Report

1.2.1 The structure of this report will adopt the following format:

- Section 2 – Traffic Assessment
- Section 3 – Traffic Impact Assessment;
- Section 4 – Junction Impact Assessments;
- Section 5 – Summary and Conclusions.

2 TRAFFIC FLOWS

2.1 General

2.1.1 This section of the report outlines the process used to identify and assess the traffic impact of the proposed development.

2.1.2 The traffic impact of the proposed development will be assessed for the AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hours for a traffic neutral weekday in a traffic neutral month.

2.2 Data Collection

2.2.1 Prior to the commencement of this assessment, a manual classified count (MCC) survey was undertaken of the Blandford St Mary Roundabout on the 30th April 2013. The data from this survey has been used as the basis of this assessment. The raw survey data can be found in Appendix 1.

2.2.2 The turning counts at the roundabout are summarised in the table in terms of vehicles in the AM and PM peak hour.

From / To	A354 North	A350 South	A354 South	Bournemouth Road	**Total**
A354 North	0	390	397	184	**971**
A350 South	293	0	7	265	**565**
A354 South	319	0	0	186	**505**
Bournemouth Road	208	158	105	0	**471**
Total	**820**	**548**	**509**	**635**	**2512**

Table 2-1 - Blandford St Mary Roundabout 2013 AM Peak Hour Turning Count (Vehicles)

From / To	A354 North	A350 South	A354 South	Bournemouth Road	**Total**
A354 North	0	379	324	268	**971**
A350 South	306	0	12	243	**561**
A354 South	268	19	0	168	**455**
Bournemouth Road	337	196	149	0	**682**
Total	**911**	**594**	**485**	**679**	**2669**

Table 2-2 - Blandford St Mary Roundabout 2013 PM Peak Hour Turning Count (Vehicles)

2.2.3 Heavy Goods Vehicle proportions for each of the roundabout entries for each peak hour were calculated from the traffic data and can be seen in Table 2-3 and Table 2-4

HGV Proportions	
AM Peak	
A354 North	5%
A350 South	3%
A354 South	4%
Bournemouth Road	2%

Table 2-3 - Blandford St Mary Roundabout 2013 AM Peak Hour HGV Proportions

HGV Proportions	
PM Peak	
A354 North	2%
A350 South	1%
A354 South	8%
Bournemouth Road	0%

Table 2-4 - Blandford St Mary Roundabout 2013 PM Peak Hour HGV Proportions

2.3 Proposed Development

2.3.1 The study is based on the provision of 200 dwellings on the site to the south of the Blandford St Mary junction. A map showing the location of the proposed development is visible in Figure 1.

2.4 Trip Rates

2.4.1 In order to predict the amount of traffic expected to be generated as a result of the proposed development, a trip rate was derived from the TRICS 2013(a) v6.11.2 database.

2.4.2 A multi-modal trip rate was derived from the aggregate trip rate for sites of a similar nature within the 'Mixed Private / Non-Private Housing' category in the TRICS database. Full details on the sites selected from the TRICS database and assumptions made can be found in Appendix 2. Average trip rates from the proxy sites have been used. A summary of the peak hour person trip rates is illustrated in Table 2-5.

TRICS Person Trip Rates - Mixed Private / Non-Private Housing			
Time	Arrivals	Departures	Total
08:00 - 09:00	0.210	0.642	0.852
17:00 - 18:00	0.498	0.254	0.752

Table 2-5 – Peak hour person trip rates

2.5 Modal Split

2.5.1 The modal split for the proposed development was established in order to calculate the vehicle trip generation by mode from the person trip rates. Travel to work census data for the Portman ward (2011) was used to calculate the modal split for residential development. The Portman ward covers the whole of the development site in addition to south and western areas of Blandford. A map showing the ward is illustrated in Figure 2. The raw mode split data from the census is detailed in Appendix 3.

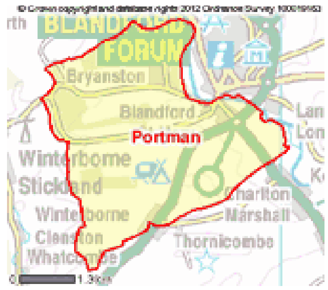


Figure 2 – Portman Ward

2.5.2 The mode split for the Portman ward is displayed in Figure 3.

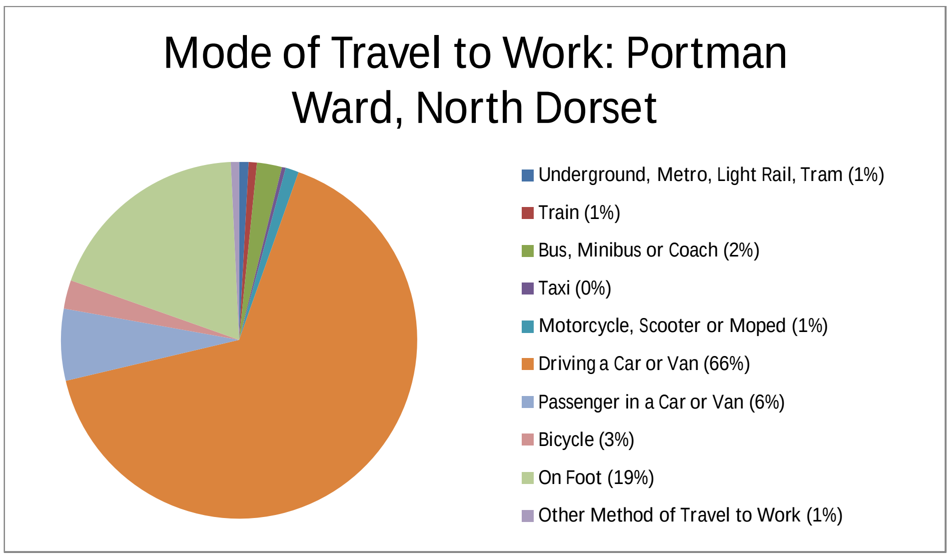


Figure 3 – Travel to work mode split data

2.5.3 The total number of car based trips from the site was calculated by combining the Underground, Metro, Light Rail, Tram, Train and Driving a Car or Van categories as all of these journeys are initially assumed to be made by car (e.g. a trip to the train station). It is possible that journeys made by train could be initially made via cycle, bus *etc* however in order for the assessment process to be robust it has been assumed that these journeys would initially be undertaken by car.

2.5.4 Using the above approach, the total proportion of car trips to and from the proposed development site has been calculated to be 68%, with 74% of all trips being made by car or van once car or van passengers have been taken into account.

2.6 Trip Generation

2.6.1 The vehicular impact of the committed developments was calculated using the person trip rates and modal split identified in 2.4 and 2.5 respectively.

2.6.2 As the development proposal is for residential dwellings only, it has been assumed that there are no Heavy Goods Vehicle (HGV) movements associated with the site.

2.6.3 The resulting vehicle trips and are summarised in Table 2-6.

New Trips - Proposed Development			
AM Peak Hour		PM Peak Hour	
In	Out	In	Out
28	85	66	33

Table 2-6 – Proposed Development Trips

2.7 Traffic Growth

2.7.1 Growth factors were generated using TEMpro version 6.2 and National Trip End Model (NTEM) dataset versions 6.2 for 2013-2014 and 2013-2029.

2.7.2 As committed development has not been explicitly modelled the traffic growth figures from TEMpro have not been adjusted.

2.7.3 Table 2-7 summarises the resulting TEMpro growth rates for Blandford Forum from 2013 – 2014.

2013-2014	Area Description	Area	All purposes: Local Growth Figure
AM Peak Hour	19UE1	Blandford Forum	1.001
PM Peak Hour	19UE1	Blandford Forum	1.002

Table 2-7 Background Growth Factors 2013 - 2014

2.7.4 Table 2-8 summarises the resulting TEMpro growth rates for Blandford Forum from 2013 – 2029.

2013-2029	Area Description	Area	All purposes: Local Growth Figure
AM Peak Hour	19UE1	Blandford Forum	1.177
PM Peak Hour	19UE1	Blandford Forum	1.200

Table 2-8 – Background Growth Factors 2013 - 2029

2.7.5 The TEMpro growth factors were applied to the existing traffic on the highway network in the future year scenarios, no provision has been made to increase the traffic associated with the proposed development.

2.7.6 The TEMpro calculations for the forecast years have been included in Appendix 4.

2.8 Trip Assignment

2.8.1 In terms of traffic distribution, it has been assumed that 50% of trips use a proposed site access on to the A350 and 50% use a proposed site access onto the A354.

2.8.2 Beyond the site access locations, traffic has been distributed according to proportion of traffic travelling in each direction on the A354/A350 during each peak hour. Traffic through the Blandford St Mary junction has been distributed proportionately according to the traffic survey.

2.8.3 Distributing the traffic from the site proportionately with the heaviest traffic flow is the most robust method of assessing the site's vehicular impact. As the greatest traffic volume is assigned to movements already experiencing the greatest demand, therefore providing a worst-case-scenario assessment.

3 TRAFFIC FORECAST FLOWS

3.1 General

3.1.1 This section of the report details the impact of the traffic associated with the proposed development on the highway network adjacent to the proposed development site.

3.1.2 The Without Development scenario in each year details the traffic impact without the development proposals. The With Development scenario details the vehicular impact with the development proposals constructed.

3.2 Impact on Surrounding Highway Network

3.2.1 The traffic flows on the adjacent highway network for each modelled scenario are illustrated below.

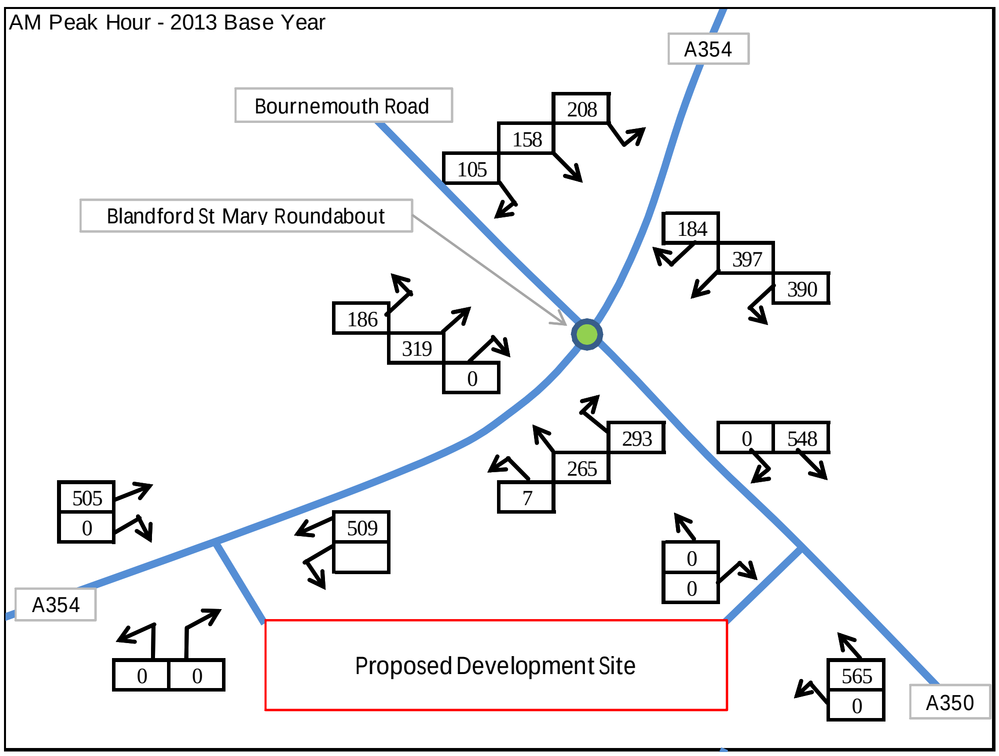


Figure 4 - 2013 AM Peak Hour Base Year Traffic Flows (Vehicles)

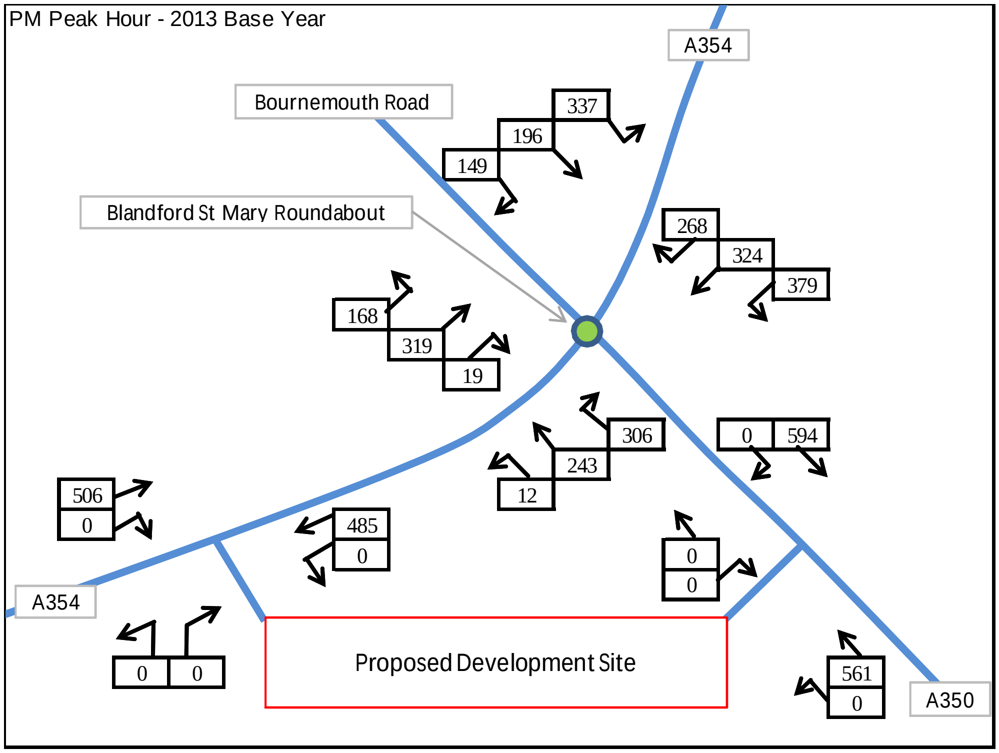


Figure 5 - 2013 PM Peak Hour Base Year Traffic Flows (Vehicles)

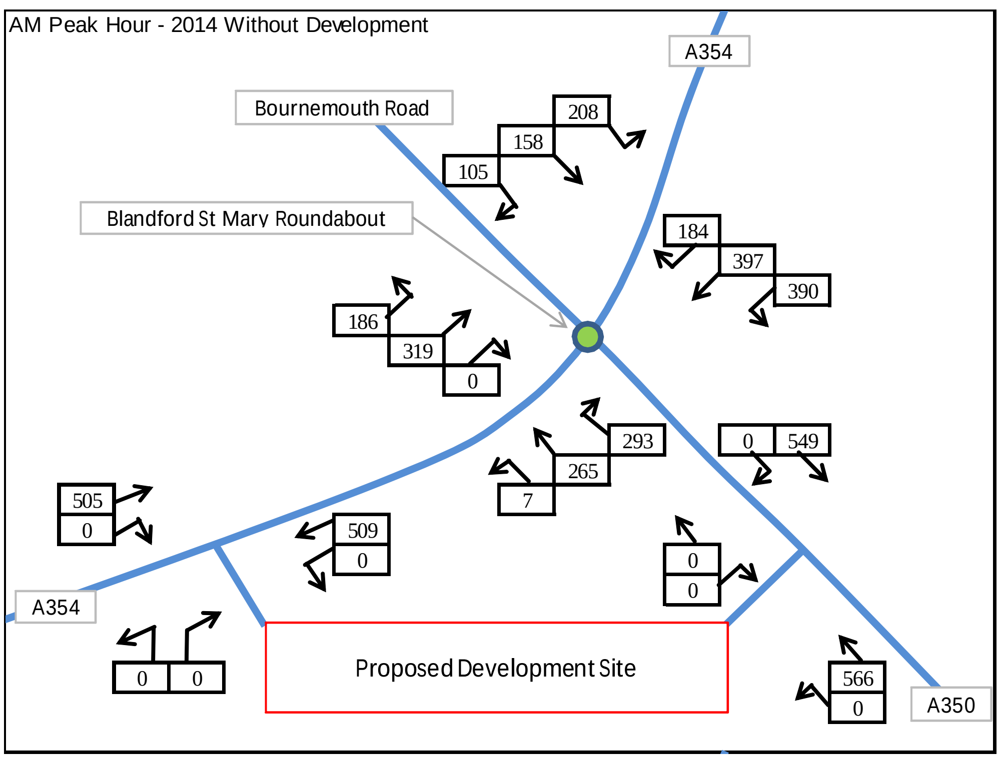


Figure 6 - 2014 AM Peak Hour Without Development Traffic Flows (Vehicles)

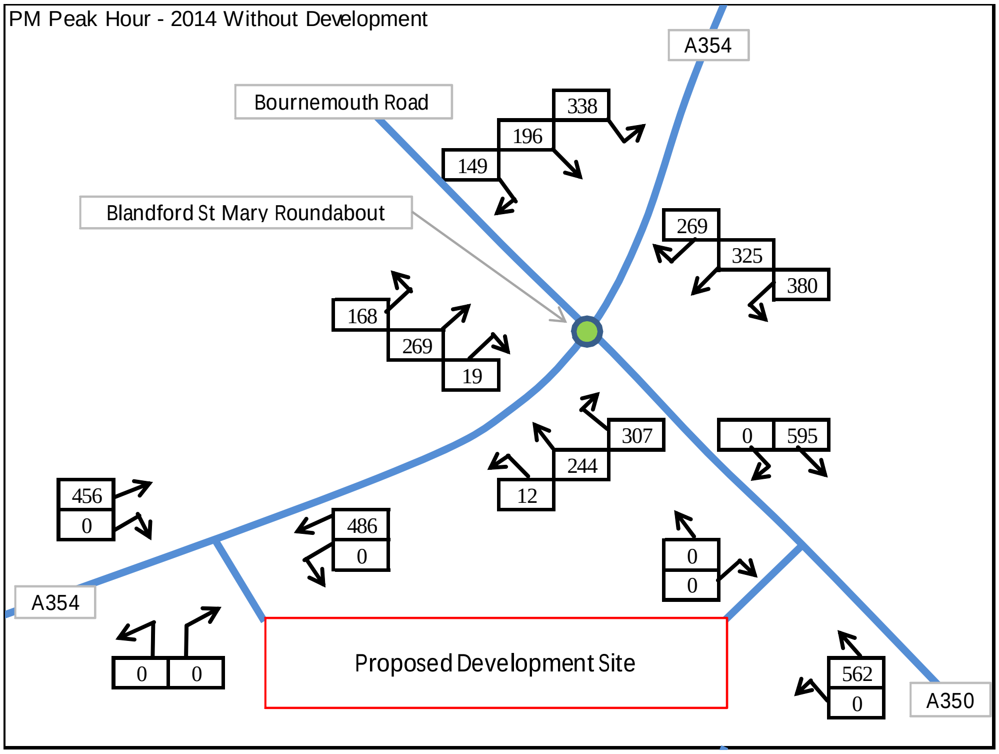


Figure 7 - 2014 PM Peak Hour Without Development Traffic Flows (Vehicles)

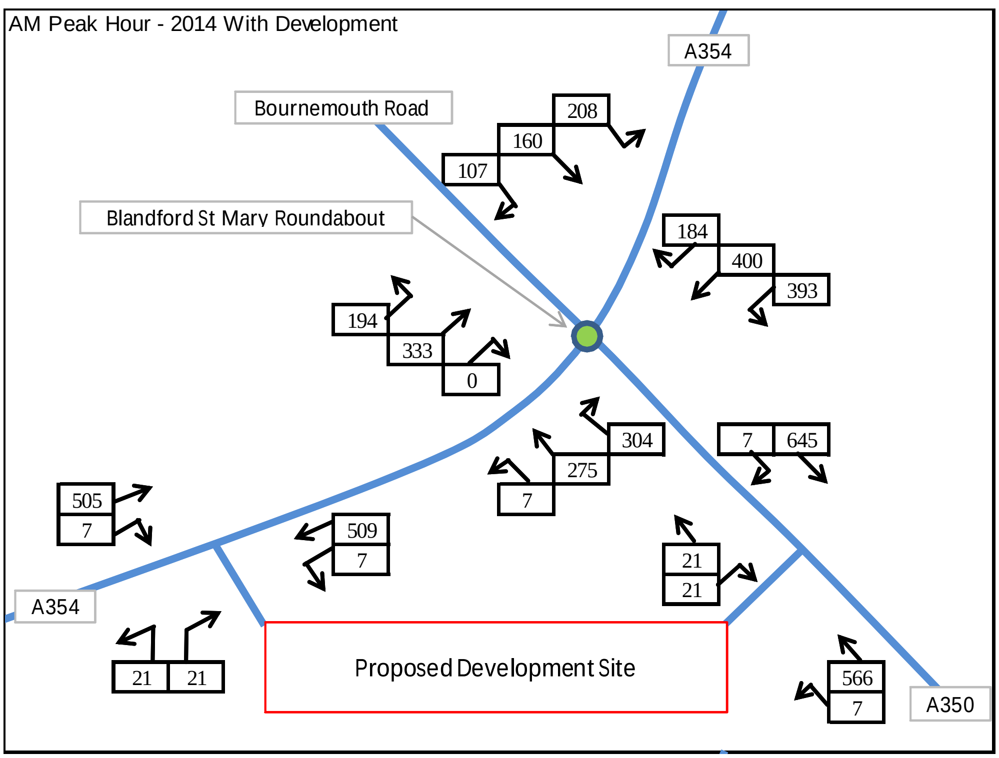


Figure 8 - 2014 AM Peak Hour With Development Traffic Flows (Vehicles)

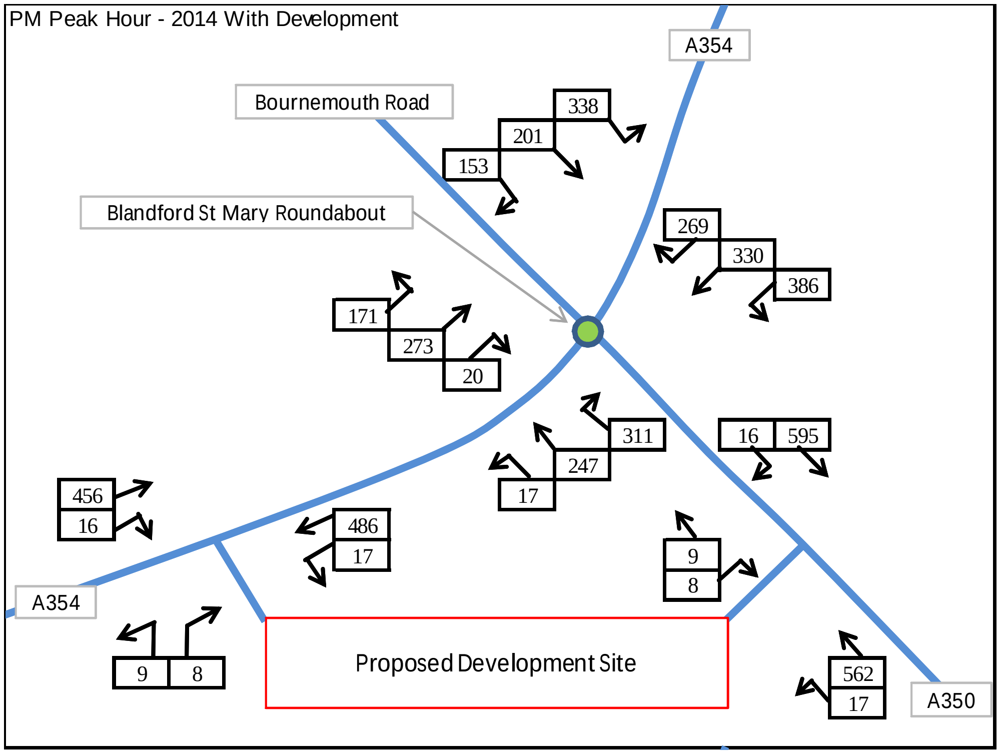


Figure 9 - 2014 PM Peak Hour With Development Traffic Flows (Vehicles)

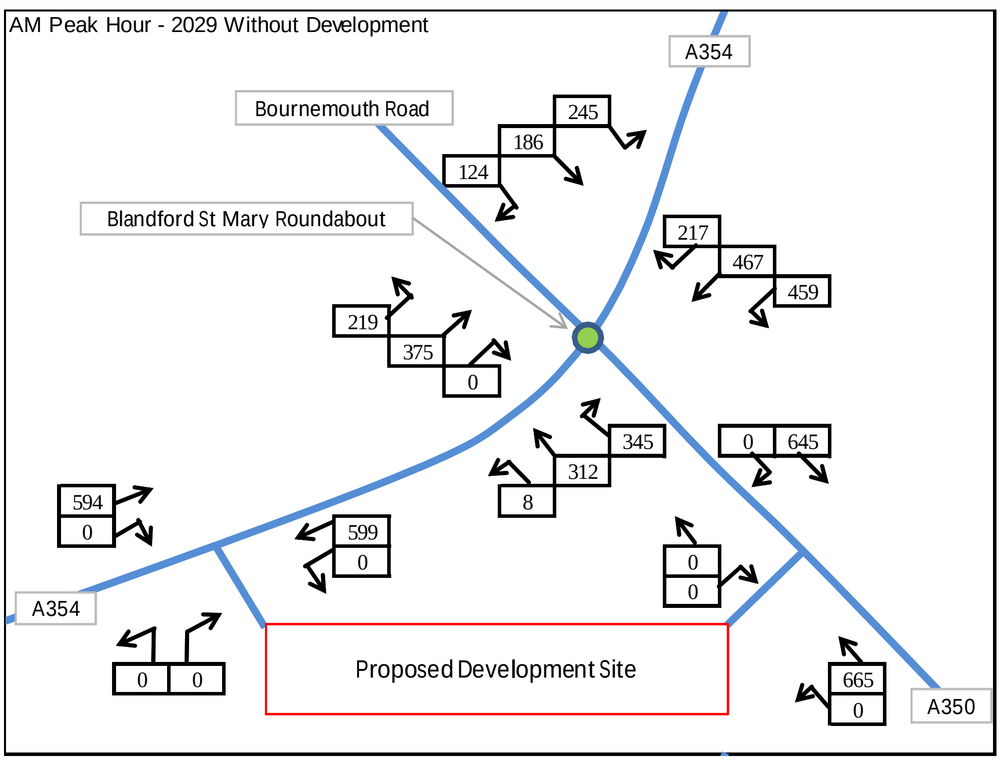


Figure 10 - 2029 AM Peak Hour Without Development Traffic Flows (Vehicles)

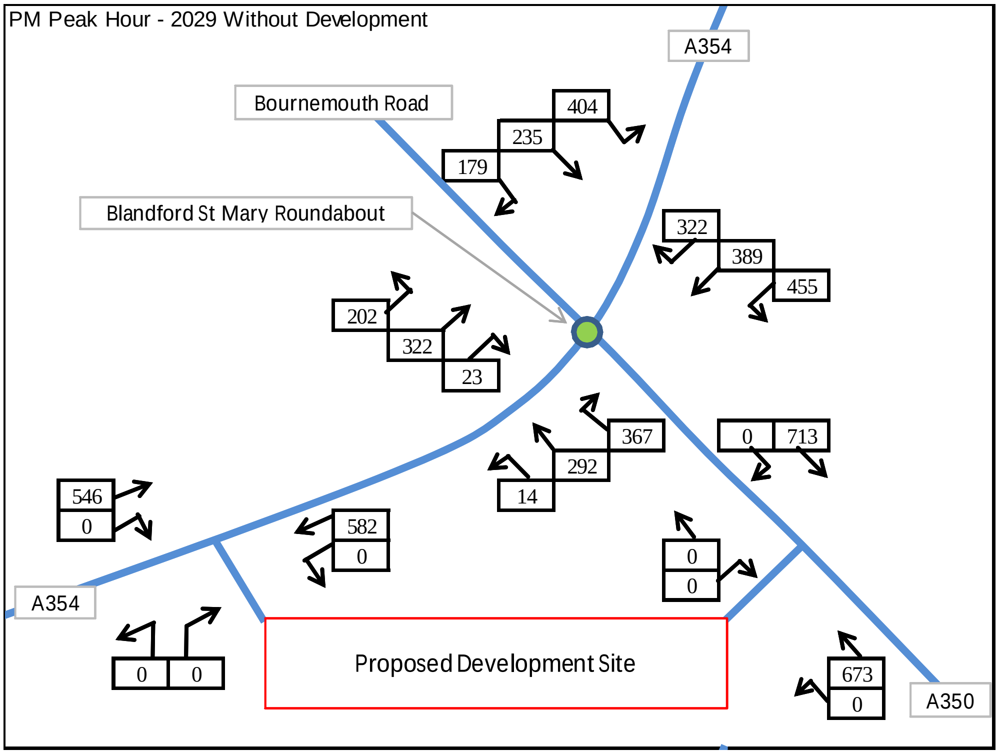


Figure 11 - 2029 PM Peak Hour Without Development Traffic Flows (Vehicles)

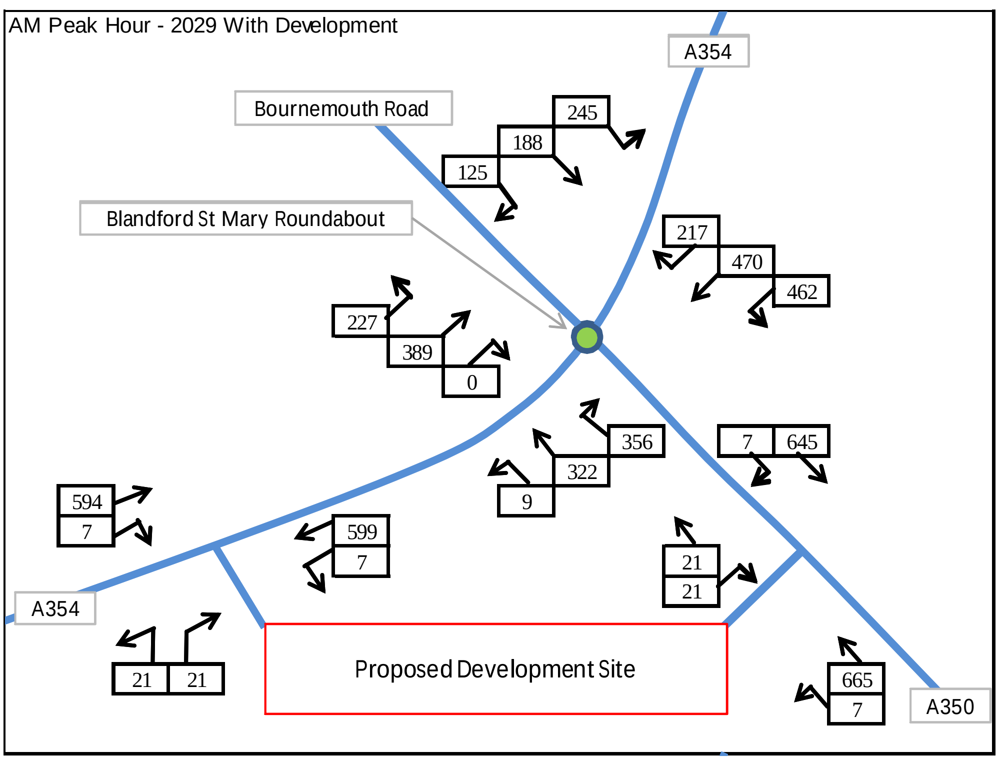


Figure 12 - 2029 AM Peak Hour With Development Traffic Flows (Vehicles)

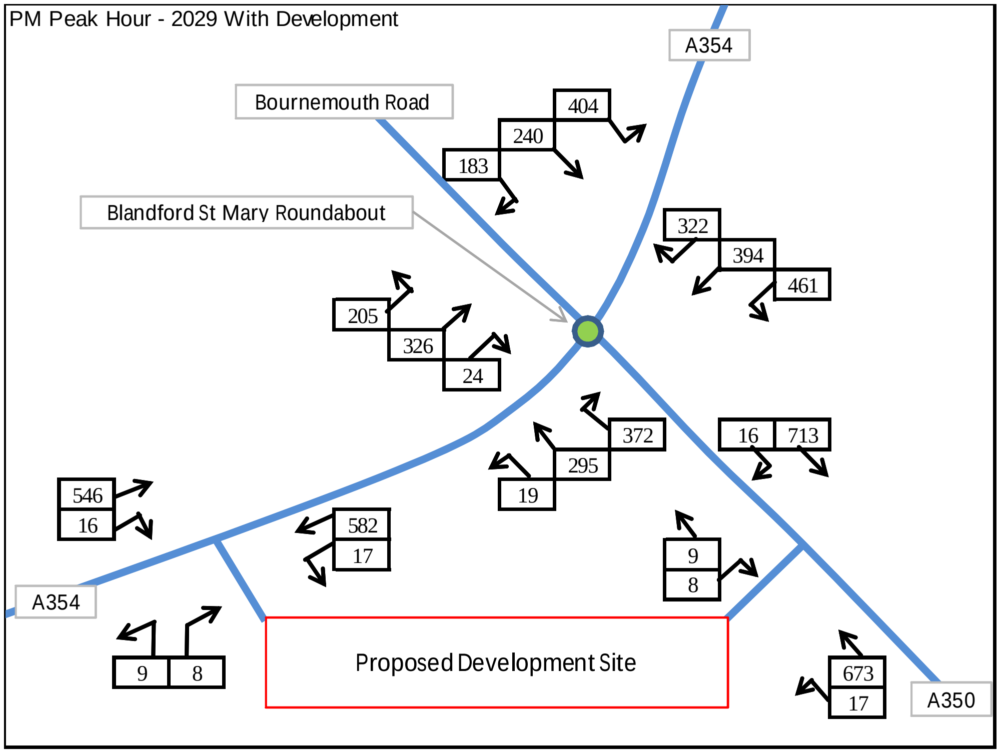


Figure 13 - 2029 PM Peak Hour With Development Traffic Flows (Vehicles)

4 IMPACT ON JUNCTIONS

4.1 General

4.1.1 The following junctions have been assessed to identify any potential capacity issues.

- Blandford St Mary Junction,
- Site access onto the A350,
- Site Access onto the A354.

4.1.2 The site accesses have not been constructed, however they have been assessed in accordance with the method outlined in this report. It is anticipated that they will be constructed by 2014 so an opening year of 2014 has been modelled and a future year of 2029 has been assessed in accordance with *Guidance on Transport Assessment.* This level of growth is above the requirements of Dorset County Council who requested a future year 10 years beyond the opening year therefore the assessment is considered to be robust.

4.1.3 The roundabout has been modelled using JUNCTIONS 8 software. The priority junctions have been modelled using PICADY 5. All of these are "industry standard" software for assessing the performance of these junction types.

4.1.4 In the case of a roundabout or priority junction, the Ratio of Flow to Capacity (RFC) statistic will be used to determine how close a junction is to capacity. An RFC value below 0.85 indicates a junction is operating within capacity and a RFC value above 0.85 indicates a potential capacity issue at the junction.

4.1.5 The assessment of the above junctions has been conducted for up to 10 modelling scenarios. A summary of all the possible modelling scenarios is included in Table 4-1. Traffic flows for each scenario are given in Section 3 of this report.

<table>
<tr><th>Year</th><th>Development Scenario</th><th>Time Period</th></tr>
<tr><td rowspan="2">2013</td><td rowspan="2">Base Year</td><td>AM</td></tr>
<tr><td>PM</td></tr>
<tr><td rowspan="4">2014</td><td rowspan="2">Without Development</td><td>AM</td></tr>
<tr><td>PM</td></tr>
<tr><td rowspan="2">With Development</td><td>AM</td></tr>
<tr><td>PM</td></tr>
<tr><td rowspan="4">2029</td><td rowspan="2">Without Development</td><td>AM</td></tr>
<tr><td>PM</td></tr>
<tr><td rowspan="2">With Development</td><td>AM</td></tr>
<tr><td>PM</td></tr>
</table>

Table 4-1 – Possible Junction Modelling Scenarios

4.2 Blandford St Mary Junction

4.2.1 The junction of the A350 and the A354 to the south of Blandford Forum is a standard roundabout. The single carriageway approaches flare to two entry lanes on each of the approaches. There are informal pedestrian refuges on the each of the arms, with the south western (A354) and north eastern (Bournemouth Road) arms served by pedestrian footways encouraging their use as a crossing location. There are no controlled crossings or formal pedestrian crossings within a reasonable distance of the junction and therefore unlikely to affect its operation.

4.2.2 An aerial photograph showing the layout of the Blandford St Mary roundabout is displayed in Figure 14.

Figure 14 –Blandford St Mary aerial protograph

4.2.3 Detailed modelling has been undertaken using the Transport Research Laboratory's JUNCTIONS software. This is specifically designed for assessing the performance of roundabouts and expresses performance as ratio of flows to capacity (RFC). When an RFC reaches a value of 1, the roundabout arm is operating at its maximum theoretical capacity.

4.2.4 HGV values were input into the junction model and converted to PCUs in line with the proportion of HGVs using the roundabout in the base year. These can be found in Table 2-3 and Table 2-4.

4.2.5 Default lane usage values were used and the 'ONE HOUR' traffic flow profile parameter used for the junction model.

4.2.6 The assessment of the Blandford St Mary junction has been conducted for all 10 modelling scenarios, as set out in Table 4-2.

Year	Development Scenario	Time Period
2013	Base Year	AM
		PM
2014	Without Development	AM
		PM
	With Development	AM
		PM
2029	Without Development	AM
		PM
	With Development	AM
		PM

Table 4-2 – Blandford St Mary Roundabout modelling scenarios

4.2.7 The full JUNCTIONS results are included in Appendix 5 and are summarised below in Table 4-3. The results are split by each arm of the junction. Queue, in Passenger Car Units (PCU) and delay (in seconds per PCU) statistics are also presented for each of the modelling scenarios.

4.2.8 One PCU is a unit of distance used in traffic modelling and is equivalent to the space occupied by one average sized car including the headway space to the next vehicle in a traffic queue. It is a method of normalising all of the different vehicle types using a junction and is equivalent to 5.75m.

	AM			PM		
	Queue (PCU)	Delay (s/pcu)	RFC	Queue (PCU)	Delay (s/pcu)	RFC
	2013 Base					
A354 North	0.94	3.18	0.47	0.99	3.33	0.49
A350 South	1.17	6.8	0.53	1.21	7.09	0.55
A354 South	0.59	3.86	0.36	0.56	4.04	0.34
Bournemouth Road	0.73	5.07	0.42	1.47	7.12	0.6
	2014 Without Development					
A354 North	0.94	3.19	0.47	0.99	3.34	0.49
A350 South	1.17	6.81	0.53	1.21	7.12	0.55
A354 South	0.6	3.86	0.36	0.56	4.05	0.34
Bournemouth Road	0.73	5.07	0.42	1.48	7.15	0.6
	2014 With Development					
A354 North	0.96	3.21	0.48	1.02	3.4	0.5
A350 South	1.28	7.16	0.55	1.3	7.43	0.56
A354 South	0.65	4.03	0.38	0.58	4.12	0.35
Bournemouth Road	0.76	5.23	0.43	1.55	7.39	0.61
	2029 Without Development					
A354 North	1.37	3.95	0.57	1.58	4.46	0.61
A350 South	2.09	10.44	0.67	2.51	12.48	0.72
A354 South	0.88	4.89	0.46	0.88	5.32	0.45
Bournemouth Road	1.11	6.57	0.52	3.19	13.06	0.77
	2029 With Development					
A354 North	1.39	3.99	0.57	1.64	4.58	0.62
A350 South	2.32	11.28	0.7	2.75	13.44	0.74
A354 South	0.97	5.16	0.48	0.92	5.44	0.46
Bournemouth Road	1.16	6.83	0.53	3.41	13.87	0.78

Table 4-3 – Blandford St Mary Roundabout Modelling Results

4.2.9 The results of the JUNCTIONS analysis indicate that the junction is likely to operate within capacity for the AM and PM peak hour in 2014 and 2029 scenarios. It is predicted that there will be no significant queuing issues as the greatest queue predicted is 3.4 PCUs in the PM peak in the 2029 future year. This represents an increase of 0.3 PCUs in the scenario without the proposed development.

4.2.10 Queuing, in the context above is defined to be the accumulation of vehicles over the modelled time period. Whilst there is predicted to be no queuing issues at the junction, small random queues may occur within the peak hour at the junction depending on the arrival of platoons of vehicles at the junction, however these queues would quickly dissipate and are a result in the natural variation in traffic flow. These random queues would not be of overall detriment to the users of the roundabout.

4.2.11 It is predicted that there will be no delay issues at the junction for any of the modelled time periods. The longest predicted delay is 13.87 seconds for vehicles entering the roundabout from Bournemouth Road in the PM peak hours in 2029. This represents an increase of approximately 0.5 seconds on the predicted delay in the scenario without the proposed development.

4.3 Site Access onto A350

4.3.1 An initial design for the proposed A350 site access is shown in Figure 15. It has been anticipated that a ghost island junction would be provided with forward visibilities and carriageway widths of a standard suitable for a principal rural A-road.

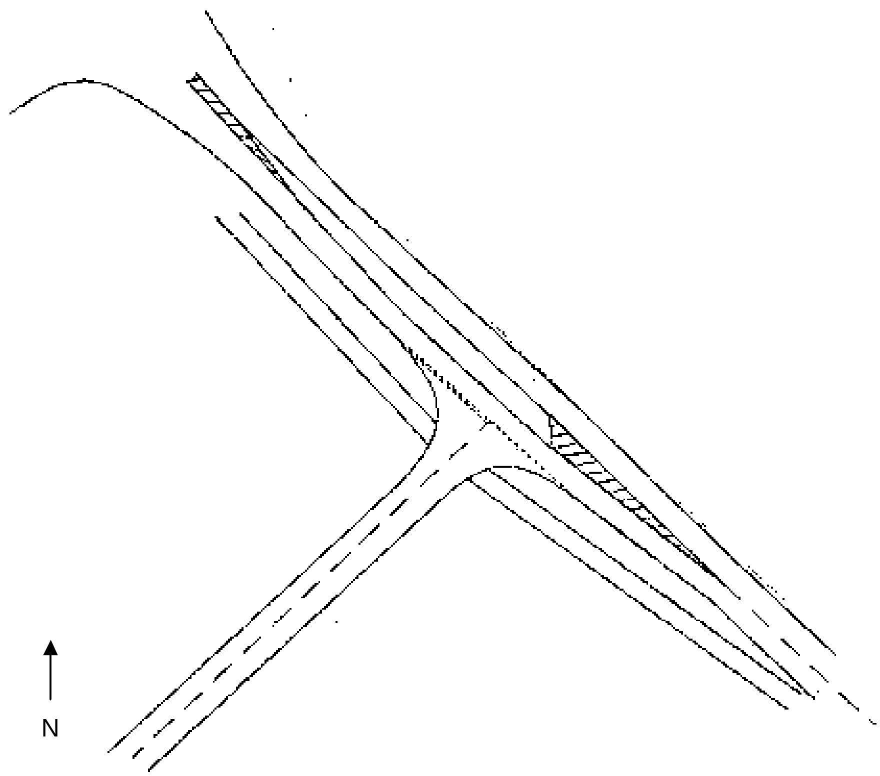


Figure 15 – Proposed A350 Site Access

4.3.2 This junction would only be constructed if the proposed development were granted planning permission, therefore it has not been modelled in the Base Year or Do-Minimum scenarios. The assessment of the A350 Site Access has been conducted for 4 modelling scenarios, as set out in Table 4-4.

Year	Development Scenario	Time Period
2014	With Development	AM
		PM
2029	With Development	AM
		PM

Table 4-4 – A350 Site Access Priority Junction Modelling Scenarios

4.3.3 The PICADY output files are provided in Appendix 6 and are summarised below in Table 4-5.

	AM Peak Hour			PM Peak Hour		
	Queue	Av. Delay / Veh	RFC	Queue	Av. Delay / Veh	RFC
2014 - With Development						
Site Access Out	0.17	0.22	0.147	0.06	0.21	0.059
Right turn into Site from A350	0.01	0.12	0.014	0.03	0.12	0.034
2029 - With Development						
Site Access Out	0.2	0.26	0.169	0.08	0.25	0.071
Right turn into Site from A350	0.02	0.13	0.015	0.04	0.13	0.036

Table 4-5 – A350 Site Access Modelling Results

4.3.4 The results of the PICADY analysis indicate that the junction is likely to operate within capacity for both the AM and PM peak hour in the 2014 and 2029 scenarios.

4.3.5 It is predicted that there will be no queue or delay issues at the junction for any of the modelled time periods.

4.4 Site Access onto A354

4.4.1 An initial design for the proposed A354 site access is shown in Figure 16. It has been anticipated that a ghost island junction would be provided with forward visibilities and carriageway widths of a standard suitable for a principal rural A-road.

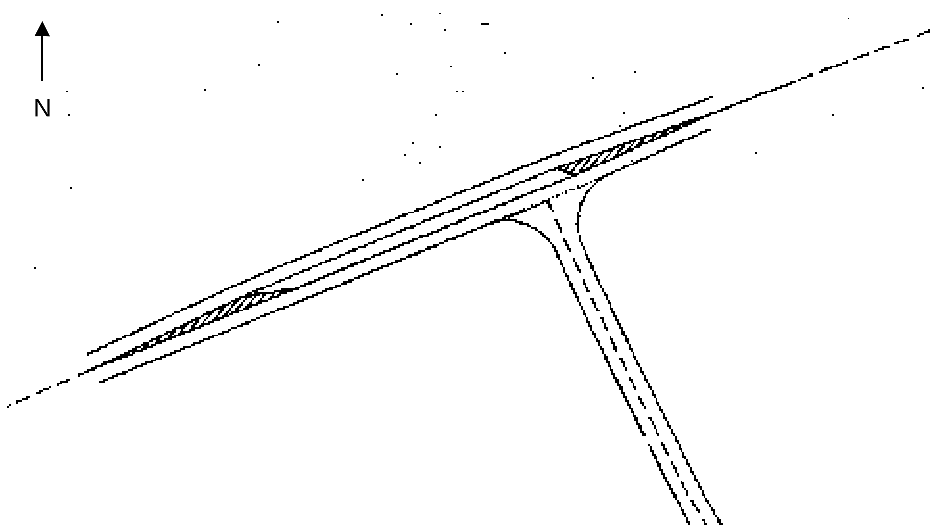


Figure 16 – Proposed A354 Site Access

4.4.2 As this junction would only be constructed if the proposed development were granted planning permission therefore it has not been modelled in the Do-Minimum scenarios. The assessment of the A354 Site Access has been conducted for 4 modelling scenarios, as set out in Table 4-6.

Year	Development Scenario	Time Period
2014	With Development	AM
		PM
2029	With Development	AM
		PM

Table 4-6 – A354 Site Access Priority Junction Modelling Scenarios

4.4.3 The PICADY output files are provided in Appendix 6 and are summarised below in Table 4-7.

	AM			PM		
	Queue	Av. Delay / Veh	RFC	Queue	Av. Delay / Veh	RFC
2014 - With Development						
Site Access Out	0.016	0.21	0.138	0.06	0.18	0.053
Right turn into Site from A354	0.02	0.12	0.015	0.04	0.13	0.035
2029 - With Development						
Site Access Out	0.18	0.24	0.155	0.06	0.21	0.059
Right turn into Site from A354	0.02	0.13	0.016	0.04	0.13	0.037

Table 4-7 – A354 Site Access Modelling Results

4.4.4 The results of the PICADY analysis indicate that the junction is likely to operate within capacity for both the AM and PM peak hour periods in both the 2014 and 2029 scenarios.

4.4.5 It is predicted that there will be no queue or delay issues at the junction for any of the modelled time periods.

5 SUMMARY AND CONCLUSIONS

5.1 Summary

5.1.1 This report assesses the vehicular impact of building 200 residential dwellings at Blandford St Mary on the adjacent highway network. The main aspects of the report are listed below:

- Junction models were developed using 'industry standard' software to assess two proposed access for the development and the Blandford St Mary Roundabout.
- As part of the traffic assessments background traffic growth, local mode split factors from the 2011 census and local traffic distributions were taken into account.
- The report details the predicted opening year and future year traffic flows in a series of diagrams.
- The results of the individual models for junctions agreed as part of the scoping process identified no significant congestion issues.

5.2 Conclusions

5.2.1 The report demonstrates that:

- The proposed development will not cause any queuing or delay issues to traffic on the existing adjacent highway network.
- The proposed access arrangements have sufficient capacity to accommodate the proposed development.
- There is sufficient vehicular capacity within the existing Blandford St Mary Roundabout design to accommodate the proposed development without the need for mitigation.
- It is likely, in the future, that the site could accommodate additional dwellings above the 200 proposed in this report. There is a demonstrable spare capacity in the site accesses and the Blandford St Mary roundabout to facilitate this.

Appendix 1 – Raw Traffic Data from Survey

Dorset Engineering Consultancy
Pullman Court, Station Approach
Weymouth Avenue
Dorchester, Dorset
DT1 1GA

CLASSIFIED VEHICLE TURNING COUNT

CLIENT R Ackerman

PROJECT No. 5117	JOB No. J162	T. SURVEY No. 13029	SITE CODE

LOCATION : Blandford St Mary roundabout AREA : Blandford

GRID EASTING : 388870 NORTH' : 105515 SPEED : 60

EXP. 12-16 hr : 1.14 16-24 hr : 1.05 U-TURN : NOT COUNTED

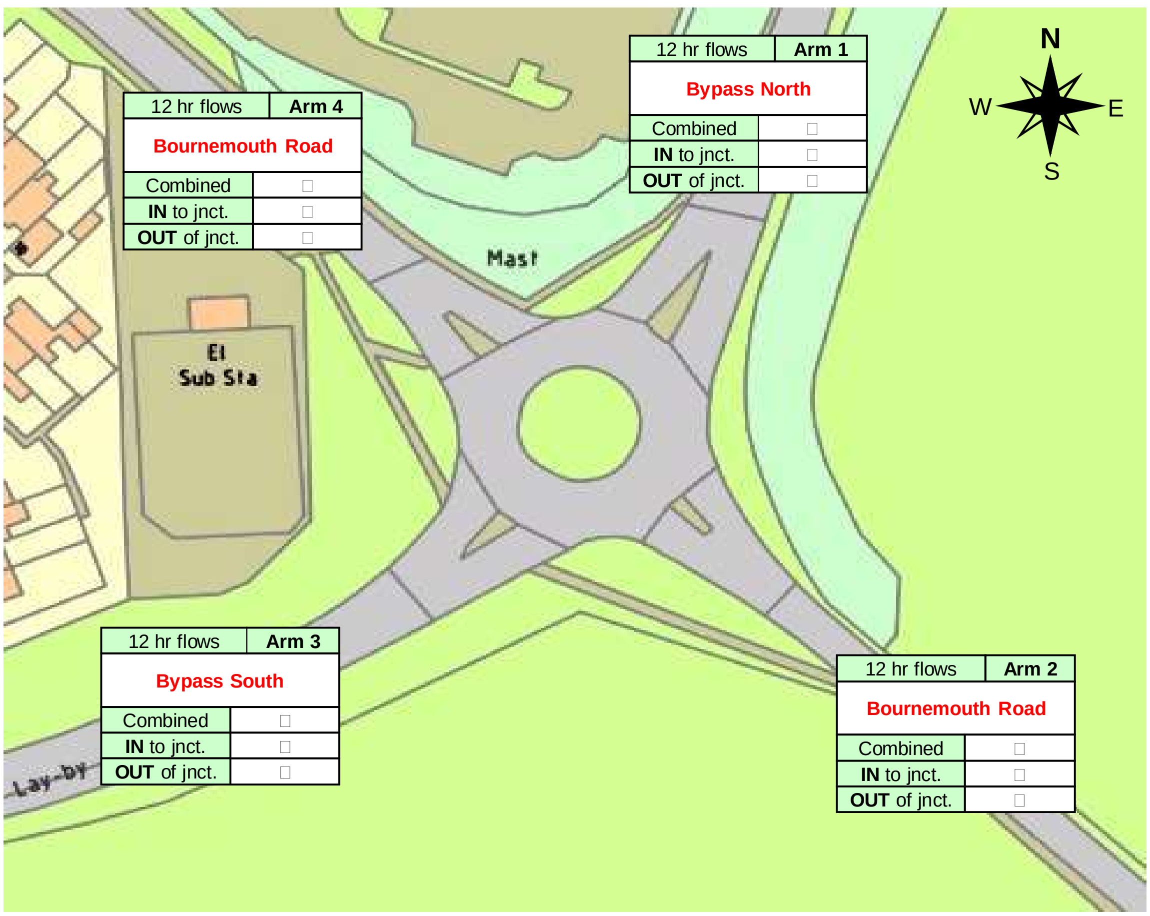
ARM	G ref.	ROUTE	DESCRIPTION
1	NE	A354	Bypass North
2	SE	A350	Bournemouth Road
3	SW	A354	Bypass South
4	NW	C31	Bournemouth Road

SURVEY DAY : Tues	DATE/MON/YR : 30 / April / 2013

PERIOD (1) : 0700 - 1900	INTERVAL (1) : 30	WEATHER (1) :
PERIOD (2) : - - -	INTERVAL (2) : -	WEATHER (2) : -
PERIOD (3) : - - -	INTERVAL (3) : -	WEATHER (3) : -

NOTES :

PLAN :



SURVEYS CONDUCTED FOR EXTERNAL CLIENTS ARE NOT FOR GENERAL USE OR DISPERSAL

COBA7 OUTPUT

Location : Blandford St Mary roundabout **Day :** Tues **Date :** 30 April 2013 **Count No. :** 13029

Results : **Classified vehicle TURNING MOVEMENTS in ½ hours** **Times :** **0700-1900**

Turn : NE»NE 1 » 1 **Bypass North into Bypass North**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
12 hr :	0	0	0	0	0	0	0	0	0

Turn : NE»SW 1 » 3 **Bypass North into Bypass South**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	93	29	3	5	0	1	131	8	0
07:30	135	27	4	6	9	0	181	10	0
08:00	149	50	6	3	1	1	210	9	0
08:30	140	34	10	2	0	1	187	12	0
09:00	92	22	9	3	0	4	130	12	0
09:30	75	28	6	4	0	2	115	10	0
10:00	86	26	4	2	2	0	120	6	0
10:30	76	18	7	3	1	0	105	10	0
11:00	87	18	10	1	2	1	119	11	0
11:30	94	11	12	3	0	1	121	15	1
12:00	102	22	6	3	0	0	133	9	0
12:30	83	15	10	3	1	1	113	13	0
13:00	90	23	6	3	1	1	124	9	0
13:30	68	19	7	1	0	3	98	8	0
14:00	79	16	4	2	0	3	104	6	0
14:30	84	20	4	3	3	3	117	7	0
15:00	83	16	6	1	2	5	113	7	0
15:30	66	40	9	0	0	1	116	9	0
16:00	83	23	1	0	1	3	111	1	0
16:30	127	37	1	0	0	0	165	1	0
17:00	151	28	1	1	1	0	182	2	0
17:30	112	24	0	1	2	3	142	1	0
18:00	107	11	1	2	4	1	126	3	0
18:30	59	9	0	0	3	0	71	0	0
12 hr :	2321	566	127	52	33	35	3134	179	1

Turn : NE»SE 1 » 2 **Bypass North into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	145	17	4	3	0	1	170	7	0
07:30	176	31	9	4	0	4	224	13	0
08:00	157	24	6	3	0	1	191	9	0
08:30	154	28	11	5	0	1	199	16	0
09:00	88	14	7	4	0	0	113	11	0
09:30	106	19	13	3	0	0	141	16	0
10:00	92	15	13	2	0	0	122	15	0
10:30	93	11	7	3	2	0	116	10	0
11:00	100	11	7	2	2	0	122	9	0
11:30	87	17	5	5	0	2	116	10	0
12:00	86	21	2	1	1	1	112	3	0
12:30	77	15	7	3	0	0	102	10	0
13:00	60	16	6	2	0	0	84	8	0
13:30	65	13	5	3	0	1	87	8	0
14:00	81	23	4	6	0	1	115	10	0
14:30	65	18	6	2	1	3	95	8	0
15:00	86	25	1	3	2	0	117	4	0
15:30	96	34	3	5	4	2	144	8	0
16:00	121	43	2	3	3	2	174	5	1
16:30	132	35	4	2	8	0	181	6	2
17:00	127	37	3	4	26	0	197	7	0
17:30	130	32	1	2	16	1	182	3	1
18:00	117	17	3	0	22	1	160	3	0
18:30	88	10	2	1	12	0	113	3	0
12 hr :	2529	526	131	71	99	21	3377	202	4

Turn : NE»NW 1 » 4 **Bypass North into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	17	8	1	0	0	0	26	1	0
07:30	30	11	0	2	1	1	45	2	0
08:00	74	12	1	1	0	1	89	2	0
08:30	78	14	1	1	0	1	95	2	0
09:00	53	16	2	1	0	1	73	3	0
09:30	62	13	1	1	3	0	80	2	0
10:00	69	9	0	1	1	2	82	1	0
10:30	60	10	0	0	0	0	70	0	2
11:00	73	6	0	1	1	0	81	1	0
11:30	77	12	2	2	0	0	93	4	0
12:00	71	8	1	0	0	0	80	1	0
12:30	70	12	2	0	0	0	84	2	0
13:00	83	12	0	0	2	0	97	0	0
13:30	60	11	2	3	1	1	78	5	0
14:00	106	20	1	1	0	1	129	2	0
14:30	123	11	1	2	1	1	139	3	0
15:00	87	12	1	0	1	1	102	1	0
15:30	81	13	1	1	2	2	100	2	0
16:00	125	16	2	1	0	2	146	3	0
16:30	117	23	1	1	2	0	144	2	0
17:00	111	9	2	0	2	3	127	2	0
17:30	122	16	0	2	1	0	141	2	0
18:00	110	11	2	0	2	0	125	2	0
18:30	84	7	0	0	2	1	94	0	0
12 hr :	1943	292	24	21	22	18	2320	45	2

COBA7 OUTPUT

Location : Blandford St Mary roundabout **Day :** Tues **Date :** 30 April 2013 **Count No. :** 13029

Results : **Classified vehicle TURNING MOVEMENTS in ½ hours** **Times :** **0700-1900**

Turn : SE»NE 2 » 1 **Bournemouth Road into Bypass North**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	77	26	4	6	1	0	**114**	10	0
07:30	136	56	7	8	0	1	**208**	15	0
08:00	112	29	0	5	0	1	**147**	5	0
08:30	106	26	5	8	0	1	**146**	13	0
09:00	90	16	1	2	0	5	**114**	3	0
09:30	75	20	1	8	0	1	**105**	9	0
10:00	47	23	3	10	0	0	**83**	13	0
10:30	109	26	5	5	1	0	**146**	10	1
11:00	59	21	3	8	3	0	**94**	11	0
11:30	59	18	6	4	1	0	**88**	10	0
12:00	66	17	5	2	0	0	**90**	7	0
12:30	53	16	1	7	0	0	**77**	8	0
13:00	60	18	3	2	2	0	**85**	5	0
13:30	75	14	8	3	4	0	**104**	11	0
14:00	82	31	2	0	3	0	**118**	2	0
14:30	79	10	3	5	0	1	**98**	8	0
15:00	82	13	3	3	1	0	**102**	6	0
15:30	78	30	2	2	1	2	**115**	4	0
16:00	88	22	2	4	1	1	**118**	6	0
16:30	129	28	4	4	1	2	**168**	8	0
17:00	132	25	3	3	2	2	**167**	6	1
17:30	126	10	0	1	2	0	**139**	1	0
18:00	118	6	0	0	2	0	**126**	0	0
18:30	86	12	0	1	3	0	**102**	1	0
12 hr :	**2124**	**513**	**71**	**101**	**28**	**17**	**2854**	**172**	**2**

Turn : SE»SW 2 » 3 **Bournemouth Road into Bypass South**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	2	0	0	0	0	0	**2**	0	0
07:30	5	0	1	0	0	0	**6**	1	0
08:00	2	0	0	0	0	0	**2**	0	0
08:30	3	2	0	0	0	0	**5**	0	0
09:00	8	2	0	0	0	0	**10**	0	0
09:30	4	1	1	0	0	0	**6**	1	0
10:00	3	0	0	0	0	0	**3**	0	0
10:30	8	2	2	0	0	0	**12**	2	0
11:00	5	2	0	0	0	0	**7**	0	0
11:30	4	1	2	0	0	0	**7**	2	0
12:00	3	2	1	0	0	1	**7**	1	0
12:30	8	4	2	1	0	0	**15**	3	0
13:00	9	5	0	0	0	0	**14**	0	0
13:30	7	2	0	1	0	0	**10**	1	0
14:00	6	1	2	1	0	0	**10**	3	0
14:30	7	0	0	0	0	0	**7**	0	0
15:00	5	2	0	0	0	0	**7**	0	0
15:30	3	2	0	0	0	0	**5**	0	0
16:00	1	2	0	0	1	0	**4**	0	0
16:30	2	0	0	0	1	0	**3**	0	0
17:00	8	0	0	0	0	0	**8**	0	0
17:30	3	0	0	0	1	0	**4**	0	0
18:00	3	2	0	0	0	0	**5**	0	0
18:30	0	0	0	0	0	0	**0**	0	0
12 hr :	**109**	**32**	**11**	**3**	**3**	**1**	**159**	**14**	**0**

Turn : SE»SE 2 » 2 **Bournemouth Road into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	0	0	0	0	0	0	**0**	0	0
07:30	0	0	0	0	0	0	**0**	0	0
08:00	0	0	0	0	0	0	**0**	0	0
08:30	0	0	0	0	0	0	**0**	0	0
09:00	0	0	0	0	0	0	**0**	0	0
09:30	0	0	0	0	0	0	**0**	0	0
10:00	0	0	0	0	0	0	**0**	0	0
10:30	0	0	0	0	0	0	**0**	0	0
11:00	0	0	0	0	0	0	**0**	0	0
11:30	0	0	0	0	0	0	**0**	0	0
12:00	0	0	0	0	0	0	**0**	0	0
12:30	0	0	0	0	0	0	**0**	0	0
13:00	0	0	0	0	0	0	**0**	0	0
13:30	0	0	0	0	0	0	**0**	0	0
14:00	0	0	0	0	0	0	**0**	0	0
14:30	0	0	0	0	0	0	**0**	0	0
15:00	0	0	0	0	0	0	**0**	0	0
15:30	0	0	0	0	0	0	**0**	0	0
16:00	0	0	0	0	0	0	**0**	0	0
16:30	0	0	0	0	0	0	**0**	0	0
17:00	0	0	0	0	0	0	**0**	0	0
17:30	0	0	0	0	0	0	**0**	0	0
18:00	0	0	0	0	0	0	**0**	0	0
18:30	0	0	0	0	0	0	**0**	0	0
12 hr :	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Turn : SE»NW 2 » 4 **Bournemouth Road into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	35	13	0	0	1	0	**49**	0	1
07:30	87	13	2	1	2	1	**106**	3	0
08:00	120	14	0	1	1	1	**137**	1	2
08:30	118	8	0	0	1	1	**128**	0	0
09:00	74	17	1	0	1	2	**95**	1	0
09:30	62	15	1	2	1	1	**82**	3	0
10:00	53	8	2	2	1	2	**68**	4	1
10:30	112	6	0	0	1	0	**119**	0	0
11:00	57	8	1	0	0	1	**67**	1	3
11:30	51	6	1	2	0	1	**61**	3	0
12:00	70	8	2	1	0	1	**82**	3	0
12:30	76	13	2	0	1	0	**92**	2	0
13:00	61	7	2	1	0	1	**72**	3	0
13:30	77	9	2	1	0	1	**90**	3	0
14:00	64	8	1	0	0	1	**74**	1	0
14:30	69	10	0	0	3	0	**82**	0	0
15:00	87	9	2	0	0	1	**99**	2	0
15:30	92	10	0	0	0	2	**104**	0	0
16:00	78	9	0	0	0	1	**88**	0	1
16:30	114	13	0	0	1	1	**129**	0	0
17:00	100	13	0	1	4	1	**119**	1	0
17:30	110	10	0	0	3	1	**124**	0	0
18:00	100	7	0	0	1	1	**109**	0	0
18:30	91	4	0	0	2	0	**97**	0	1
12 hr :	**1958**	**238**	**19**	**12**	**24**	**22**	**2273**	**31**	**9**

COBA7 OUTPUT

Location : Blandford St Mary roundabout **Day :** Tues **Date :** 30 April 2013 **Count No. :** 13029

Results : **Classified vehicle TURNING MOVEMENTS in ½ hours** **Times :** **0700-1900**

Turn : SW»NE 3 » 1 **Bypass South into Bypass North**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	90	20	6	3	0	0	119	9	0
07:30	111	33	11	7	0	3	165	18	0
08:00	126	41	11	3	2	1	184	14	0
08:30	96	28	7	0	2	2	135	7	0
09:00	75	34	11	5	0	3	128	16	0
09:30	65	25	6	5	1	0	102	11	0
10:00	72	12	12	0	0	0	96	12	0
10:30	52	15	12	1	0	1	81	13	0
11:00	59	19	7	2	4	1	92	9	0
11:30	75	22	5	7	4	0	113	12	0
12:00	48	8	5	4	3	0	68	9	0
12:30	44	28	12	3	0	0	87	15	0
13:00	55	20	11	4	0	3	93	15	0
13:30	49	12	6	2	0	0	69	8	0
14:00	53	16	10	4	5	5	93	14	0
14:30	63	19	6	6	2	0	96	12	0
15:00	51	22	5	4	1	1	84	9	0
15:30	53	16	5	5	2	2	83	10	0
16:00	76	35	7	3	0	5	126	10	0
16:30	95	15	11	3	2	3	129	14	0
17:00	83	36	3	1	1	3	127	4	0
17:30	105	0	29	3	1	3	141	32	0
18:00	75	20	2	2	0	2	101	4	0
18:30	55	10	1	0	0	0	66	1	1
12 hr :	**1726**	**506**	**201**	**77**	**30**	**38**	**2578**	**278**	**1**

Turn : SW»SW 3 » 3 **Bypass South into Bypass South**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
12 hr :	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Turn : SW»SE 3 » 2 **Bypass South into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	1	2	0	0	0	0	3	0	0
07:30	8	3	0	0	0	3	14	0	0
08:00	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:30	6	4	1	0	0	0	11	1	0
10:00	3	1	1	0	0	0	5	1	0
10:30	11	3	2	1	0	0	17	3	0
11:00	6	1	1	0	0	0	8	1	0
11:30	7	2	1	1	1	0	12	2	0
12:00	13	7	2	2	1	0	25	4	0
12:30	2	0	0	0	0	0	2	0	0
13:00	6	2	1	1	0	0	10	2	0
13:30	14	2	1	0	1	0	18	1	0
14:00	4	3	0	0	0	0	7	0	0
14:30	6	4	1	2	0	0	13	3	0
15:00	4	0	0	1	0	0	5	1	0
15:30	19	8	2	2	2	1	34	4	0
16:00	0	0	0	0	0	0	0	0	0
16:30	17	5	1	1	0	1	25	2	0
17:00	15	4	0	0	0	0	19	0	0
17:30	0	0	0	0	0	0	0	0	0
18:00	5	2	0	0	0	0	7	0	0
18:30	2	0	0	0	0	0	2	0	0
12 hr :	**149**	**53**	**14**	**11**	**5**	**5**	**237**	**25**	**0**

Turn : SW»NW 3 » 4 **Bypass South into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	19	8	1	0	1	0	29	1	0
07:30	53	16	2	0	0	0	71	2	0
08:00	78	16	0	1	0	0	95	1	0
08:30	79	10	0	0	0	2	91	0	0
09:00	49	12	2	0	1	2	66	2	0
09:30	45	8	0	0	1	0	54	0	1
10:00	45	8	1	0	0	1	55	1	0
10:30	47	1	0	0	0	0	48	0	0
11:00	37	12	1	0	1	0	51	1	0
11:30	40	7	1	0	1	0	49	1	0
12:00	42	6	1	0	0	1	50	1	0
12:30	56	8	0	0	0	0	64	0	0
13:00	48	7	1	1	0	0	57	2	0
13:30	51	5	0	1	0	0	57	1	0
14:00	51	7	2	0	1	0	61	2	0
14:30	45	7	0	0	0	0	52	0	0
15:00	54	8	1	1	0	0	64	2	1
15:30	62	15	0	0	2	1	80	0	0
16:00	69	9	0	1	0	0	79	1	0
16:30	64	8	1	0	0	1	74	1	0
17:00	68	11	1	0	0	1	81	1	0
17:30	73	13	1	0	0	0	87	1	0
18:00	50	12	1	0	0	1	64	1	0
18:30	39	6	0	0	0	0	45	0	0
12 hr :	**1264**	**220**	**17**	**5**	**8**	**10**	**1524**	**22**	**2**

COBA7 OUTPUT

Location : Blandford St Mary roundabout **Day :** Tues **Date :** 30 April 2013 **Count No. :** 13029

Results : **Classified vehicle TURNING MOVEMENTS in ½ hours** **Times :** **0700-1900**

Turn : NW»NE 4 » 1 **Bournemouth Road into Bypass North**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	39	9	2	2	0	0	**52**	4	0
07:30	83	15	3	1	3	0	**105**	4	0
08:00	67	17	3	1	1	1	**90**	4	0
08:30	104	11	2	0	0	1	**118**	2	0
09:00	87	15	1	0	0	3	**106**	1	0
09:30	64	9	2	2	0	0	**77**	4	1
10:00	67	12	1	0	1	0	**81**	1	0
10:30	100	15	1	0	0	0	**116**	1	0
11:00	80	8	3	4	0	0	**95**	7	0
11:30	95	11	1	2	1	0	**110**	3	0
12:00	81	11	1	3	0	0	**96**	4	0
12:30	116	16	2	2	0	1	**137**	4	0
13:00	118	14	0	1	2	0	**135**	1	0
13:30	106	15	1	1	1	3	**127**	2	0
14:00	90	14	2	0	1	2	**109**	2	1
14:30	99	9	0	1	3	2	**114**	1	1
15:00	101	15	2	0	1	1	**120**	2	0
15:30	119	21	0	0	1	1	**142**	0	0
16:00	119	16	1	1	0	0	**137**	2	0
16:30	131	25	1	0	0	1	**158**	1	0
17:00	164	14	2	0	1	2	**183**	2	0
17:30	135	16	0	1	2	0	**154**	1	0
18:00	119	10	1	0	0	3	**133**	1	0
18:30	93	8	0	0	2	1	**104**	0	0
12 hr :	**2377**	**326**	**32**	**22**	**20**	**22**	**2799**	**54**	**3**

Turn : NW»SW 4 » 3 **Bournemouth Road into Bypass South**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	19	12	0	1	0	0	**32**	1	0
07:30	32	12	2	0	1	1	**48**	2	0
08:00	41	7	0	1	0	1	**50**	1	0
08:30	35	16	2	0	0	2	**55**	2	0
09:00	24	9	1	0	0	0	**34**	1	0
09:30	36	9	0	0	0	0	**45**	0	0
10:00	32	4	0	0	1	0	**37**	0	0
10:30	33	8	0	0	0	1	**42**	0	0
11:00	40	9	1	0	0	1	**51**	1	0
11:30	43	3	0	0	0	1	**47**	0	0
12:00	54	8	0	0	0	0	**62**	0	0
12:30	35	9	1	0	1	0	**46**	1	0
13:00	50	9	2	0	1	1	**63**	2	0
13:30	38	4	1	1	0	0	**44**	2	0
14:00	38	7	2	0	0	2	**49**	2	0
14:30	50	7	0	0	0	0	**57**	0	0
15:00	39	9	0	1	0	1	**50**	1	0
15:30	47	6	0	1	1	1	**56**	1	0
16:00	47	8	1	0	0	0	**56**	1	0
16:30	59	15	0	1	1	1	**77**	1	0
17:00	66	11	0	0	2	0	**79**	0	0
17:30	57	11	0	0	1	1	**70**	0	0
18:00	56	5	0	0	2	1	**64**	0	0
18:30	35	3	0	0	0	0	**38**	0	0
12 hr :	**1006**	**201**	**13**	**6**	**11**	**15**	**1252**	**19**	**0**

Turn : NW»SE 4 » 2 **Bournemouth Road into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	52	8	0	0	0	1	**61**	0	0
07:30	62	8	0	1	2	2	**75**	1	1
08:00	63	12	0	0	1	3	**79**	0	0
08:30	64	11	2	0	0	2	**79**	2	0
09:00	54	10	0	1	1	0	**66**	1	0
09:30	55	7	4	2	0	3	**71**	6	0
10:00	44	7	0	2	0	1	**54**	2	1
10:30	52	2	2	0	0	1	**57**	2	3
11:00	52	5	0	2	1	0	**60**	2	0
11:30	48	5	1	0	2	2	**58**	1	1
12:00	60	6	0	0	0	0	**66**	0	0
12:30	62	8	0	1	1	1	**73**	1	0
13:00	55	4	0	0	0	1	**60**	0	1
13:30	46	10	0	1	0	4	**61**	1	1
14:00	51	8	0	0	0	0	**59**	0	0
14:30	54	8	1	0	0	2	**65**	1	0
15:00	54	7	1	0	1	0	**63**	1	0
15:30	53	10	0	0	2	3	**68**	0	2
16:00	78	14	0	0	3	1	**96**	0	0
16:30	78	12	1	1	2	2	**96**	2	0
17:00	90	8	0	0	6	0	**104**	0	1
17:30	78	12	0	0	1	1	**92**	0	0
18:00	72	3	0	0	2	1	**78**	0	3
18:30	68	2	0	0	0	1	**71**	0	1
12 hr :	**1445**	**187**	**12**	**11**	**25**	**32**	**1712**	**23**	**15**

Turn : NW»NW 4 » 4 **Bournemouth Road into Bournemouth Road**

½ Hr begin	Car	Light Good	OGV1	OGV2	Motor cycle	Bus & coach	Total V'cles	Total OGVs	Cycle
07:00	0	0	0	0	0	0	**0**	0	0
07:30	0	0	0	0	0	0	**0**	0	0
08:00	0	0	0	0	0	0	**0**	0	0
08:30	0	0	0	0	0	0	**0**	0	0
09:00	0	0	0	0	0	0	**0**	0	0
09:30	0	0	0	0	0	0	**0**	0	0
10:00	0	0	0	0	0	0	**0**	0	0
10:30	0	0	0	0	0	0	**0**	0	0
11:00	0	0	0	0	0	0	**0**	0	0
11:30	0	0	0	0	0	0	**0**	0	0
12:00	0	0	0	0	0	0	**0**	0	0
12:30	0	0	0	0	0	0	**0**	0	0
13:00	0	0	0	0	0	0	**0**	0	0
13:30	0	0	0	0	0	0	**0**	0	0
14:00	0	0	0	0	0	0	**0**	0	0
14:30	0	0	0	0	0	0	**0**	0	0
15:00	0	0	0	0	0	0	**0**	0	0
15:30	0	0	0	0	0	0	**0**	0	0
16:00	0	0	0	0	0	0	**0**	0	0
16:30	0	0	0	0	0	0	**0**	0	0
17:00	0	0	0	0	0	0	**0**	0	0
17:30	0	0	0	0	0	0	**0**	0	0
18:00	0	0	0	0	0	0	**0**	0	0
18:30	0	0	0	0	0	0	**0**	0	0
12 hr :	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix 2 – TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	KC	KENT	1 days
	RE	READING	1 days
	SC	SURREY	3 days
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	BR	BRISTOL CITY	1 days
	DV	DEVON	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
06	WEST MIDLANDS		
	HE	HEREFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	1 days
10	WALES		
	CM	CARMARTHENSHIRE	1 days
11	SCOTLAND		
	FA	FALKIRK	1 days

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

Filtering Stage 2 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:	Number of dwellings
Actual Range:	14 to 500 (units:)
Range Selected by User:	14 to 1412 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 11/12/12

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	4 days
Tuesday	2 days
Wednesday	3 days
Thursday	6 days
Friday	1 days

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

Selected survey types:

Manual count	16 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	6

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

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	13
Built-Up Zone	1
No Sub Category	1

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

Filtering Stage 3 selection:

Use Class:

C3	16 days

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

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	1 days
15,001 to 20,000	2 days
20,001 to 25,000	5 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	2 days
125,001 to 250,000	6 days
250,001 to 500,000	3 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	4 days
1.1 to 1.5	11 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	5 days
No	11 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.

LIST OF SITES relevant to selection parameters

1 BR-03-M-02 BLOCKS OF FLATS BRISTOL CITY
CLARENCE ROAD

BRISTOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 42
Survey date: MONDAY 12/10/09 Survey Type: MANUAL

2 CB-03-M-03 SEMI-DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBECK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: MONDAY 20/06/05 Survey Type: MANUAL

3 CM-03-M-01 HOUSES & FLATS CARMARTHENSHIRE
COLLEGE ROAD

CARMARTHEN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 48
Survey date: THURSDAY 18/09/08 Survey Type: MANUAL

4 DV-03-M-01 HOUSES & FLATS DEVON
TOPSHAM ROAD

EXETER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 61
Survey date: THURSDAY 06/10/11 Survey Type: MANUAL

5 FA-03-M-01 SEMI D./TERRACED FALKIRK
FAIRLIE STREET

FALKIRK
Edge of Town
Residential Zone
Total Number of dwellings: 138
Survey date: WEDNESDAY 29/06/05 Survey Type: MANUAL

6 HC-03-M-04 HOUSES & FLATS HAMPSHIRE
HUNTS POND ROAD
TITCHFIELD
NEAR FAREHAM
Edge of Town
Residential Zone
Total Number of dwellings: 282
Survey date: TUESDAY 11/12/12 Survey Type: MANUAL

7 HE-03-M-01 SEMI D./TERRACED HEREFORDSHIRE
WHITECROSS ROAD
WIDEMARSH
HEREFORD
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Number of dwellings: 57
Survey date: WEDNESDAY 01/03/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 KC-03-M-01 BLOCKS OF FLATS KENT
HIGH STREET

RAMSGATE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 103
Survey date: TUESDAY 08/12/09 Survey Type: MANUAL

9 LE-03-M-01 SEMI DETACHED LEICESTERSHIRE
RYDER ROAD
BRAUNSTONE FRITH
LEICESTER
Edge of Town
Residential Zone
Total Number of dwellings: 16
Survey date: THURSDAY 27/09/12 Survey Type: MANUAL

10 MS-03-M-01 HOUSING MERSEYSIDE
OFF KINGSWAY
PRECOT
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 40
Survey date: MONDAY 25/06/07 Survey Type: MANUAL

11 NY-03-M-03 SEMI D./TERRACED NORTH YORKSHIRE
CAWTHORN AVENUE

HARROGATE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: THURSDAY 11/09/08 Survey Type: MANUAL

12 RE-03-M-01 BLOCKS OF FLATS READING
OXFORD ROAD

READING
Edge of Town
Built-Up Zone
Total Number of dwellings: 79
Survey date: FRIDAY 03/11/06 Survey Type: MANUAL

13 SC-03-M-03 HOUSES & FLATS SURREY
ST ANNE'S DRIVE

REDHILL
Edge of Town
Residential Zone
Total Number of dwellings: 500
Survey date: THURSDAY 08/09/11 Survey Type: MANUAL

14 SC-03-M-04 HOUSES/FLATS SURREY
EPSOM ROAD

GUILDFORD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 130
Survey date: THURSDAY 13/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 SC-03-M-05 HOUSES & FLATS SURREY
HOLYWELL WAY
STANWELL
STAINES
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY 19/11/12 Survey Type: MANUAL

16 WS-03-M-03 TERRACED & FLATS WEST SUSSEX
UPPER SHOREHAM ROAD

SHOREHAM BY SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 48
Survey date: WEDNESDAY 18/04/12 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL 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	16	106	0.084	16	106	0.233	16	106	0.317
08:00 - 09:00	16	106	0.115	**16**	**106**	**0.282**	16	106	0.397
09:00 - 10:00	16	106	0.126	16	106	0.153	16	106	0.279
10:00 - 11:00	16	106	0.134	16	106	0.135	16	106	0.269
11:00 - 12:00	16	106	0.141	16	106	0.132	16	106	0.273
12:00 - 13:00	16	106	0.134	16	106	0.144	16	106	0.278
13:00 - 14:00	16	106	0.143	16	106	0.147	16	106	0.290
14:00 - 15:00	16	106	0.150	16	106	0.151	16	106	0.301
15:00 - 16:00	16	106	0.185	16	106	0.142	16	106	0.327
16:00 - 17:00	16	106	0.241	16	106	0.179	16	106	0.420
17:00 - 18:00	**16**	**106**	**0.290**	16	106	0.150	**16**	**106**	**0.440**
18:00 - 19:00	16	106	0.230	16	106	0.165	16	106	0.395
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.973			2.013			3.986

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.

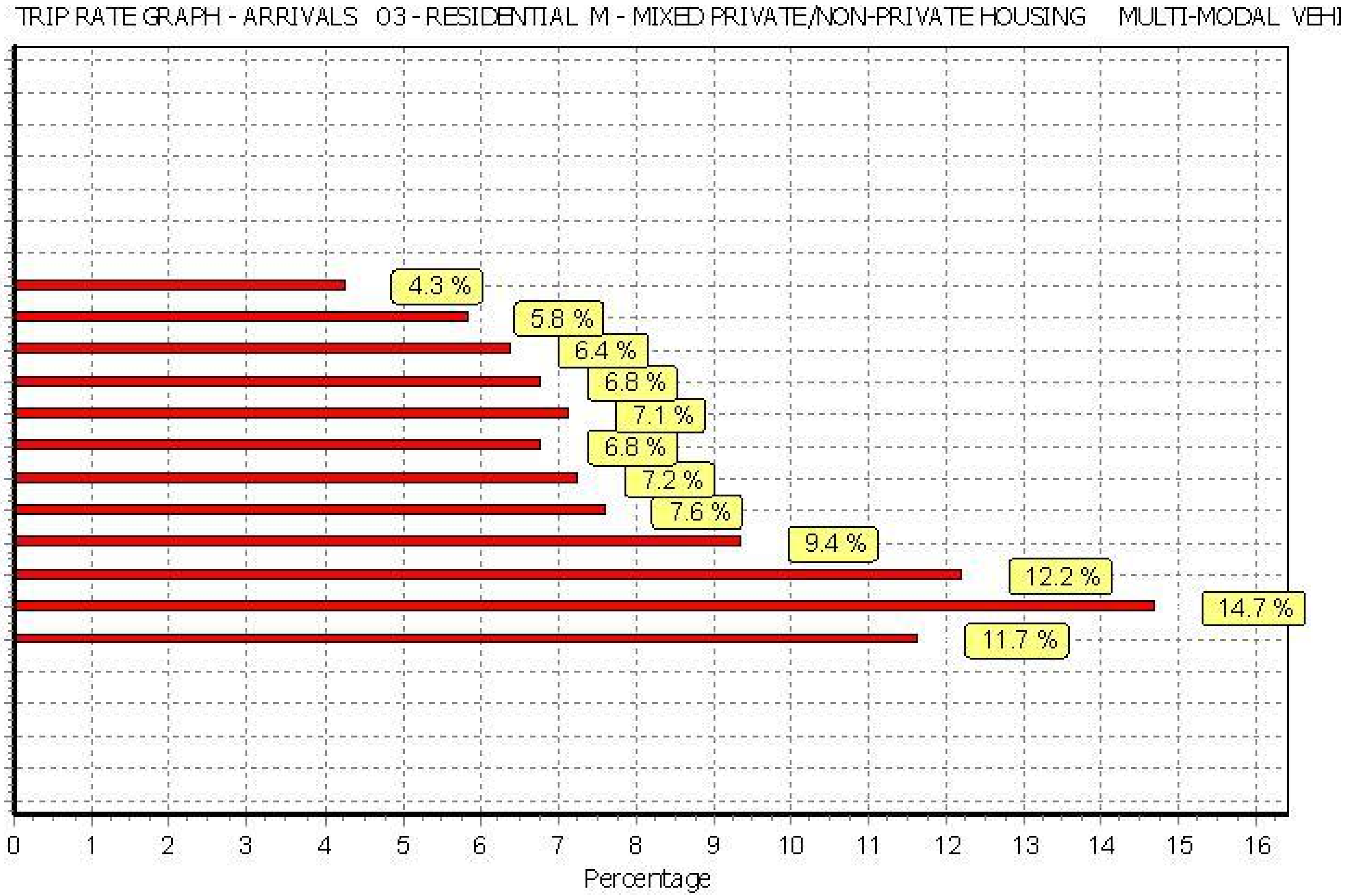
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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:	14 - 500 (units:)
Survey date date range:	01/01/05 - 11/12/12
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	3

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.

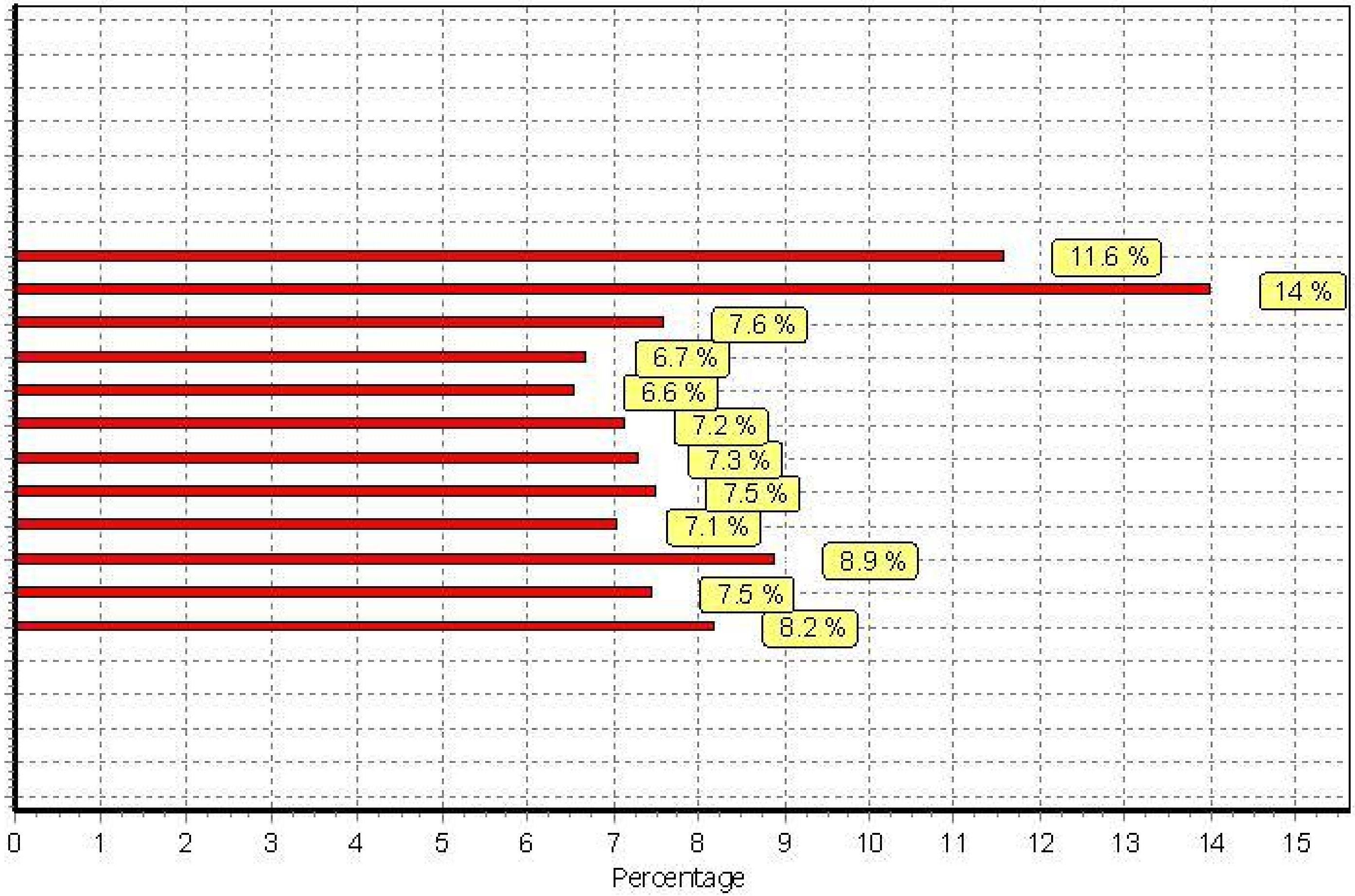
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.084	4.3
08:00-09:00	0.115	5.8
09:00-10:00	0.126	6.4
10:00-11:00	0.134	6.8
11:00-12:00	0.141	7.1
12:00-13:00	0.134	6.8
13:00-14:00	0.143	7.2
14:00-15:00	0.150	7.6
15:00-16:00	0.185	9.4
16:00-17:00	0.241	12.2
17:00-18:00	0.290	14.7
18:00-19:00	0.230	11.7
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL V

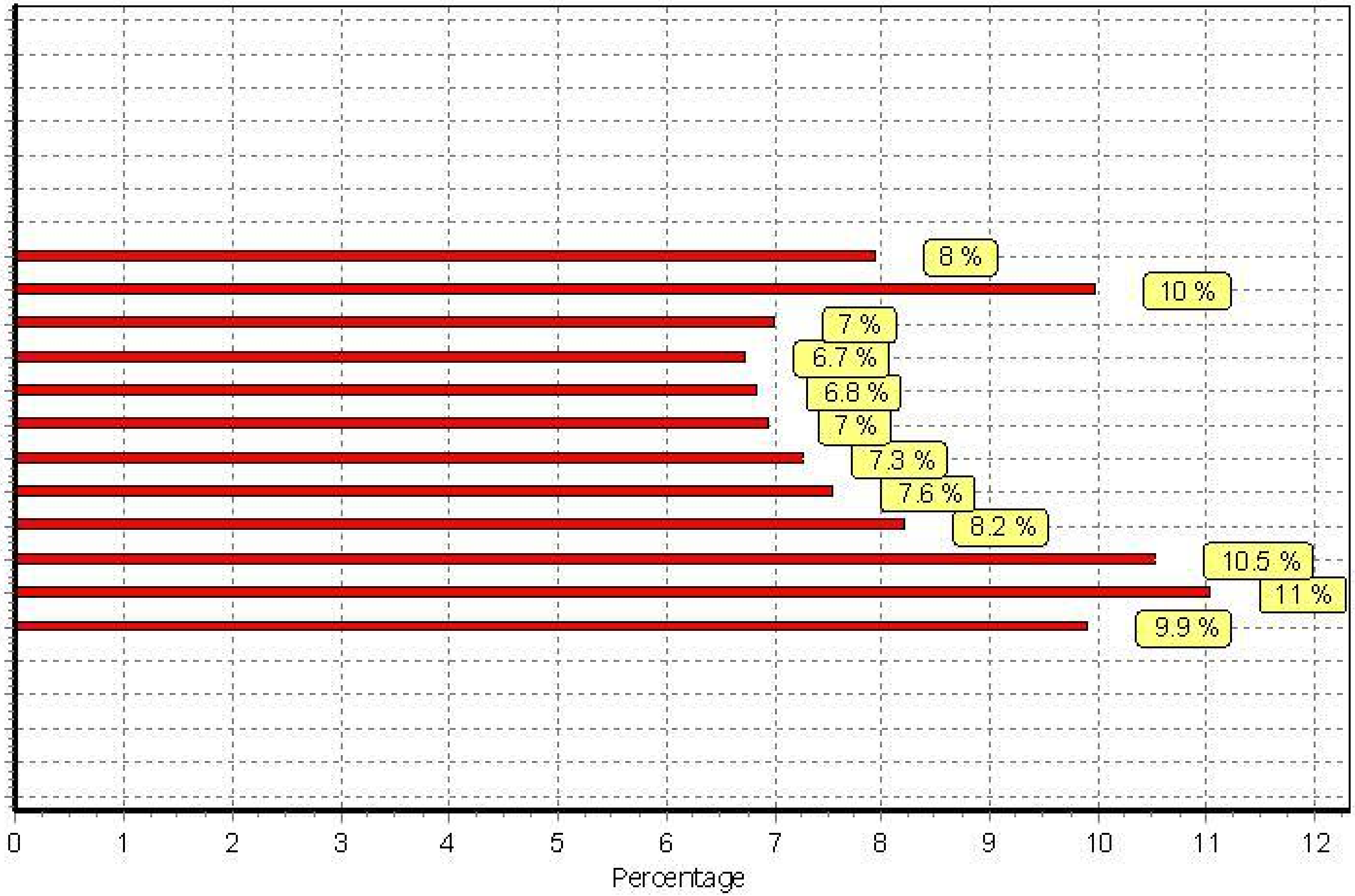
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.233	11.6
08:00-09:00	0.282	14.0
09:00-10:00	0.153	7.6
10:00-11:00	0.135	6.7
11:00-12:00	0.132	6.6
12:00-13:00	0.144	7.2
13:00-14:00	0.147	7.3
14:00-15:00	0.151	7.5
15:00-16:00	0.142	7.1
16:00-17:00	0.179	8.9
17:00-18:00	0.150	7.5
18:00-19:00	0.165	8.2
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - TOTALS 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL VEHICL

TIME	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	0.317	8.0
08:00-09:00	0.397	10.0
09:00-10:00	0.279	7.0
10:00-11:00	0.269	6.7
11:00-12:00	0.273	6.8
12:00-13:00	0.278	7.0
13:00-14:00	0.290	7.3
14:00-15:00	0.301	7.6
15:00-16:00	0.327	8.2
16:00-17:00	0.420	10.5
17:00-18:00	0.440	11.0
18:00-19:00	0.395	9.9
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/NON-PRIVATE HOUSING

MULTI-MODAL OGVS

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	16	106	0.001	16	106	0.000	16	106	0.001
08:00 - 09:00	16	106	0.002	16	106	0.001	16	106	0.003
09:00 - 10:00	16	106	0.001	16	106	0.003	16	106	0.004
10:00 - 11:00	16	106	0.002	16	106	0.001	16	106	0.003
11:00 - 12:00	**16**	**106**	**0.005**	**16**	**106**	**0.004**	**16**	**106**	**0.009**
12:00 - 13:00	16	106	0.003	16	106	0.001	16	106	0.004
13:00 - 14:00	16	106	0.003	16	106	0.001	16	106	0.004
14:00 - 15:00	16	106	0.002	16	106	0.003	16	106	0.005
15:00 - 16:00	16	106	0.001	16	106	0.004	16	106	0.005
16:00 - 17:00	16	106	0.001	16	106	0.002	16	106	0.003
17:00 - 18:00	16	106	0.000	16	106	0.001	16	106	0.001
18:00 - 19:00	16	106	0.000	16	106	0.001	16	106	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.022			0.043

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.

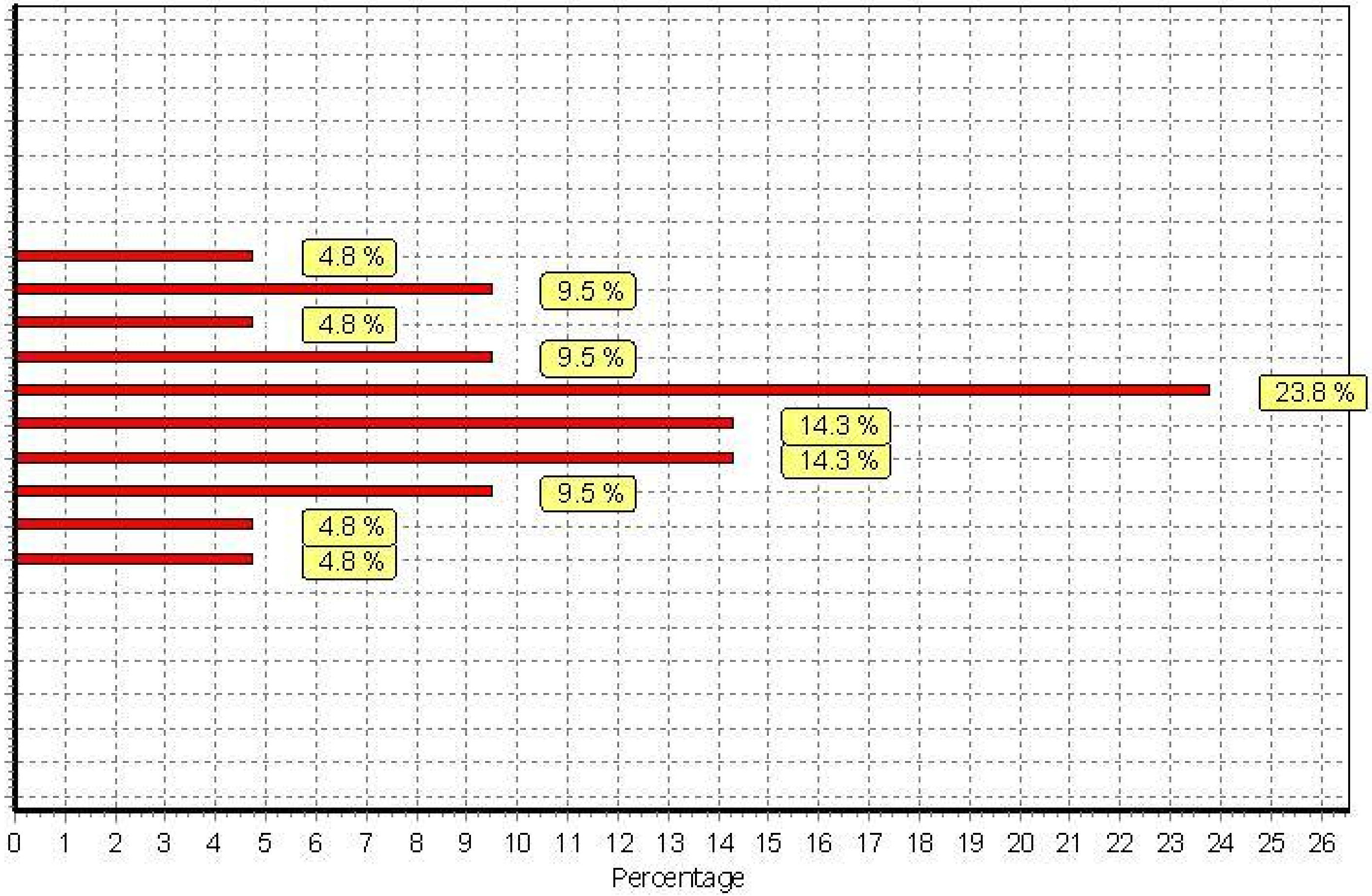
Parameter summary

Trip rate parameter range selected:	14 - 500 (units:)
Survey date date range:	01/01/05 - 11/12/12
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	3

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.

TRIP RATE GRAPH - ARRIVALS 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL OGV

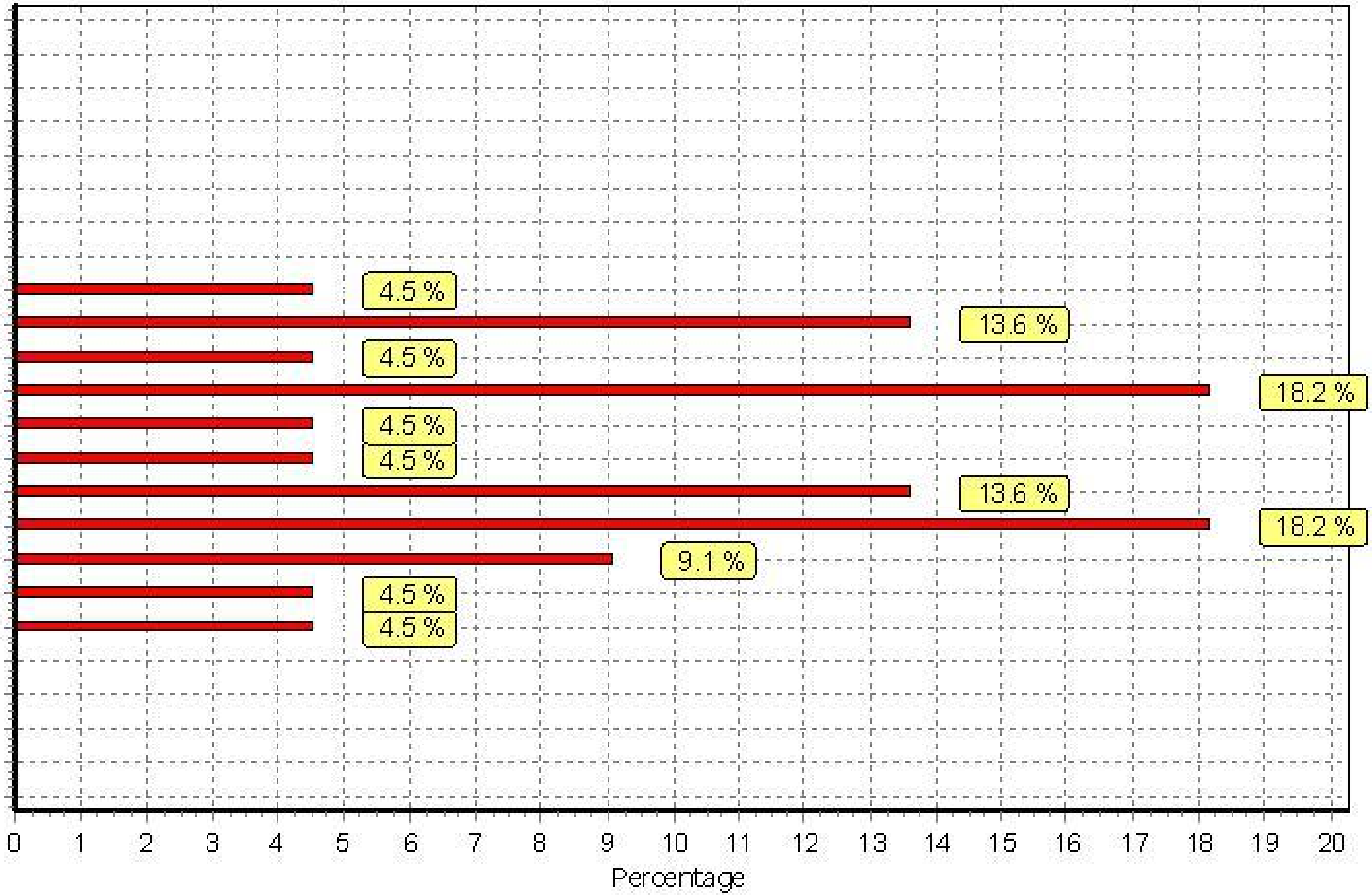
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.001	4.8
08:00-09:00	0.002	9.5
09:00-10:00	0.001	4.8
10:00-11:00	0.002	9.5
11:00-12:00	0.005	23.8
12:00-13:00	0.003	14.3
13:00-14:00	0.003	14.3
14:00-15:00	0.002	9.5
15:00-16:00	0.001	4.8
16:00-17:00	0.001	4.8
17:00-18:00		
18:00-19:00		
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TIME	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		
08:00-09:00	0.001	4.5
09:00-10:00	0.003	13.6
10:00-11:00	0.001	4.5
11:00-12:00	0.004	18.2
12:00-13:00	0.001	4.5
13:00-14:00	0.001	4.5
14:00-15:00	0.003	13.6
15:00-16:00	0.004	18.2
16:00-17:00	0.002	9.1
17:00-18:00	0.001	4.5
18:00-19:00	0.001	4.5
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		

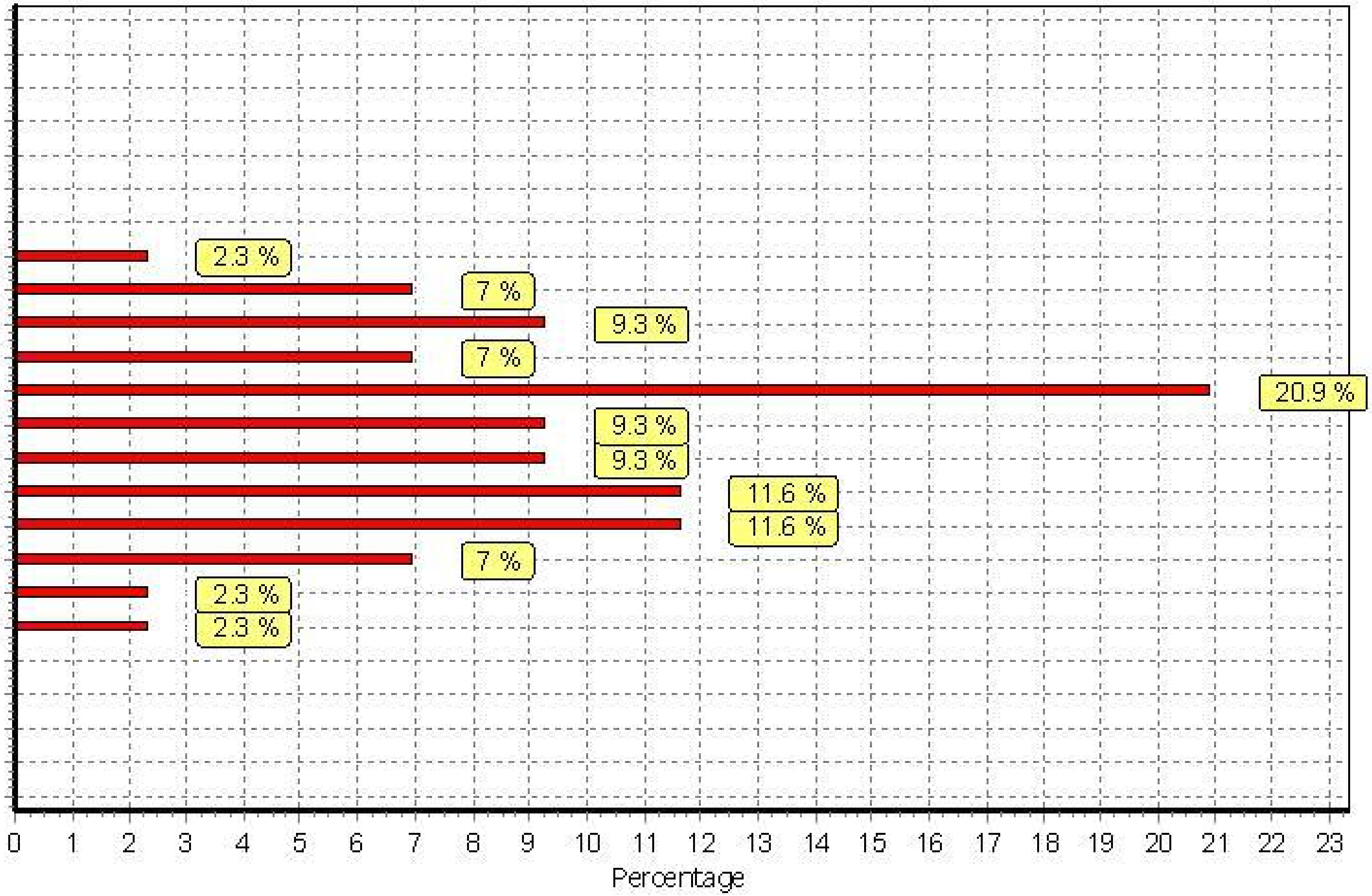
TRIP RATE GRAPH - DEPARTURES 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL C



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - TOTALS 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL OGVS

TIME	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	0.001	2.3
08:00-09:00	0.003	7.0
09:00-10:00	0.004	9.3
10:00-11:00	0.003	7.0
11:00-12:00	0.009	20.9
12:00-13:00	0.004	9.3
13:00-14:00	0.004	9.3
14:00-15:00	0.005	11.6
15:00-16:00	0.005	11.6
16:00-17:00	0.003	7.0
17:00-18:00	0.001	2.3
18:00-19:00	0.001	2.3
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/NON-PRIVATE HOUSING
MULTI-MODAL TOTAL PEOPLE
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	16	106	0.126	16	106	0.399	16	106	0.525
08:00 - 09:00	16	106	0.210	**16**	**106**	**0.642**	**16**	**106**	**0.852**
09:00 - 10:00	16	106	0.199	16	106	0.271	16	106	0.470
10:00 - 11:00	16	106	0.219	16	106	0.228	16	106	0.447
11:00 - 12:00	16	106	0.214	16	106	0.242	16	106	0.456
12:00 - 13:00	16	106	0.233	16	106	0.244	16	106	0.477
13:00 - 14:00	16	106	0.250	16	106	0.246	16	106	0.496
14:00 - 15:00	16	106	0.274	16	106	0.261	16	106	0.535
15:00 - 16:00	16	106	0.458	16	106	0.278	16	106	0.736
16:00 - 17:00	16	106	0.421	16	106	0.303	16	106	0.724
17:00 - 18:00	**16**	**106**	**0.498**	16	106	0.254	16	106	0.752
18:00 - 19:00	16	106	0.407	16	106	0.272	16	106	0.679
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.509			3.640			7.149

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.

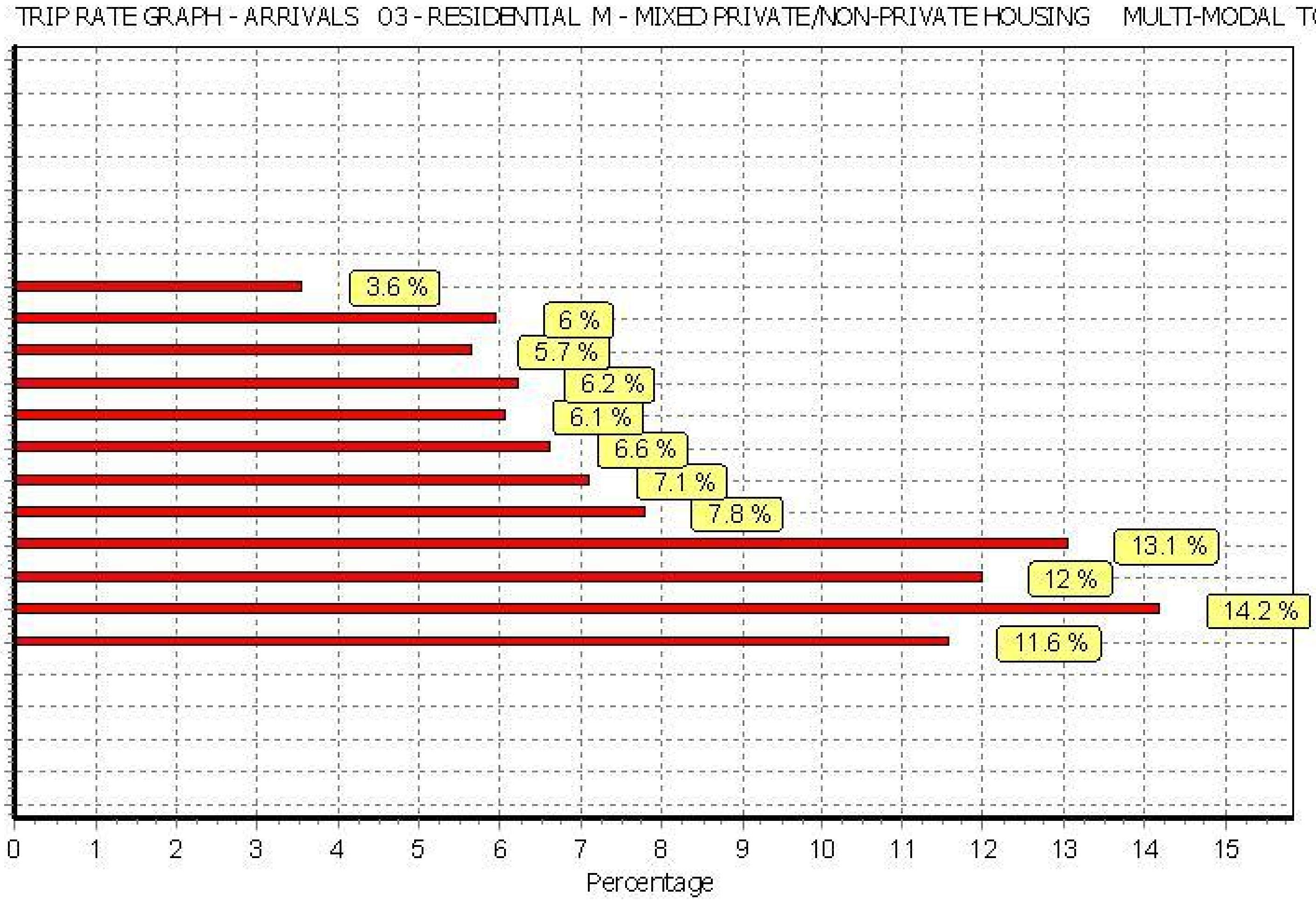
To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected 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:	14 - 500 (units:)
Survey date date range:	01/01/05 - 11/12/12
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	3

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.

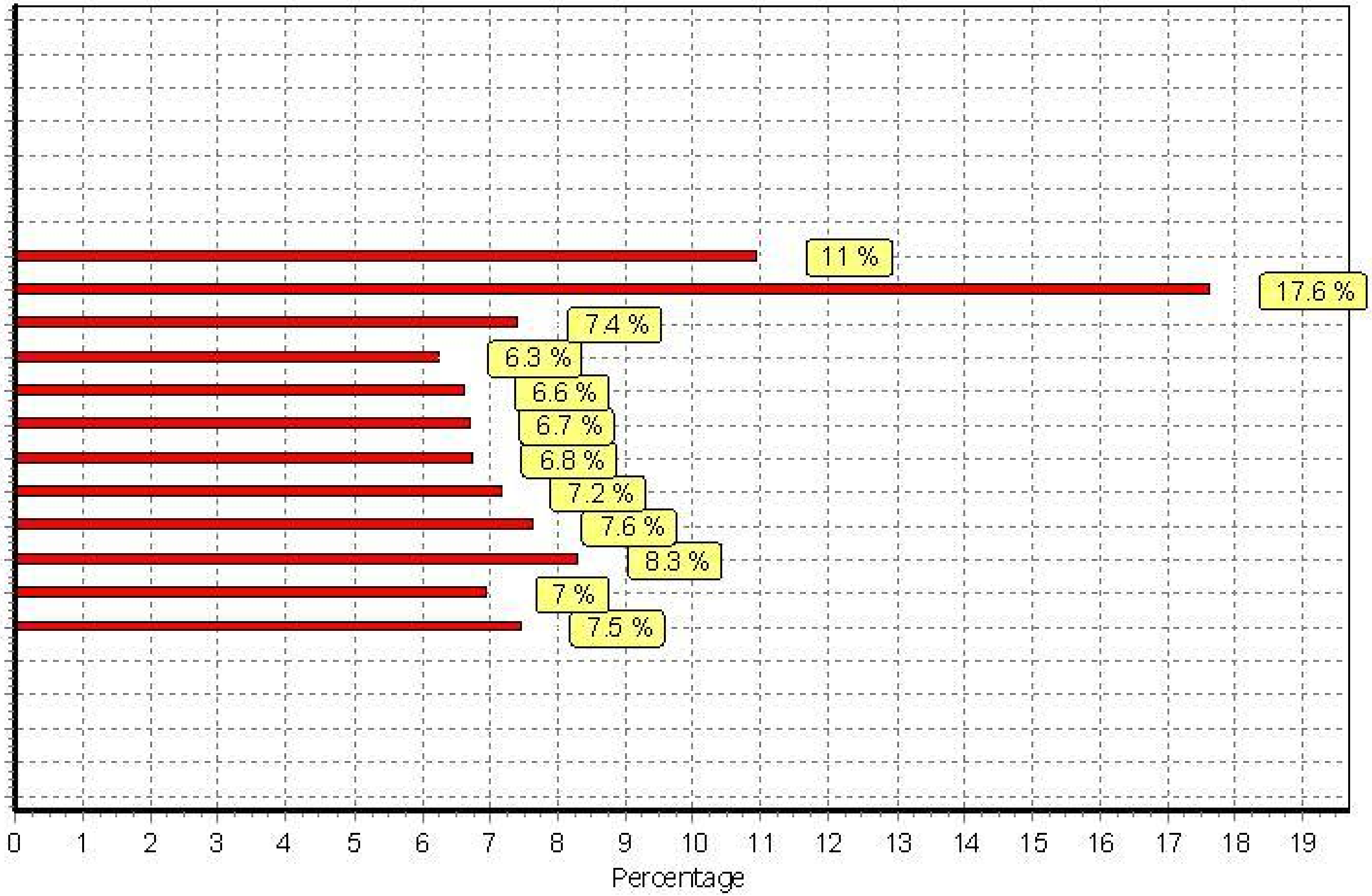
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.126	3.6
08:00-09:00	0.210	6.0
09:00-10:00	0.199	5.7
10:00-11:00	0.219	6.2
11:00-12:00	0.214	6.1
12:00-13:00	0.233	6.6
13:00-14:00	0.250	7.1
14:00-15:00	0.274	7.8
15:00-16:00	0.458	13.1
16:00-17:00	0.421	12.0
17:00-18:00	0.498	14.2
18:00-19:00	0.407	11.6
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - DEPARTURES 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL T

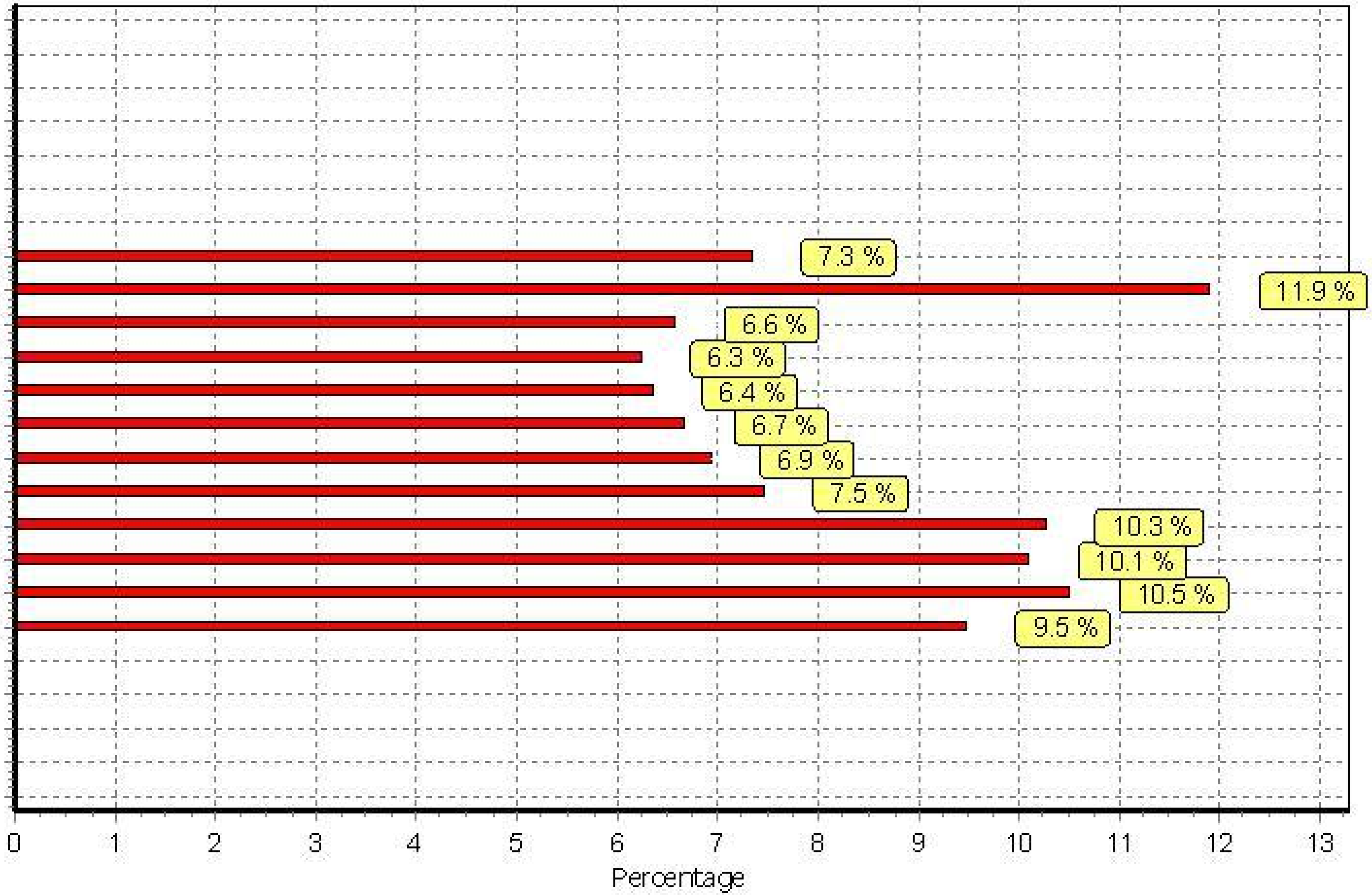
TIME	RATE	%
00:00-01:00		
01:00-02:00		
02:00-03:00		
03:00-04:00		
04:00-05:00		
05:00-06:00		
06:00-07:00		
07:00-08:00	0.399	11.0
08:00-09:00	0.642	17.6
09:00-10:00	0.271	7.4
10:00-11:00	0.228	6.3
11:00-12:00	0.242	6.6
12:00-13:00	0.244	6.7
13:00-14:00	0.246	6.8
14:00-15:00	0.261	7.2
15:00-16:00	0.278	7.6
16:00-17:00	0.303	8.3
17:00-18:00	0.254	7.0
18:00-19:00	0.272	7.5
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE GRAPH - TOTALS 03 - RESIDENTIAL M - MIXED PRIVATE/NON-PRIVATE HOUSING MULTI-MODAL TOTAL

TIME	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	0.525	7.3
08:00-09:00	0.852	11.9
09:00-10:00	0.470	6.6
10:00-11:00	0.447	6.3
11:00-12:00	0.456	6.4
12:00-13:00	0.477	6.7
13:00-14:00	0.496	6.9
14:00-15:00	0.535	7.5
15:00-16:00	0.736	10.3
16:00-17:00	0.724	10.1
17:00-18:00	0.752	10.5
18:00-19:00	0.679	9.5
19:00-20:00		
20:00-21:00		
21:00-22:00		
22:00-23:00		
23:00-24:00		



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

Appendix 3 – Mode Split Data

Neighbourhood Statistics

Area: Portman (Ward)

Method of Travel to Work, 2011 (QS701EW)

About this dataset (PDF 54Kb)

Map this data (opens a new window)

Email me about data releases

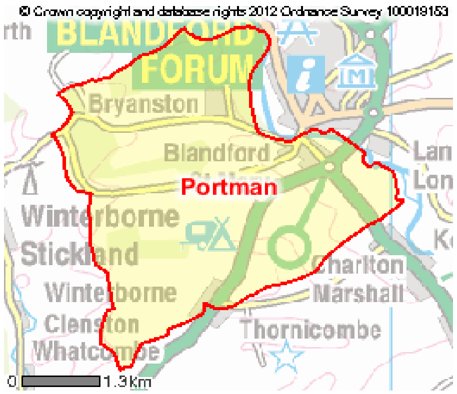
Period Mar11 | Print this table | Download the complete dataset **.CSV** format **under 1MB** | Download this table

Variable	Measure	Portman	North Dorset (Non-Metropolitan District)	South West	England
All Usual Residents Aged 16 to 74 (Persons)[1]	Count	1,719	49,140	3,856,715	38,881,374
Work Mainly at or From Home (Persons)[1]	Count	67	2,832	177,999	1,349,568
Underground, Metro, Light Rail, Tram (Persons)[1]	Count	8	65	3,086	1,027,625
Train (Persons)[1]	Count	7	435	38,898	1,343,684
Bus, Minibus or Coach (Persons)[1]	Count	21	370	119,878	1,886,539
Taxi (Persons)[1]	Count	3	67	7,493	131,465
Motorcycle, Scooter or Moped (Persons)[1]	Count	11	243	28,461	206,550
Driving a Car or Van (Persons)[1]	Count	609	21,916	1,596,171	14,345,882
Passenger in a Car or Van (Persons)[1]	Count	60	1,504	132,014	1,264,553
Bicycle (Persons)[1]	Count	24	713	90,285	742,675
On Foot (Persons)[1]	Count	174	5,047	348,463	2,701,453
Other Method of Travel to Work (Persons)[1]	Count	7	240	17,636	162,727
Not in Employment (Persons)[1]	Count	728	15,708	1,296,331	13,718,653

Last Updated: 30 January 2013

Source: Office for National Statistics

Area Map



Area: Portman (Ward)

View

Choose another table from the list

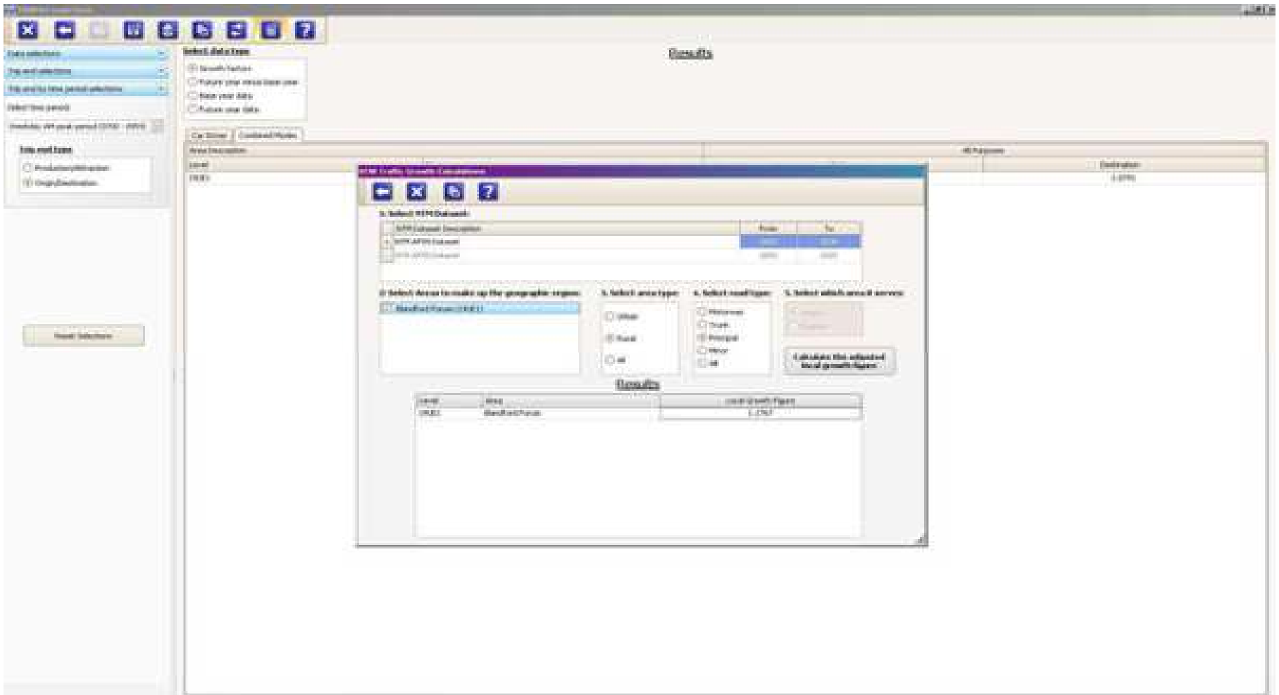
Advanced options

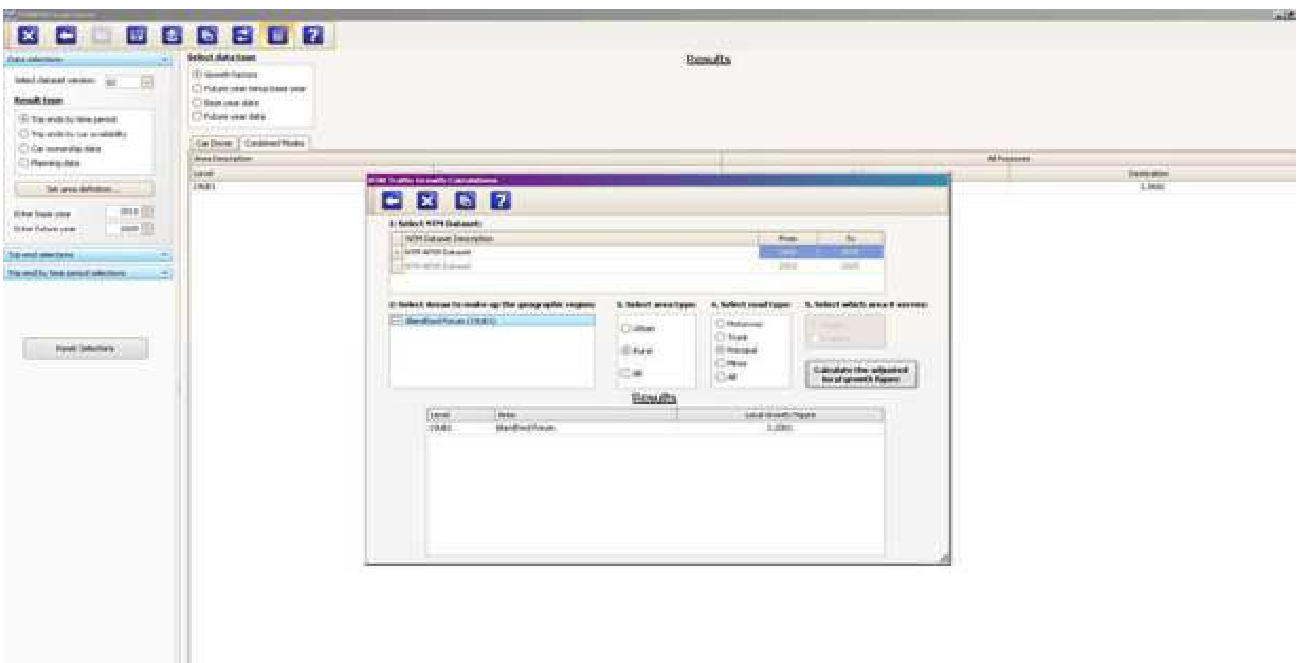
Compare your data further

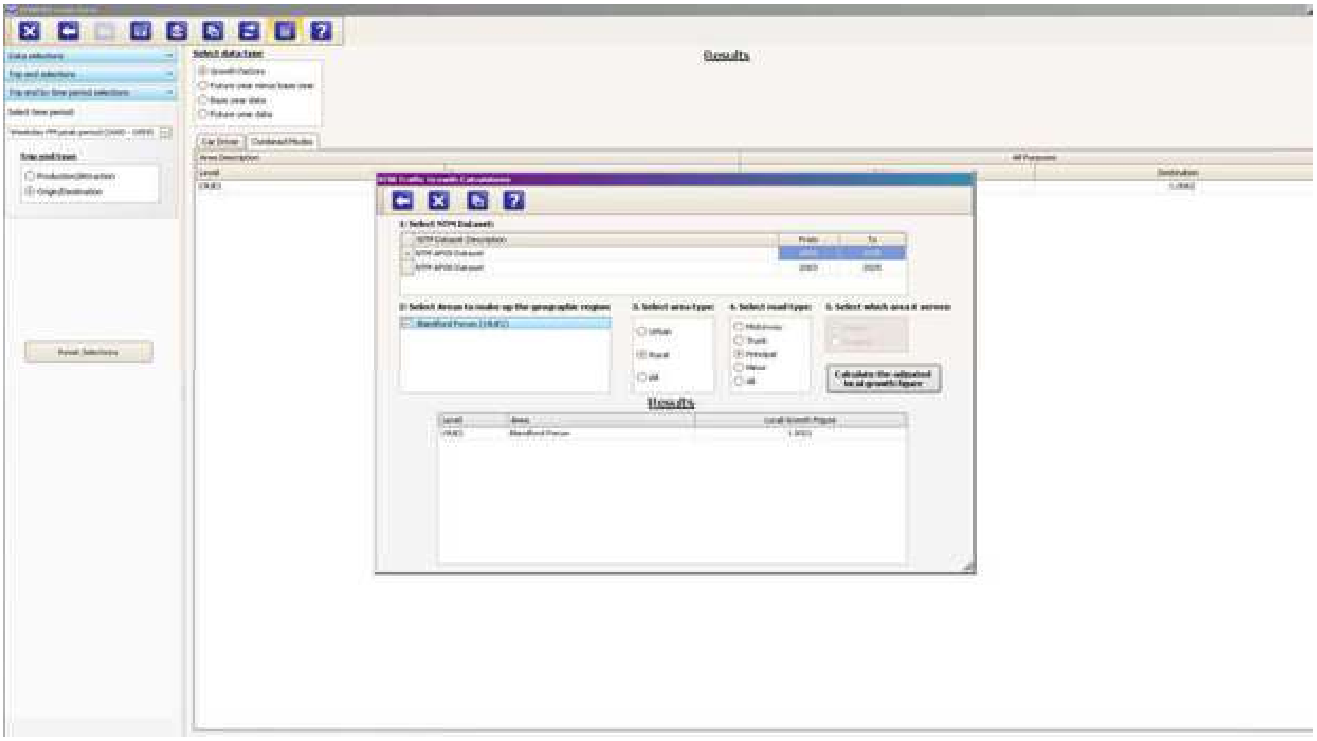
External links

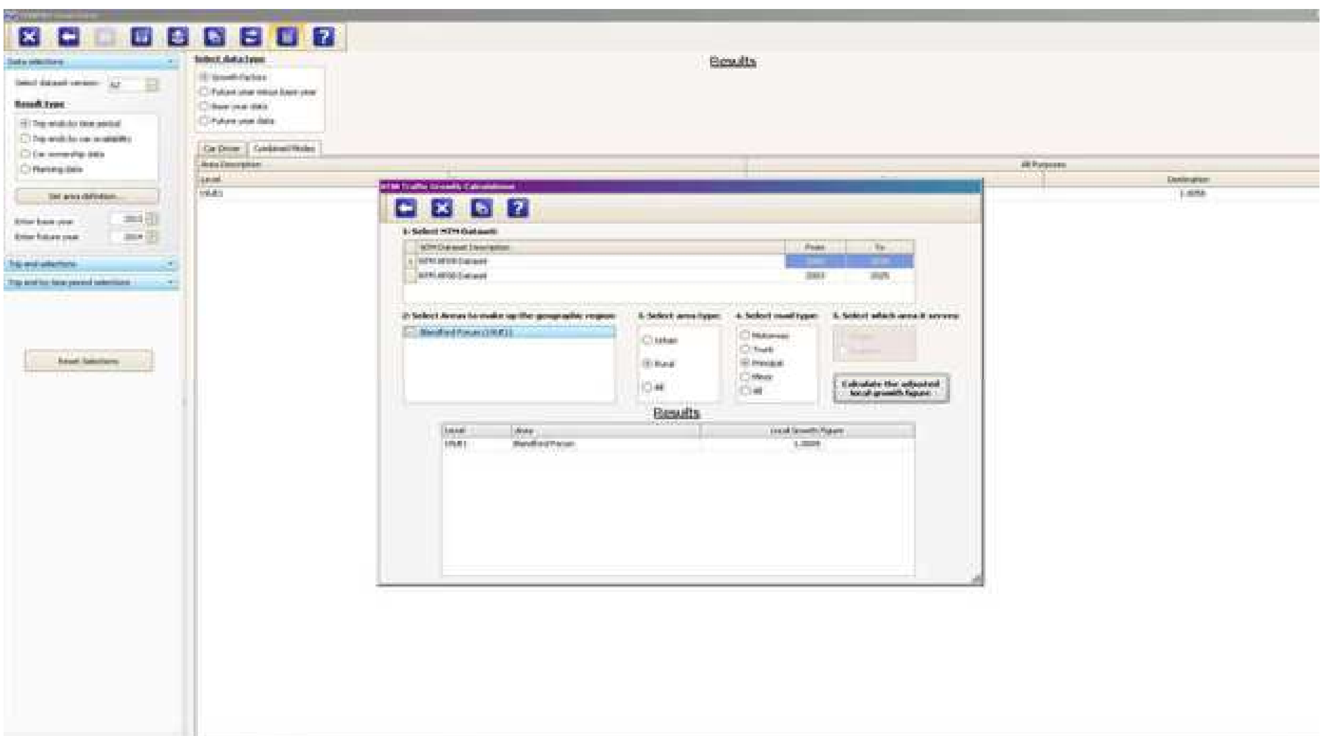
- Data.gov.uk
- Eurostat
- Ordnance Survey
- RSS
- Straight Statistics
- Data 4 Neighbourhood Renewal
- Floor Targets Interactive
- Association of Research Observatories
- CLIP
- Information for Local Government from Central Government

Appendix 4 – TEMpro Output


Results


Results


Results
Results
Calculate the adjusted local growth figure


Results
Results
Calculate the adjusted local growth figure

Appendix 5 - JUNCTIONS OUTPUTS

Junctions 8

ARCADY 8 - Roundabout Module

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: (new file)
Path:
Report generation date: 12/06/2013 12:52:05

» (Default Analysis Set) - 2014 DM, AM
» (Default Analysis Set) - 2014 DM, PM
» (Default Analysis Set) - 2014 DS, AM
» (Default Analysis Set) - 2014 DS, PM
» (Default Analysis Set) - 2029 DM, AM
» (Default Analysis Set) - 2029 DM, PM
» (Default Analysis Set) - 2029 DS, AM
» (Default Analysis Set) - 2029 DS, PM
» (Default Analysis Set) - 2013 BY, AM
» (Default Analysis Set) - 2013 BY, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013 BY							
Arm 1	0.94	3.18	0.47	A	0.99	3.33	0.49	A
Arm 2	1.17	6.80	0.53	A	1.21	7.09	0.55	A
Arm 3	0.59	3.86	0.36	A	0.56	4.04	0.34	A
Arm 4	0.73	5.07	0.42	A	1.47	7.12	0.60	A
	A1 - 2014 DM							
Arm 1	0.93	3.16	0.47	A	0.99	3.34	0.49	A
Arm 2	1.16	6.73	0.53	A	1.21	7.12	0.55	A
Arm 3	0.59	3.83	0.36	A	0.56	4.05	0.34	A
Arm 4	0.73	5.07	0.42	A	1.48	7.15	0.60	A
	A1 - 2014 DS							
Arm 1	0.96	3.21	0.48	A	1.02	3.40	0.50	A
Arm 2	1.28	7.16	0.55	A	1.30	7.43	0.56	A
Arm 3	0.65	4.03	0.38	A	0.58	4.12	0.35	A
Arm 4	0.76	5.23	0.43	A	1.55	7.39	0.61	A
	A1 - 2029 DM							
Arm 1	1.37	3.95	0.57	A	1.58	4.46	0.61	A
Arm 2	2.09	10.44	0.67	B	2.51	12.48	0.72	B
Arm 3	0.88	4.89	0.46	A	0.88	5.32	0.45	A
Arm 4	1.11	6.57	0.52	A	3.19	13.06	0.77	B
	A1 - 2029 DS							
Arm 1	1.39	3.99	0.57	A	1.64	4.58	0.62	A
Arm 2	2.32	11.28	0.70	B	2.75	13.44	0.74	B
Arm 3	0.97	5.16	0.48	A	0.92	5.44	0.46	A
Arm 4	1.16	6.83	0.53	A	3.41	13.87	0.78	B

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

"D1 - 2014 DM, AM " model duration: 07:45 - 09:15
"D2 - 2014 DM, PM" model duration: 16:45 - 18:15
"D3 - 2014 DS, AM" model duration: 07:45 - 09:15
"D4 - 2014 DS, PM" model duration: 16:45 - 18:15
"D5 - 2029 DM, AM" model duration: 07:45 - 09:15
"D6 - 2029 DM, PM" model duration: 16:45 - 18:15
"D7 - 2029 DS, AM" model duration: 07:45 - 09:15
"D8 - 2029 DS, PM" model duration: 16:45 - 18:15
"D9 - 2013 BY, AM" model duration: 07:45 - 09:15
"D10 - 2013 BY, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.1.305 at 12/06/2013 12:52:01

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	30/05/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\haywardr
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2014 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, AM	2014 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			4.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	961.92	100.000
2	ONE HOUR	✓	565.64	100.000
3	ONE HOUR	✓	505.48	100.000
4	ONE HOUR	✓	471.45	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	390.370	397.380	174.170
	2	293.380	0.000	7.010	265.250
	3	319.300	0.000	0.000	186.180
	4	208.200	158.150	105.100	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.41	0.41	0.18
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240

	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	3.16	0.93	A
2	0.53	6.73	1.16	A
3	0.36	3.83	0.59	A
4	0.42	5.07	0.73	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	724.18	722.30	197.40	0.00	2332.44	0.310	0.47	2.349	A
2	425.84	423.89	507.98	0.00	1319.92	0.323	0.49	4.144	A
3	380.55	379.38	549.42	0.00	1726.41	0.220	0.29	2.783	A
4	354.93	353.52	459.50	0.00	1379.99	0.257	0.35	3.584	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.75	864.11	236.37	0.00	2301.02	0.376	0.63	2.633	A
2	508.50	507.68	607.80	0.00	1259.09	0.404	0.69	4.948	A
3	454.42	454.01	657.85	0.00	1646.13	0.276	0.40	3.148	A
4	423.82	423.32	550.10	0.00	1323.06	0.320	0.48	4.093	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1059.09	1057.92	289.30	0.00	2258.37	0.469	0.92	3.151	A
2	622.78	620.97	744.09	0.00	1176.02	0.530	1.15	6.684	A
3	556.54	555.78	804.83	0.00	1537.32	0.362	0.59	3.817	A
4	519.08	518.10	673.15	0.00	1245.74	0.417	0.72	5.057	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1059.09	1059.08	289.83	0.00	2257.93	0.469	0.93	3.157	A
2	622.78	622.74	744.99	0.00	1175.47	0.530	1.16	6.732	A
3	556.54	556.53	806.79	0.00	1535.88	0.362	0.59	3.830	A
4	519.08	519.06	674.55	0.00	1244.86	0.417	0.73	5.075	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.75	865.90	237.20	0.00	2300.36	0.376	0.64	2.642	A
2	508.50	510.29	609.20	0.00	1258.24	0.404	0.71	4.989	A

3	454.42	455.18	660.75	0.00	1643.98	0.276	0.40	3.160	A
4	423.82	424.79	552.20	0.00	1321.74	0.321	0.49	4.112	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	724.18	724.83	198.48	0.00	2331.57	0.311	0.48	2.358	A
2	425.84	426.69	509.92	0.00	1318.75	0.323	0.50	4.175	A
3	380.55	380.97	552.64	0.00	1724.02	0.221	0.30	2.796	A
4	354.93	355.45	461.96	0.00	1378.44	0.257	0.36	3.602	A

(Default Analysis Set) - 2014 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, PM	2014 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			5.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	973.07	100.000
2	ONE HOUR	✓	562.21	100.000
3	ONE HOUR	✓	455.97	100.000
4	ONE HOUR	✓	683.46	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	379.810	324.690	268.570
	2	306.660	0.000	12.030	243.520

	3	268.570	19.040	0.000	168.360
	4	337.720	196.420	149.320	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.33	0.28
	2	0.55	0.00	0.02	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.49	3.34	0.99	A
2	0.55	7.12	1.21	A
3	0.34	4.05	0.56	A
4	0.60	7.15	1.48	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	732.58	730.65	273.39	0.00	2271.19	0.323	0.48	2.374	A
2	423.26	421.29	557.36	0.00	1289.83	0.328	0.49	4.193	A
3	343.28	342.17	613.94	0.00	1678.64	0.205	0.28	2.915	A

4	514.54	512.20	445.62	0.00	1388.71	0.371	0.59	4.114	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	874.77	874.08	327.38	0.00	2227.67	0.393	0.65	2.704	A
2	505.42	504.55	666.91	0.00	1223.06	0.413	0.71	5.073	A
3	409.91	409.52	735.01	0.00	1589.02	0.258	0.37	3.307	A
4	614.42	613.37	533.52	0.00	1333.48	0.461	0.85	5.013	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1071.37	1070.04	400.35	0.00	2168.85	0.494	0.99	3.328	A
2	619.00	617.02	816.25	0.00	1132.04	0.547	1.20	7.060	A
3	502.03	501.29	899.16	0.00	1467.50	0.342	0.56	4.034	A
4	752.50	750.04	652.76	0.00	1258.55	0.598	1.47	7.076	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1071.37	1071.35	401.60	0.00	2167.84	0.494	0.99	3.339	A
2	619.00	618.96	817.57	0.00	1131.24	0.547	1.21	7.124	A
3	502.03	502.02	901.41	0.00	1465.83	0.342	0.56	4.046	A
4	752.50	752.44	654.27	0.00	1257.60	0.598	1.48	7.154	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	874.77	876.08	329.20	0.00	2226.20	0.393	0.66	2.716	A
2	505.42	507.38	668.90	0.00	1221.85	0.414	0.72	5.123	A
3	409.91	410.64	738.33	0.00	1586.56	0.258	0.38	3.320	A
4	614.42	616.87	535.77	0.00	1332.06	0.461	0.87	5.071	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	732.58	733.28	275.19	0.00	2269.73	0.323	0.49	2.386	A
2	423.26	424.15	559.72	0.00	1288.39	0.329	0.50	4.227	A
3	343.28	343.67	617.46	0.00	1676.03	0.205	0.28	2.927	A
4	514.54	515.63	448.13	0.00	1387.13	0.371	0.60	4.153	A

(Default Analysis Set) - 2014 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, AM	2014 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			4.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	977.50	100.000
2	ONE HOUR	✓	587.11	100.000
3	ONE HOUR	✓	526.55	100.000
4	ONE HOUR	✓	475.29	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	393.110	400.220	184.170
	2	304.420	0.000	7.360	275.330
	3	332.610	0.000	0.000	193.940
	4	208.200	160.440	106.650	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.48	3.21	0.96	A
2	0.55	7.16	1.28	A
3	0.38	4.03	0.65	A
4	0.43	5.23	0.76	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	735.91	733.98	200.27	0.00	2330.13	0.316	0.48	2.368	A
2	442.01	439.92	518.77	0.00	1313.35	0.337	0.52	4.250	A
3	396.41	395.16	572.70	0.00	1709.17	0.232	0.31	2.853	A
4	357.82	356.38	477.72	0.00	1368.54	0.261	0.36	3.635	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	878.75	878.09	239.81	0.00	2298.25	0.382	0.65	2.664	A
2	527.80	526.89	620.72	0.00	1251.21	0.422	0.75	5.132	A
3	473.36	472.91	685.73	0.00	1625.49	0.291	0.43	3.253	A
4	427.28	426.75	571.92	0.00	1309.35	0.326	0.49	4.171	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1076.25	1075.02	293.49	0.00	2254.99	0.477	0.95	3.205	A
2	646.42	644.36	759.89	0.00	1166.40	0.554	1.26	7.100	A
3	579.74	578.87	838.82	0.00	1512.16	0.383	0.64	4.018	A
4	523.30	522.27	699.76	0.00	1229.02	0.426	0.75	5.205	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1076.25	1076.23	294.06	0.00	2254.52	0.477	0.96	3.212	A
2	646.42	646.37	760.84	0.00	1165.82	0.554	1.28	7.164	A
3	579.74	579.73	841.04	0.00	1510.52	0.384	0.65	4.031	A
4	523.30	523.29	701.35	0.00	1228.02	0.426	0.76	5.226	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	878.75	879.96	240.68	0.00	2297.55	0.382	0.65	2.674	A
2	527.80	529.85	622.18	0.00	1250.32	0.422	0.76	5.181	A
3	473.36	474.22	689.00	0.00	1623.07	0.292	0.43	3.268	A
4	427.28	428.30	574.28	0.00	1307.86	0.327	0.50	4.192	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	735.91	736.58	201.38	0.00	2329.23	0.316	0.49	2.377	A
2	442.01	442.94	520.77	0.00	1312.13	0.337	0.53	4.287	A
3	396.41	396.87	576.17	0.00	1706.60	0.232	0.32	2.867	A
4	357.82	358.36	480.36	0.00	1366.88	0.262	0.36	3.653	A

(Default Analysis Set) - 2014 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, PM	2014 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			5.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	

3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	984.95	100.000
2	ONE HOUR	✓	575.68	100.000
3	ONE HOUR	✓	464.74	100.000
4	ONE HOUR	✓	691.74	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	386.030	330.350	268.570
	2	311.350	0.000	17.080	247.250
	3	273.350	20.040	0.000	171.350
	4	337.720	201.000	153.020	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.34	0.27
	2	0.54	0.00	0.03	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.50	3.40	1.02	A
2	0.56	7.43	1.30	A
3	0.35	4.12	0.58	A
4	0.61	7.39	1.55	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	741.52	739.55	280.33	0.00	2265.59	0.327	0.49	2.396	A
2	433.40	431.35	564.37	0.00	1285.56	0.337	0.51	4.262	A
3	349.88	348.74	620.21	0.00	1674.00	0.209	0.29	2.940	A
4	520.78	518.37	453.45	0.00	1383.79	0.376	0.60	4.166	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	885.45	884.74	335.69	0.00	2220.97	0.399	0.67	2.739	A
2	517.52	516.61	675.30	0.00	1217.95	0.425	0.74	5.197	A
3	417.79	417.39	742.52	0.00	1583.45	0.264	0.39	3.345	A
4	621.86	620.76	542.90	0.00	1327.58	0.468	0.88	5.099	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1084.45	1083.06	410.47	0.00	2160.69	0.502	1.02	3.394	A
2	633.84	631.67	826.48	0.00	1125.81	0.563	1.28	7.353	A
3	511.69	510.91	908.25	0.00	1460.76	0.350	0.58	4.102	A
4	761.62	759.00	664.17	0.00	1251.38	0.609	1.53	7.303	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1084.45	1084.43	411.81	0.00	2159.61	0.502	1.02	3.405	A
2	633.84	633.78	827.87	0.00	1124.96	0.563	1.30	7.427	A
3	511.69	511.68	910.68	0.00	1458.97	0.351	0.58	4.117	A
4	761.62	761.55	665.80	0.00	1250.36	0.609	1.55	7.393	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	885.45	886.82	337.64	0.00	2219.40	0.399	0.68	2.750	A
2	517.52	519.68	677.39	0.00	1216.67	0.425	0.76	5.251	A
3	417.79	418.56	746.07	0.00	1580.82	0.264	0.39	3.359	A
4	621.86	624.47	545.30	0.00	1326.08	0.469	0.90	5.173	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	741.52	742.25	282.21	0.00	2264.08	0.328	0.50	2.409	A
2	433.40	434.35	566.79	0.00	1284.08	0.338	0.52	4.301	A
3	349.88	350.29	623.86	0.00	1671.30	0.209	0.29	2.952	A
4	520.78	521.92	456.05	0.00	1382.15	0.377	0.61	4.208	A

(Default Analysis Set) - 2029 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DM, AM	2029 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			6.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)

1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1142.54	100.000
2	ONE HOUR	✓	664.81	100.000
3	ONE HOUR	✓	594.21	100.000
4	ONE HOUR	✓	554.20	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	0.000	458.900	467.130	216.510
	2	344.760	0.000	8.240	311.810
	3	375.350	0.000	0.000	218.860
	4	244.740	185.910	123.550	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**

From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	3.95	1.37	A
2	0.67	10.44	2.09	B
3	0.46	4.89	0.88	A
4	0.52	6.57	1.11	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	860.16	857.67	231.94	0.00	2304.60	0.373	0.62	2.612	A
2	500.50	497.80	605.79	0.00	1260.31	0.397	0.67	4.865	A
3	447.35	445.81	654.16	0.00	1648.86	0.271	0.39	3.115	A
4	417.23	415.37	539.76	0.00	1329.56	0.314	0.46	4.021	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1027.12	1026.15	277.76	0.00	2267.66	0.453	0.87	3.045	A
2	597.65	596.22	724.89	0.00	1187.72	0.503	1.03	6.276	A
3	534.18	533.56	783.28	0.00	1553.28	0.344	0.54	3.678	A
4	498.21	497.43	646.23	0.00	1262.66	0.395	0.66	4.809	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1257.96	1255.96	339.75	0.00	2217.69	0.567	1.36	3.928	A
2	731.97	727.90	887.15	0.00	1088.83	0.672	2.05	10.196	B
3	654.24	652.90	956.88	0.00	1424.77	0.459	0.88	4.854	A
4	610.19	608.45	789.90	0.00	1172.38	0.520	1.09	6.513	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1257.96	1257.93	340.70	0.00	2216.93	0.567	1.37	3.947	A
2	731.97	731.82	888.71	0.00	1087.88	0.673	2.09	10.439	B
3	654.24	654.21	961.13	0.00	1421.62	0.460	0.88	4.889	A
4	610.19	610.14	792.76	0.00	1170.58	0.521	1.11	6.572	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1027.12	1029.10	279.16	0.00	2266.54	0.453	0.88	3.065	A
2	597.65	601.75	727.22	0.00	1186.31	0.504	1.06	6.409	A
3	534.18	535.51	789.30	0.00	1548.82	0.345	0.55	3.710	A
4	498.21	499.93	650.33	0.00	1260.08	0.395	0.68	4.856	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	860.16	861.15	233.43	0.00	2303.40	0.373	0.63	2.626	A
2	500.50	502.01	608.47	0.00	1258.68	0.398	0.69	4.929	A
3	447.35	448.00	658.97	0.00	1645.30	0.272	0.39	3.135	A
4	417.23	418.04	543.32	0.00	1327.32	0.314	0.47	4.056	A

(Default Analysis Set) - 2029 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DM, PM	2029 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			8.49	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1165.30	100.000
2	ONE HOUR	✓	673.26	100.000

3	ONE HOUR	✓	546.05	100.000
4	ONE HOUR	✓	818.47	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	454.840	388.830	321.630
	2	367.230	0.000	14.400	291.630
	3	321.630	22.800	0.000	201.620
	4	404.430	235.220	178.820	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.33	0.28
	2	0.55	0.00	0.02	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	4.46	1.58	A
2	0.72	12.48	2.51	B
3	0.45	5.32	0.88	A
4	0.77	13.06	3.19	B

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	877.30	874.67	327.09	0.00	2227.91	0.394	0.66	2.702	A
2	506.87	504.02	667.15	0.00	1222.92	0.414	0.71	5.061	A
3	411.10	409.59	734.66	0.00	1589.27	0.259	0.38	3.301	A
4	616.19	612.77	533.28	0.00	1333.63	0.462	0.85	4.993	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1047.58	1046.46	391.65	0.00	2175.87	0.481	0.94	3.240	A
2	605.25	603.60	798.31	0.00	1142.98	0.530	1.12	6.746	A
3	490.89	490.26	879.51	0.00	1482.04	0.331	0.53	3.930	A
4	735.79	733.74	638.47	0.00	1267.53	0.580	1.37	6.748	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1283.02	1280.51	477.44	0.00	2106.71	0.609	1.57	4.419	A
2	741.27	735.97	976.09	0.00	1034.63	0.716	2.45	12.010	B
3	601.21	599.85	1073.66	0.00	1338.31	0.449	0.87	5.272	A
4	901.15	894.28	779.80	0.00	1178.72	0.765	3.08	12.419	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1283.02	1282.97	480.76	0.00	2104.03	0.610	1.58	4.460	A
2	741.27	741.01	978.99	0.00	1032.86	0.718	2.51	12.476	B
3	601.21	601.18	1079.27	0.00	1334.16	0.451	0.88	5.320	A
4	901.15	900.75	783.39	0.00	1176.47	0.766	3.19	13.064	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1047.58	1050.08	396.33	0.00	2172.09	0.482	0.95	3.273	A
2	605.25	610.64	802.51	0.00	1140.42	0.531	1.16	6.956	A
3	490.89	492.25	887.41	0.00	1476.19	0.333	0.54	3.969	A
4	735.79	742.84	643.57	0.00	1264.33	0.582	1.42	7.022	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	877.30	878.46	330.01	0.00	2225.55	0.394	0.67	2.722	A
2	506.87	508.62	670.68	0.00	1220.76	0.415	0.73	5.138	A
3	411.10	411.74	740.20	0.00	1585.17	0.259	0.38	3.327	A
4	616.19	618.38	537.14	0.00	1331.20	0.463	0.87	5.087	A

(Default Analysis Set) - 2029 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DS, AM	2029 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			6.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None

3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1148.11	100.000
2	ONE HOUR	✓	686.38	100.000
3	ONE HOUR	✓	615.29	100.000
4	ONE HOUR	✓	558.04	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	461.630	469.970	216.510
	2	355.900	0.000	8.590	321.890
	3	388.670	0.000	0.000	226.620
	4	244.740	188.200	125.100	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	3.99	1.39	A
2	0.70	11.28	2.32	B
3	0.48	5.16	0.97	A
4	0.53	6.83	1.16	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.36	861.84	234.80	0.00	2302.29	0.375	0.63	2.624	A
2	516.74	513.89	609.07	0.00	1258.31	0.411	0.71	4.980	A
3	463.22	461.59	669.98	0.00	1637.15	0.283	0.41	3.188	A
4	420.12	418.22	558.04	0.00	1318.07	0.319	0.48	4.086	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1032.13	1031.14	281.19	0.00	2264.90	0.456	0.88	3.065	A
2	617.04	615.47	728.82	0.00	1185.33	0.521	1.11	6.512	A
3	553.13	552.45	802.22	0.00	1539.26	0.359	0.58	3.801	A
4	501.67	500.85	668.11	0.00	1248.91	0.402	0.68	4.919	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1264.09	1262.05	343.91	0.00	2214.34	0.571	1.38	3.966	A
2	755.72	751.04	891.93	0.00	1085.92	0.696	2.28	10.962	B
3	677.45	675.95	979.63	0.00	1407.92	0.481	0.96	5.116	A
4	614.41	612.56	816.41	0.00	1155.72	0.532	1.14	6.759	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1264.09	1264.06	344.92	0.00	2213.53	0.571	1.39	3.987	A
2	755.72	755.53	893.54	0.00	1084.94	0.697	2.32	11.279	B
3	677.45	677.41	984.45	0.00	1404.36	0.482	0.97	5.161	A
4	614.41	614.36	819.67	0.00	1153.67	0.533	1.16	6.830	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1032.13	1034.15	282.68	0.00	2263.70	0.456	0.89	3.083	A
2	617.04	621.77	731.22	0.00	1183.87	0.521	1.14	6.674	A
3	553.13	554.63	809.01	0.00	1534.23	0.361	0.59	3.838	A
4	501.67	503.51	672.75	0.00	1245.99	0.403	0.70	4.975	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	864.36	865.36	236.35	0.00	2301.05	0.376	0.64	2.640	A
2	516.74	518.40	611.79	0.00	1256.66	0.411	0.73	5.051	A
3	463.22	463.93	675.10	0.00	1633.36	0.284	0.41	3.212	A
4	420.12	420.97	561.86	0.00	1315.67	0.319	0.48	4.121	A

(Default Analysis Set) - 2029 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 DS, PM	2029 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS

(untitled)	Roundabout	1,2,3,4			8.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1177.17	100.000
2	ONE HOUR	✓	686.74	100.000
3	ONE HOUR	✓	554.82	100.000
4	ONE HOUR	✓	826.75	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	461.060	394.480	321.630
	2	371.930	0.000	19.460	295.350
	3	326.400	23.810	0.000	204.610
	4	404.430	239.800	182.520	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.34	0.27
	2	0.54	0.00	0.03	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.62	4.58	1.64	A
2	0.74	13.44	2.75	B
3	0.46	5.44	0.92	A
4	0.78	13.87	3.41	B

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	886.24	883.55	334.01	0.00	2222.32	0.399	0.67	2.729	A
2	517.01	514.06	674.13	0.00	1218.66	0.424	0.74	5.158	A
3	417.70	416.15	740.89	0.00	1584.66	0.264	0.39	3.333	A
4	622.42	618.92	541.09	0.00	1328.72	0.468	0.88	5.070	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1058.25	1057.09	399.93	0.00	2169.19	0.488	0.96	3.290	A
2	617.37	615.59	806.67	0.00	1137.88	0.543	1.18	6.964	A
3	498.77	498.12	886.97	0.00	1476.52	0.338	0.55	3.984	A
4	743.23	741.08	647.82	0.00	1261.66	0.589	1.41	6.915	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1296.09	1293.45	487.31	0.00	2098.76	0.618	1.62	4.533	A
2	756.11	750.15	986.15	0.00	1028.49	0.735	2.67	12.843	B
3	610.87	609.43	1082.30	0.00	1331.92	0.459	0.91	5.387	A
4	910.27	902.78	790.96	0.00	1171.71	0.777	3.29	13.090	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1296.09	1296.03	490.95	0.00	2095.82	0.618	1.64	4.578	A
2	756.11	755.79	989.27	0.00	1026.60	0.737	2.75	13.437	B
3	610.87	610.83	1088.48	0.00	1327.34	0.460	0.92	5.443	A
4	910.27	909.78	794.89	0.00	1169.24	0.779	3.41	13.870	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1058.25	1060.88	405.07	0.00	2165.05	0.489	0.98	3.323	A
2	617.37	623.46	811.15	0.00	1135.15	0.544	1.23	7.214	A
3	498.77	500.20	895.65	0.00	1470.09	0.339	0.56	4.026	A
4	743.23	750.95	653.39	0.00	1258.15	0.591	1.48	7.232	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	886.24	887.44	337.08	0.00	2219.85	0.399	0.68	2.750	A
2	517.01	518.90	677.78	0.00	1216.44	0.425	0.76	5.247	A
3	417.70	418.37	746.67	0.00	1580.38	0.264	0.39	3.357	A
4	622.42	624.74	545.11	0.00	1326.19	0.469	0.90	5.172	A

(Default Analysis Set) - 2013 BY, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 BY, AM	2013 BY	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			4.49	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	

4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	971.00	100.000
2	ONE HOUR	✓	565.00	100.000
3	ONE HOUR	✓	505.00	100.000
4	ONE HOUR	✓	471.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	0.000	390.000	397.000	184.000
	2	293.000	0.000	7.000	265.000
	3	319.000	0.000	0.000	186.000
	4	208.000	158.000	105.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	3.18	0.94	A
2	0.53	6.80	1.17	A
3	0.36	3.86	0.59	A
4	0.42	5.07	0.73	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	729.11	197.21	0.00	2332.59	0.313	0.48	2.357	A
2	425.36	423.40	515.00	0.00	1315.65	0.323	0.49	4.162	A
3	380.19	379.01	556.32	0.00	1721.30	0.221	0.29	2.793	A
4	354.59	353.19	458.98	0.00	1380.31	0.257	0.35	3.582	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS

1	872.91	872.26	236.15	0.00	2301.20	0.379	0.64	2.647	A
2	507.92	507.10	616.20	0.00	1253.97	0.405	0.70	4.978	A
3	453.98	453.57	666.10	0.00	1640.02	0.277	0.40	3.163	A
4	423.42	422.91	549.49	0.00	1323.44	0.320	0.48	4.089	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1067.89	289.02	0.00	2258.59	0.473	0.94	3.176	A
2	622.08	620.24	754.37	0.00	1169.76	0.532	1.16	6.749	A
3	556.02	555.24	814.92	0.00	1529.86	0.363	0.59	3.847	A
4	518.58	517.60	672.38	0.00	1246.22	0.416	0.72	5.050	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1069.08	289.56	0.00	2258.15	0.473	0.94	3.183	A
2	622.08	622.04	755.29	0.00	1169.20	0.532	1.17	6.801	A
3	556.02	556.00	816.92	0.00	1528.38	0.364	0.59	3.859	A
4	518.58	518.56	673.80	0.00	1245.33	0.416	0.73	5.068	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	874.09	236.97	0.00	2300.54	0.379	0.65	2.657	A
2	507.92	509.74	617.62	0.00	1253.10	0.405	0.71	5.018	A
3	453.98	454.75	669.06	0.00	1637.83	0.277	0.40	3.173	A
4	423.42	424.38	551.60	0.00	1322.11	0.320	0.49	4.107	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	731.68	198.29	0.00	2331.72	0.314	0.48	2.368	A
2	425.36	426.21	516.96	0.00	1314.45	0.324	0.50	4.193	A
3	380.19	380.61	559.58	0.00	1718.88	0.221	0.30	2.806	A
4	354.59	355.11	461.45	0.00	1378.76	0.257	0.36	3.599	A

(Default Analysis Set) - 2013 BY, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 BY, PM	2013 BY	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4			5.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	39.08	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	15.17	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.806	2491.553
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.628	1668.719

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	971.00	100.000
2	ONE HOUR	✓	561.00	100.000
3	ONE HOUR	✓	455.00	100.000
4	ONE HOUR	✓	682.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	379.000	324.000	268.000
	2	306.000	0.000	12.000	243.000
	3	268.000	19.000	0.000	168.000
	4	337.000	196.000	149.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.33	0.28
	2	0.55	0.00	0.02	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340

	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.49	3.33	0.99	A
2	0.55	7.09	1.21	A
3	0.34	4.04	0.56	A
4	0.60	7.12	1.47	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	729.10	272.81	0.00	2271.65	0.322	0.48	2.371	A
2	422.35	420.39	556.18	0.00	1290.55	0.327	0.49	4.185	A
3	342.55	341.44	612.63	0.00	1679.61	0.204	0.28	2.911	A
4	513.45	511.11	444.68	0.00	1389.30	0.370	0.58	4.106	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	872.22	326.68	0.00	2228.23	0.392	0.65	2.699	A
2	504.33	503.47	665.50	0.00	1223.92	0.412	0.70	5.059	A
3	409.04	408.65	733.44	0.00	1590.18	0.257	0.37	3.301	A
4	613.10	612.06	532.38	0.00	1334.19	0.460	0.85	4.999	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1067.77	399.51	0.00	2169.53	0.493	0.98	3.319	A
2	617.67	615.71	814.52	0.00	1133.10	0.545	1.19	7.027	A
3	500.96	500.23	897.25	0.00	1468.91	0.341	0.56	4.024	A
4	750.90	748.46	651.37	0.00	1259.42	0.596	1.46	7.042	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1069.07	400.74	0.00	2168.54	0.493	0.99	3.330	A
2	617.67	617.63	815.83	0.00	1132.30	0.546	1.21	7.091	A
3	500.96	500.95	899.49	0.00	1467.25	0.341	0.56	4.036	A
4	750.90	750.83	652.87	0.00	1258.48	0.597	1.47	7.119	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	874.21	328.49	0.00	2226.78	0.392	0.66	2.709	A
2	504.33	506.28	667.47	0.00	1222.72	0.412	0.72	5.109	A

3	409.04	409.76	736.74	0.00	1587.73	0.258	0.38	3.312	A
4	613.10	615.53	534.62	0.00	1332.79	0.460	0.86	5.057	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	731.72	274.60	0.00	2270.21	0.322	0.49	2.381	A
2	422.35	423.23	558.52	0.00	1289.12	0.328	0.50	4.218	A
3	342.55	342.94	616.14	0.00	1677.01	0.204	0.28	2.926	A
4	513.45	514.53	447.17	0.00	1387.73	0.370	0.59	4.145	A

Appendix 6 - PICADY OUTPUTS

PICADY		
GUI Version: 5.00 AC Analysis Program Release: 3.0 INTERIM (MAR 2006) © Copyright TRL Limited, 2006 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO		
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The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution		

Run Analysis

Parameter	Values
File Run	M:\..\PICADY\A350_Access.vpi
Date Run	03 June 2013
Time Run	15:19:26
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	A350 South	100
Arm B	Site Access	100
Arm C	A350 North	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Blandford Forum Traffic Modelling
Location	Blandford Forum, Dorset
Date	29 May 2013
Enumerator	haywardr [W-EAPBL-L-20035]
Job Number	3513028A
Status	Preliminary
Client	R Akerman
Description	Proposed development access onto A350 to the south of Blandford Forum

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

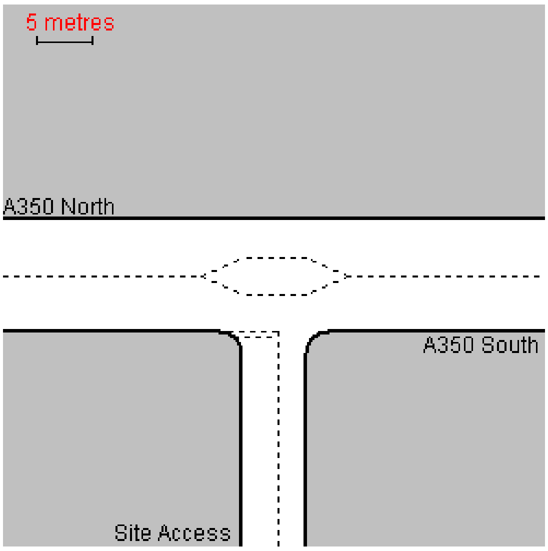
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.85
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.50
Minor Road First Lane Width (m)	3.22
Minor Road Visibility To Right (m)	50
Minor Road Visibility To Left (m)	50
Major Road Right Turn Visibility (m)	170
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	529.927	0.093	0.235	0.148	0.336
B-C	669.849	0.099	0.250	-	-
C-B	767.548	0.286	0.286	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	7.0	565.5
Arm B	20.8	0.0	21.5
Arm C	549.0	6.8	0.0

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	16.9	562.2
Arm B	8.1	0.0	8.6
Arm C	595.3	15.9	0.0

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	7.0	664.8
Arm B	20.8	0.0	21.5
Arm C	644.8	6.8	0.0

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	16.9	673.3
Arm B	8.1	0.0	8.6
Arm C	712.9	15.9	0.0

ODTAB Synthesised Flows

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh / min)	Peak Time	Peak Flow (veh / min)	Falling Time	Falling Flow (veh / min)
Arm A	08:00	7.156	08:00	10.734	08:30	7.156
Arm B	08:00	0.529	08:00	0.793	08:30	0.529
Arm C	08:00	6.947	08:00	10.421	08:30	6.947

Heavy Vehicles Percentages

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

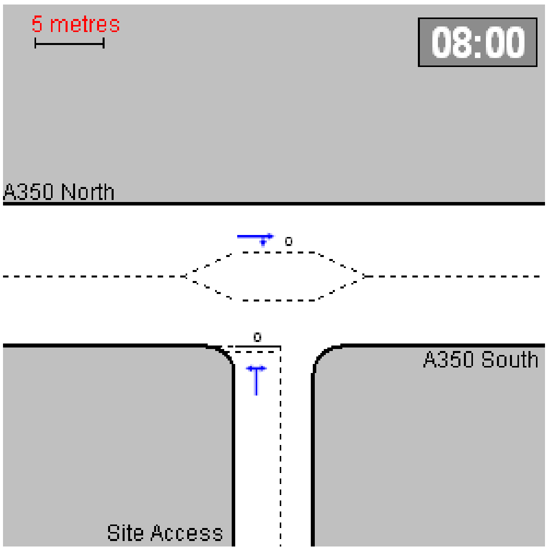
From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Default proportions of heavy vehicles are used

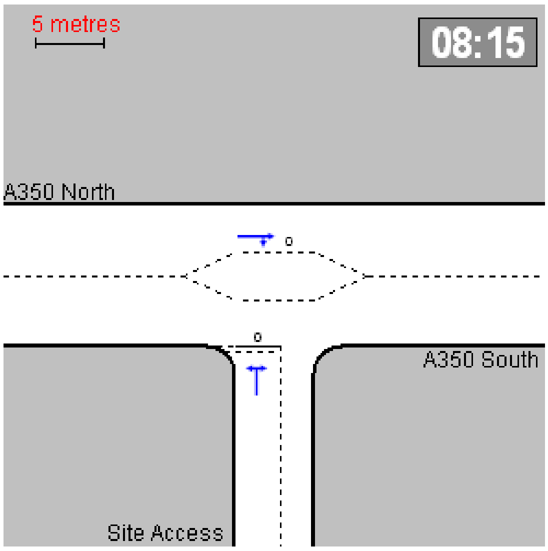
Queue Diagrams

Demand Set: 2014 AM
Modelling Period: 07:45-09:15
View Extent: 40m

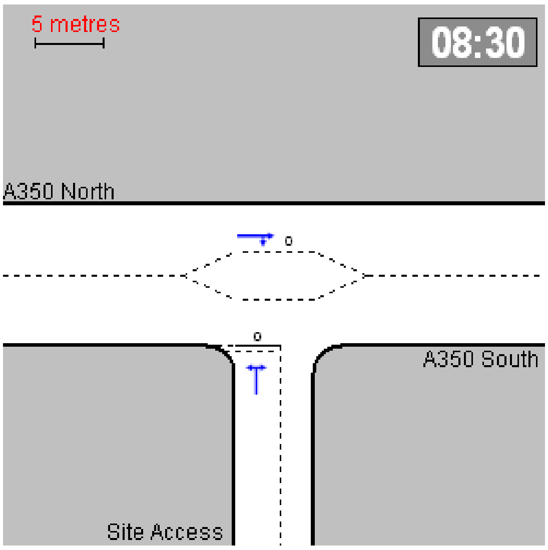
Queue Interval 1: 07:45-08:00



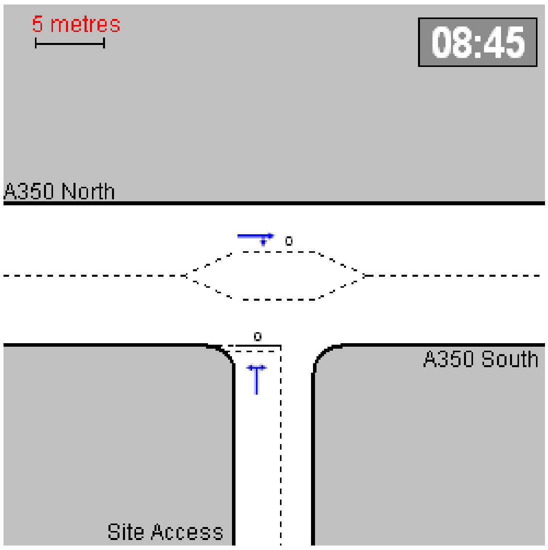
Queue Interval 2: 08:00-08:15



Queue Interval 3: 08:15-08:30

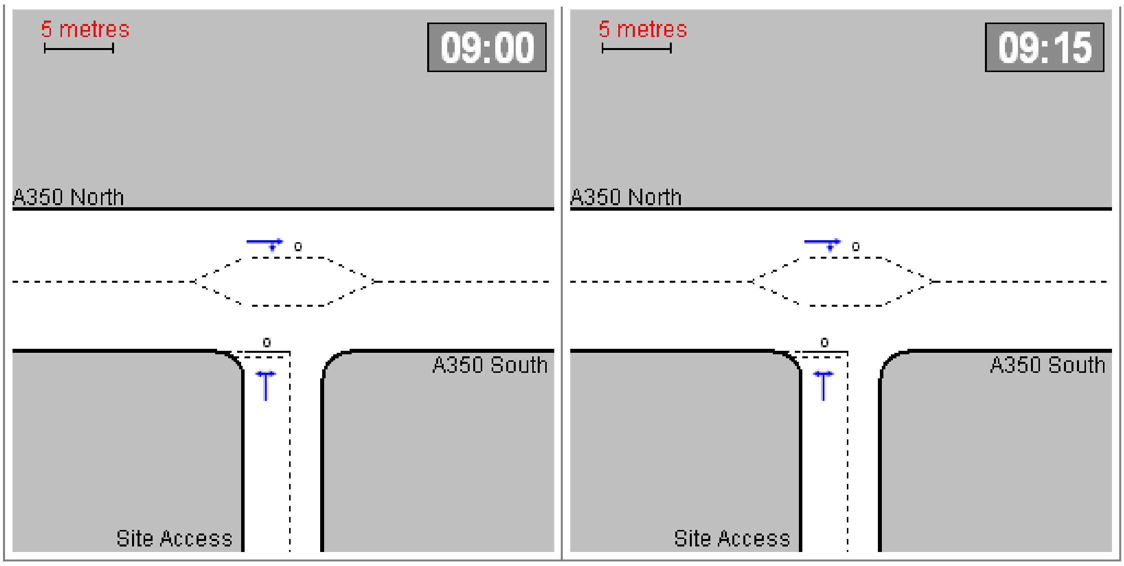


Queue Interval 4: 08:30-08:45



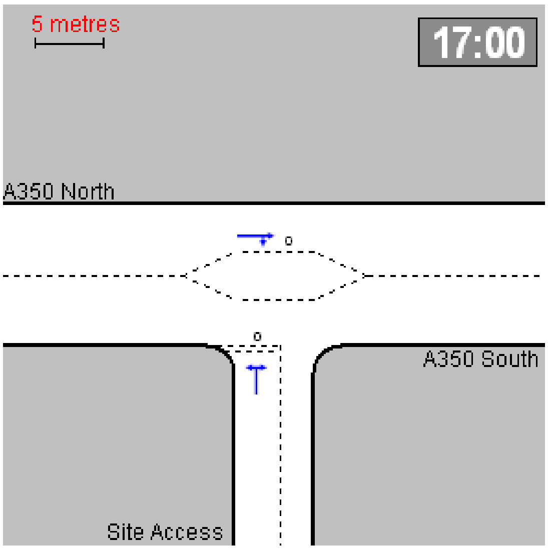
Queue Interval 5: 08:45-09:00

Queue Interval 6: 09:00-09:15

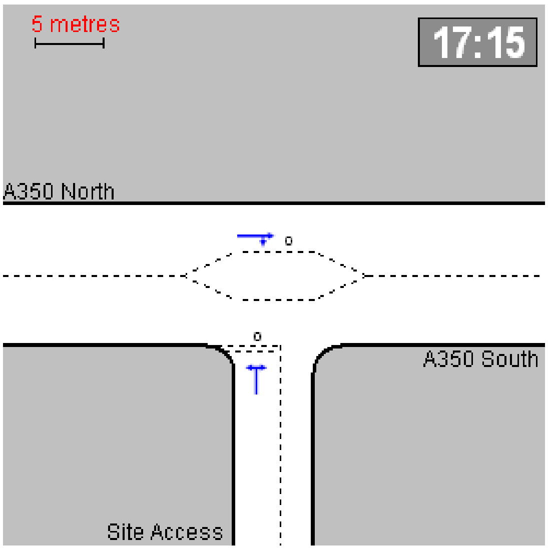

5 metres
09:00
A350 North
A350 South
Site Access
5 metres
09:15
A350 North
A350 South
Site Access

Demand Set: 2014 PM
Modelling Period: 16:45-18:15
View Extent: 40m

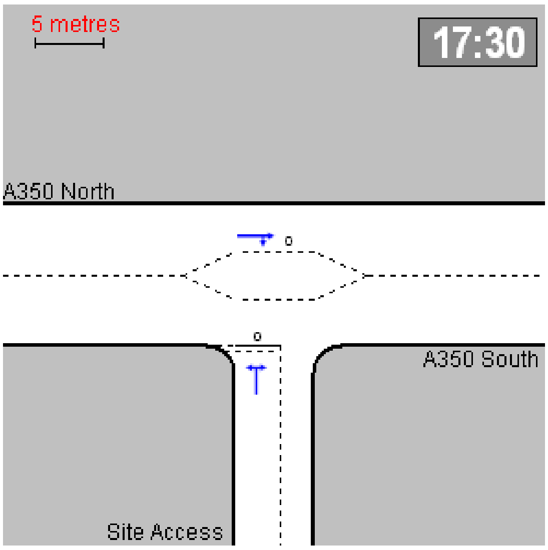
Queue Interval 1: 16:45-17:00



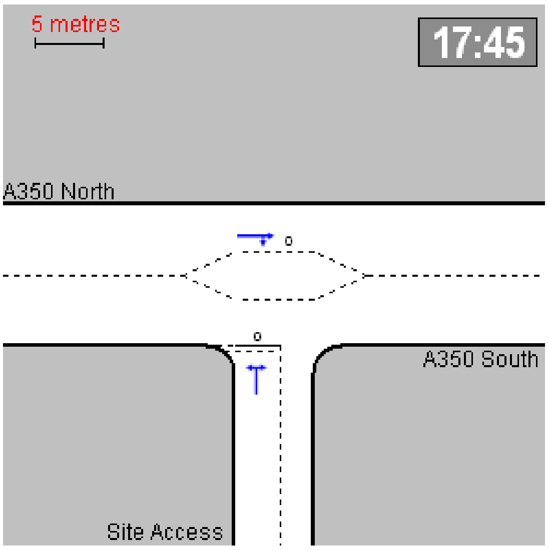
Queue Interval 2: 17:00-17:15



Queue Interval 3: 17:15-17:30

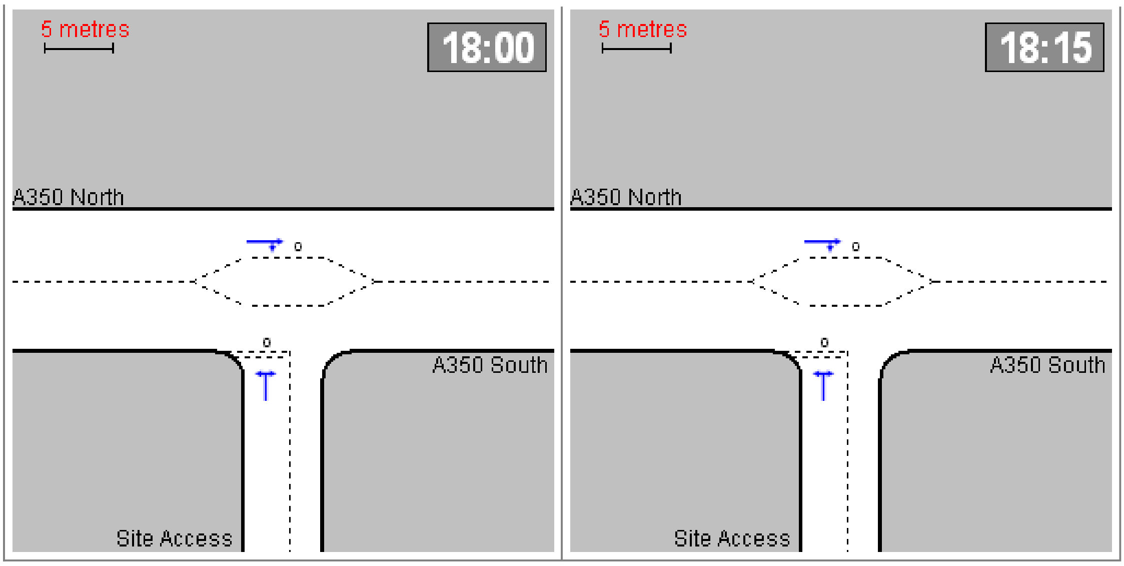


Queue Interval 4: 17:30-17:45



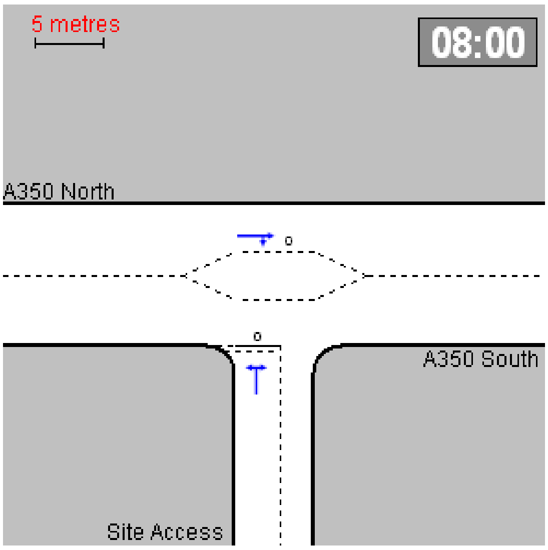
Queue Interval 5: 17:45-18:00

Queue Interval 6: 18:00-18:15

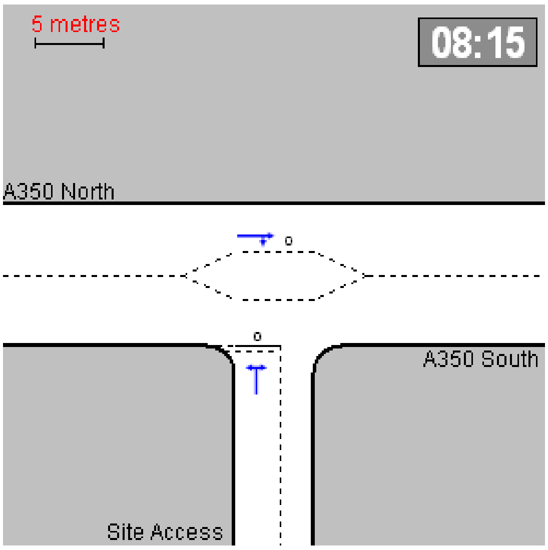

5 metres
18:00
A350 North
A350 South
Site Access
5 metres
18:15
A350 North
A350 South
Site Access

Demand Set: 2029 AM
Modelling Period: 07:45-09:15
View Extent: 40m

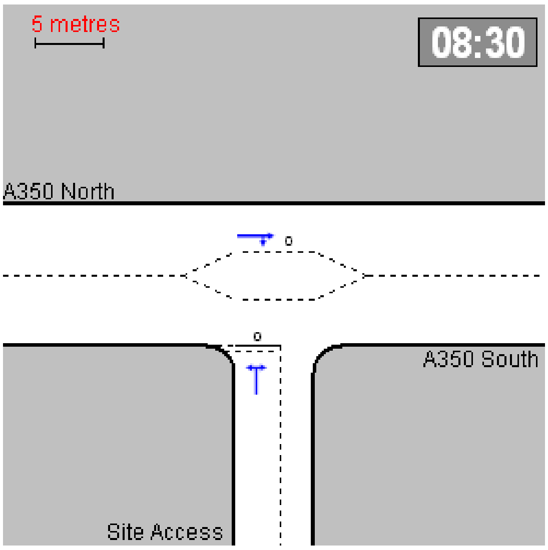
Queue Interval 1: 07:45-08:00



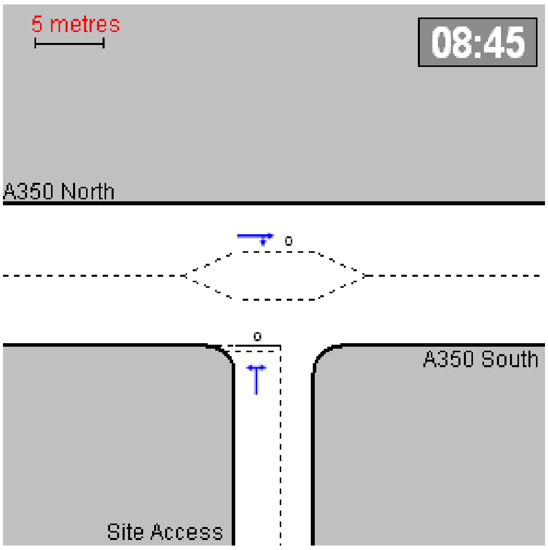
Queue Interval 2: 08:00-08:15



Queue Interval 3: 08:15-08:30

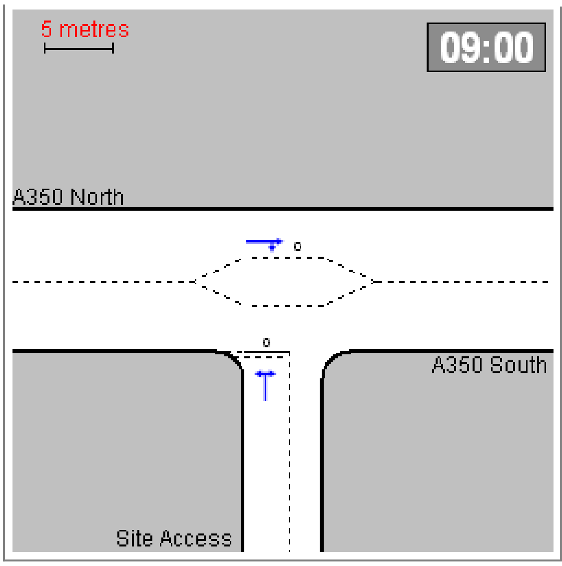


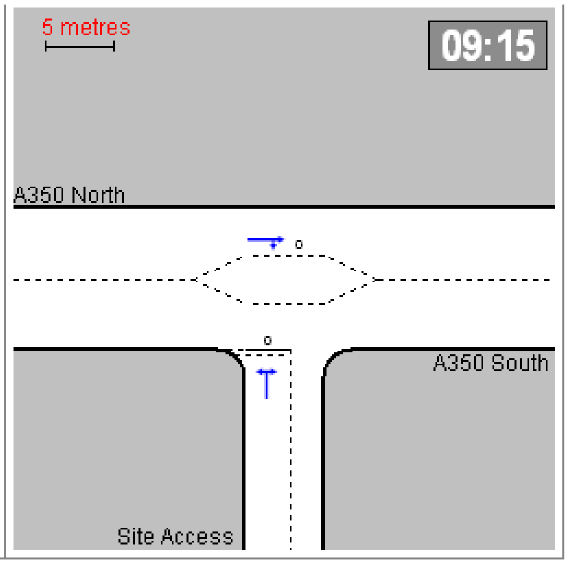
Queue Interval 4: 08:30-08:45



Queue Interval 5: 08:45-09:00

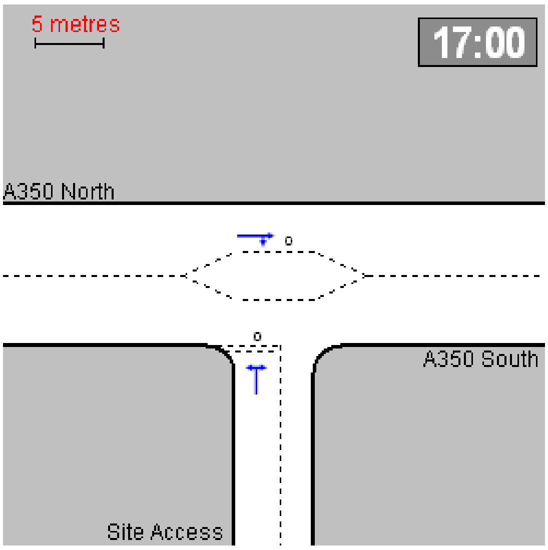
Queue Interval 6: 09:00-09:15


5 metres
09:00
A350 North
A350 South
Site Access

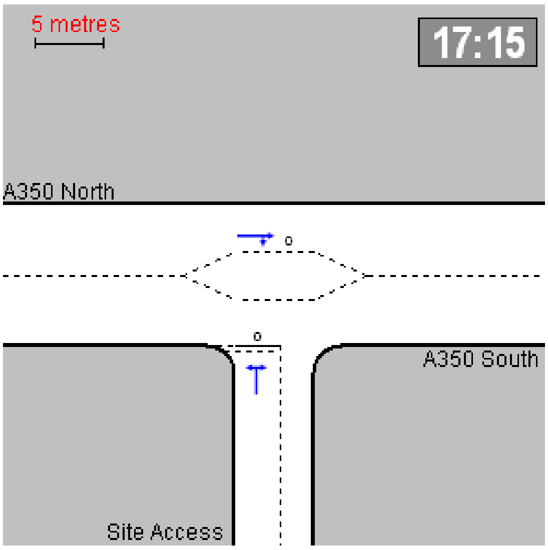

5 metres
09:15
A350 North
A350 South
Site Access

Demand Set: 2029 PM
Modelling Period: 16:45-18:15
View Extent: 40m

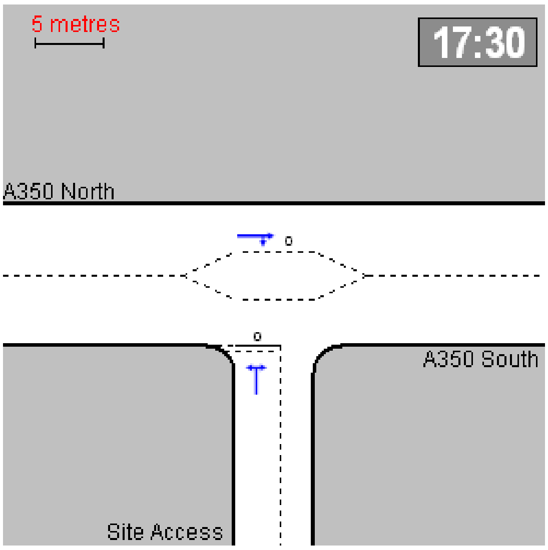
Queue Interval 1: 16:45-17:00



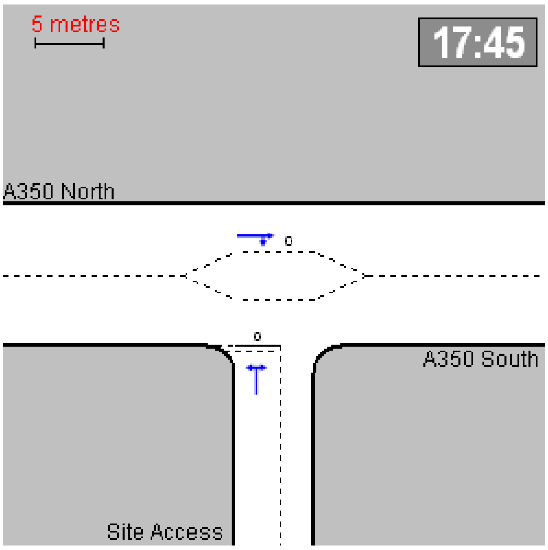
Queue Interval 2: 17:00-17:15



Queue Interval 3: 17:15-17:30

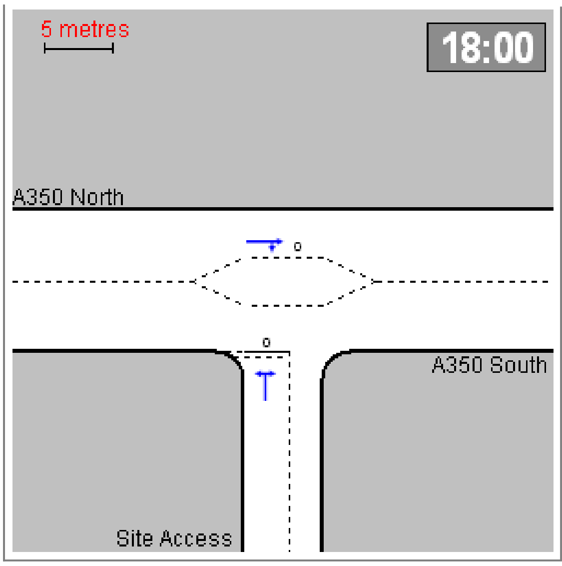


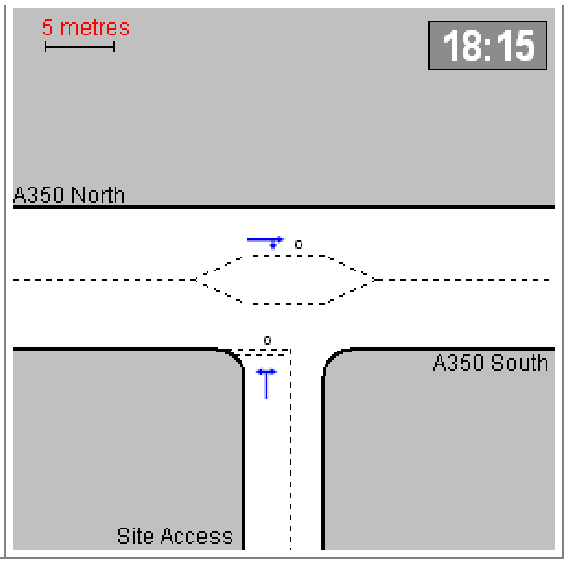
Queue Interval 4: 17:30-17:45



Queue Interval 5: 17:45-18:00

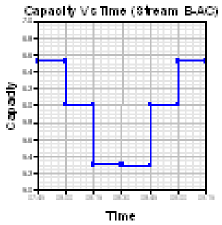
Queue Interval 6: 18:00-18:15

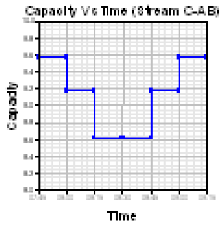

5 metres
18:00
A350 North
A350 South
Site Access


5 metres
18:15
A350 North
A350 South
Site Access

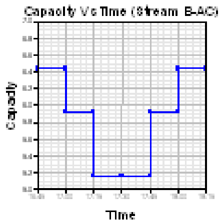
Capacity Graph

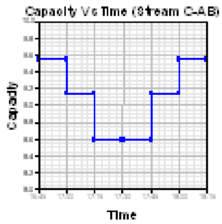
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



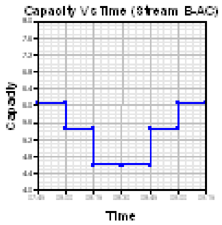


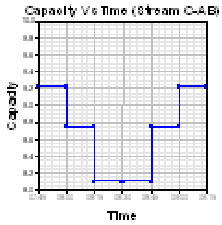
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



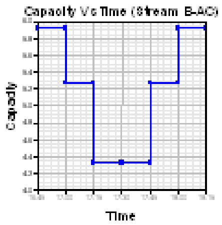


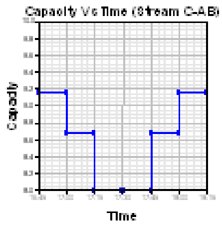
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





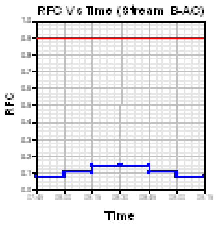
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

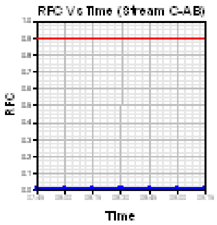




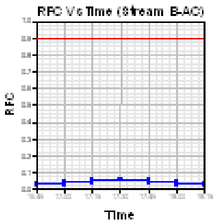
RFC Graph

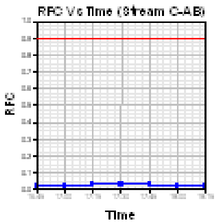
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



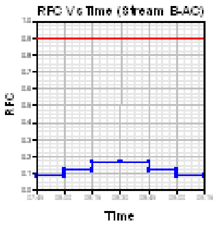


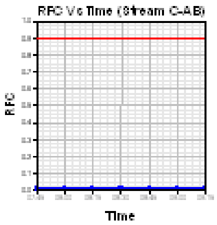
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



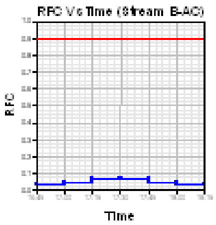


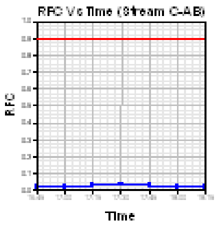
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





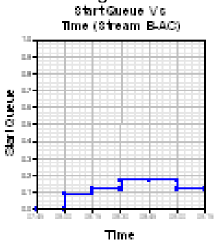
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

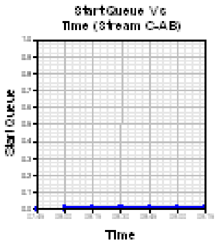




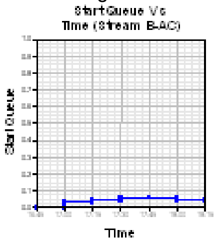
Start Queue Graph

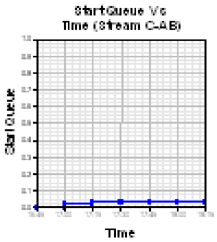
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



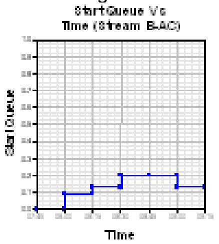


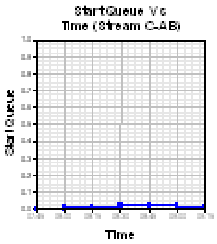
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



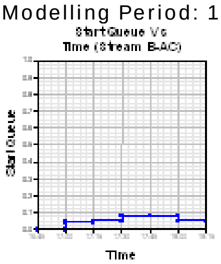


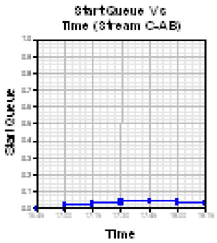
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





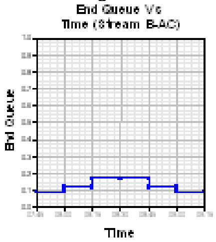
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

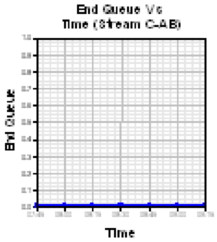




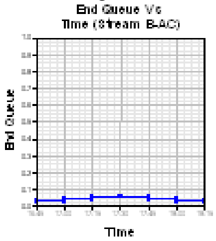
End Queue Graph

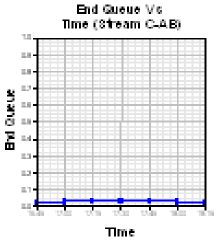
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



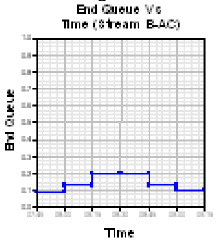


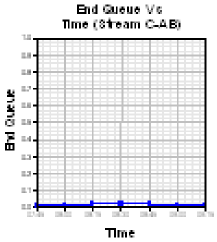
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



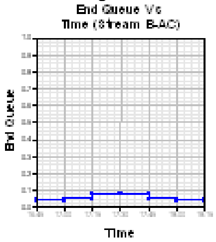


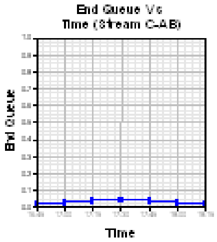
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





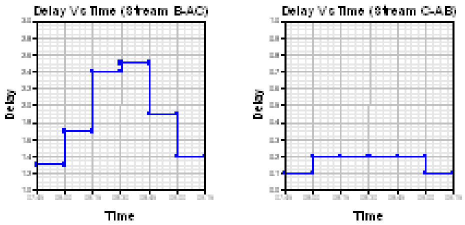
Demand Set: 2029 PM
Modelling Period: 16:45-18:15



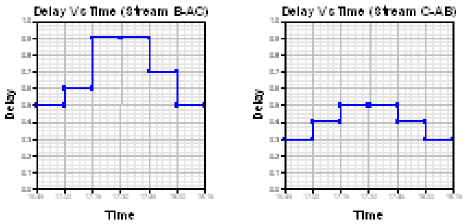


Delay Graph

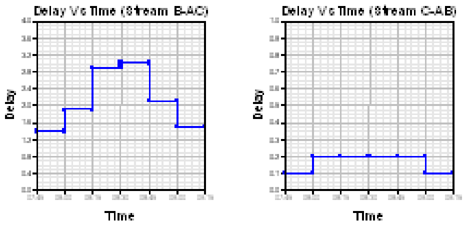
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



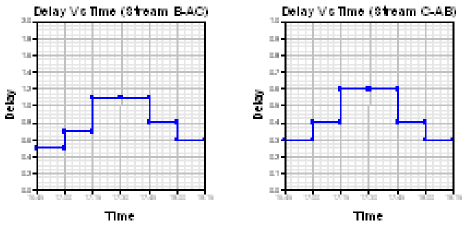
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



Demand Set: 2029 AM
Modelling Period: 07:45-09:15



Demand Set: 2029 PM
Modelling Period: 16:45-18:15



Queues & Delays

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.53	6.52	0.081	-	0.00	0.09	-	1.3	0.17
	C-AB	0.09	9.57	0.009	-	0.00	0.01	-	0.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	7.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.63	6.01	0.105	-	0.09	0.12	-	1.7	0.19
	C-AB	0.10	9.17	0.011	-	0.01	0.01	-	0.2	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	8.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.78	5.30	0.147	-	0.12	0.17	-	2.4	0.22
	C-AB	0.12	8.62	0.014	-	0.01	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	10.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.78	5.29	0.147	-	0.17	0.17	-	2.5	0.22
	C-AB	0.12	8.62	0.014	-	0.01	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	10.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.63	6.01	0.105	-	0.17	0.12	-	1.9	0.19
	C-AB	0.10	9.17	0.011	-	0.01	0.01	-	0.2	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	8.47	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.53	6.52	0.081	-	0.12	0.09	-	1.4	0.17
	C-AB	0.09	9.57	0.009	-	0.01	0.01	-	0.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	7.10	-	-	-	-	-	-	-	-

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	0.21	6.44	0.033	-	0.00	0.03	-	0.5	0.16
	C-AB	0.20	9.55	0.021	-	0.00	0.02	-	0.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	7.05	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	0.25	5.92	0.042	-	0.03	0.04	-	0.6	0.18
	C-AB	0.24	9.14	0.026	-	0.02	0.03	-	0.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	8.42	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	0.31	5.16	0.059	-	0.04	0.06	-	0.9	0.21
	C-AB	0.29	8.59	0.034	-	0.03	0.03	-	0.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	10.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	0.31	5.16	0.059	-	0.06	0.06	-	0.9	0.21
	C-AB	0.29	8.59	0.034	-	0.03	0.03	-	0.5	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	10.32	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	0.25	5.92	0.042	-	0.06	0.04	-	0.7	0.18
	C-AB	0.24	9.14	0.026	-	0.03	0.03	-	0.4	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	8.42	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	0.21	6.44	0.033	-	0.04	0.03	-	0.5	0.16
	C-AB	0.20	9.55	0.021	-	0.03	0.02	-	0.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	7.05	-	-	-	-	-	-	-	-

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.53	6.07	0.087	-	0.00	0.09	-	1.4	0.18
	C-AB	0.09	9.22	0.009	-	0.00	0.01	-	0.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	8.34	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.63	5.46	0.116	-	0.09	0.13	-	1.9	0.21
	C-AB	0.10	8.75	0.012	-	0.01	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	9.96	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.78	4.59	0.169	-	0.13	0.20	-	2.9	0.26
	C-AB	0.12	8.10	0.015	-	0.01	0.02	-	0.2	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	12.20	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.78	4.59	0.169	-	0.20	0.20	-	3.0	0.26
	C-AB	0.12	8.10	0.015	-	0.02	0.02	-	0.2	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	12.20	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.63	5.46	0.116	-	0.20	0.13	-	2.1	0.21
	C-AB	0.10	8.75	0.012	-	0.02	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	9.96	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.53	6.07	0.087	-	0.13	0.10	-	1.5	0.18
	C-AB	0.09	9.22	0.009	-	0.01	0.01	-	0.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	8.34	-	-	-	-	-	-	-	-

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	0.21	5.92	0.035	-	0.00	0.04	-	0.5	0.17
	C-AB	0.20	9.15	0.022	-	0.00	0.02	-	0.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	8.45	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	0.25	5.27	0.047	-	0.04	0.05	-	0.7	0.20
	C-AB	0.24	8.67	0.027	-	0.02	0.03	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	10.09	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	0.31	4.32	0.071	-	0.05	0.08	-	1.1	0.25
	C-AB	0.29	8.00	0.036	-	0.03	0.04	-	0.6	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	12.36	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	0.31	4.32	0.071	-	0.08	0.08	-	1.1	0.25
	C-AB	0.29	8.00	0.036	-	0.04	0.04	-	0.6	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	12.36	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	0.25	5.27	0.047	-	0.08	0.05	-	0.8	0.20
	C-AB	0.24	8.67	0.027	-	0.04	0.03	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	10.09	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	0.21	5.92	0.035	-	0.05	0.04	-	0.6	0.18
	C-AB	0.20	9.15	0.022	-	0.03	0.02	-	0.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	8.45	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	58.2	38.8	11.2	0.2	11.2	0.2
C-AB	9.4	6.2	1.0	0.1	1.0	0.1
C-A	-	-	-	-	-	-
A-B	9.6	6.4	-	-	-	-
A-C	778.4	518.9	-	-	-	-
All	1611.2	1074.2	12.2	0.0	12.2	0.0

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	23.0	15.3	4.2	0.2	4.2	0.2
C-AB	21.9	14.6	2.5	0.1	2.5	0.1
C-A	-	-	-	-	-	-
A-B	23.3	15.5	-	-	-	-
A-C	773.8	515.9	-	-	-	-
All	1661.3	1107.6	6.7	0.0	6.7	0.0

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	58.2	38.8	12.7	0.2	12.7	0.2
C-AB	9.4	6.2	1.1	0.1	1.1	0.1
C-A	-	-	-	-	-	-
A-B	9.6	6.4	-	-	-	-
A-C	915.0	610.0	-	-	-	-
All	1879.8	1253.2	13.8	0.0	13.8	0.0

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	23.0	15.3	4.8	0.2	4.8	0.2
C-AB	21.9	14.6	2.6	0.1	2.6	0.1
C-A	-	-	-	-	-	-
A-B	23.3	15.5	-	-	-	-
A-C	926.7	617.8	-	-	-	-
All	1976.1	1317.4	7.5	0.0	7.5	0.0

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

PICADY		
GUI Version: 5.00 AC Analysis Program Release: 3.0 INTERIM (MAR 2006) © Copyright TRL Limited, 2006 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO		
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Run Analysis

Parameter	Values
File Run	M:\..\PICADY\A354_Access.vpi
Date Run	03 June 2013
Time Run	15:23:22
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	A354 East	100
Arm B	Site Access	100
Arm C	A354 West	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Blandford Forum Traffic Modelling
Location	Blandford Forum, Dorset
Date	29 May 2013
Enumerator	haywardr [W-EAPBL-L-20035]
Job Number	3513028A
Status	Preliminary
Client	R Akerman
Description	Proposed development access onto A354 to the South of Blandford Forum

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

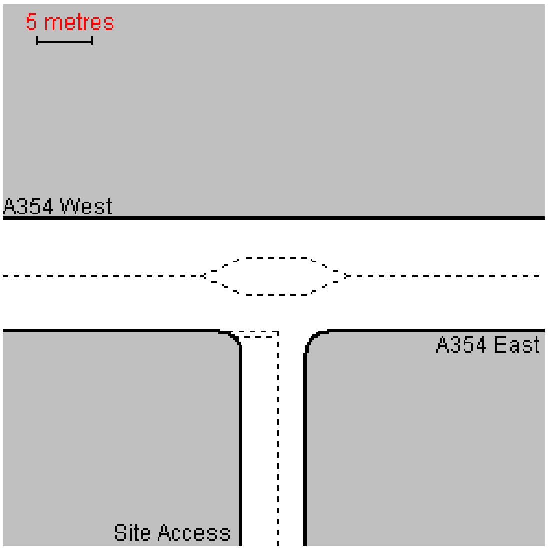
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.85
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.50
Minor Road First Lane Width (m)	3.20
Minor Road Visibility To Right (m)	50
Minor Road Visibility To Left (m)	50
Major Road Right Turn Visibility (m)	75
Major Road Right Turn Blocks Traffic	Yes

Slope and Intercept Values

Stream	Intercept for Stream B-A	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	528.889	0.093	0.234	0.148	0.335
B-C	668.537	0.099	0.249	-	-
C-B	704.748	0.263	0.263	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	07:45-09:15	90	15
Second Modelling Period	16:45-18:15	90	15

ODTAB Turning Counts

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	7.0	509.5
Arm B	21.1	0.0	21.2
Arm C	505.5	6.9	0.0

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	16.9	486.0
Arm B	8.1	0.0	8.6
Arm C	456.0	15.9	0.0

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	7.0	598.9
Arm B	21.1	0.0	21.2
Arm C	594.2	6.9	0.0

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	0.0	16.9	582.1
Arm B	8.1	0.0	8.6
Arm C	546.1	15.9	0.0

ODTAB Synthesised Flows

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

Arm	Rising Time	Rising Flow (veh / min)	Peak Time	Peak Flow (veh / min)	Falling Time	Falling Flow (veh / min)
Arm A	08:00	6.456	08:00	9.684	08:30	6.456
Arm B	08:00	0.529	08:00	0.793	08:30	0.529
Arm C	08:00	6.405	08:00	9.608	08:30	6.405

Heavy Vehicles Percentages

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

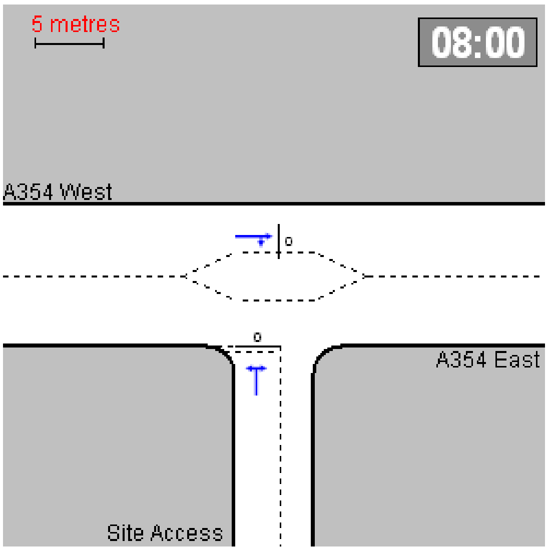
From / To	Arm A	Arm B	Arm C
Arm A	-	10.0	10.0
Arm B	10.0	-	10.0
Arm C	10.0	10.0	-

Default proportions of heavy vehicles are used

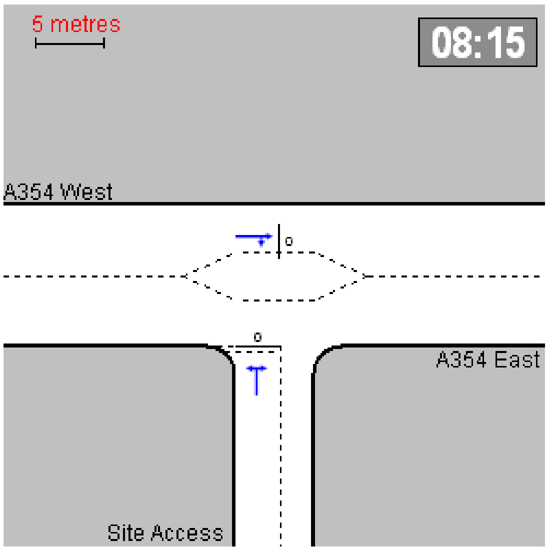
Queue Diagrams

Demand Set: 2014 AM
Modelling Period: 07:45-09:15
View Extent: 40m

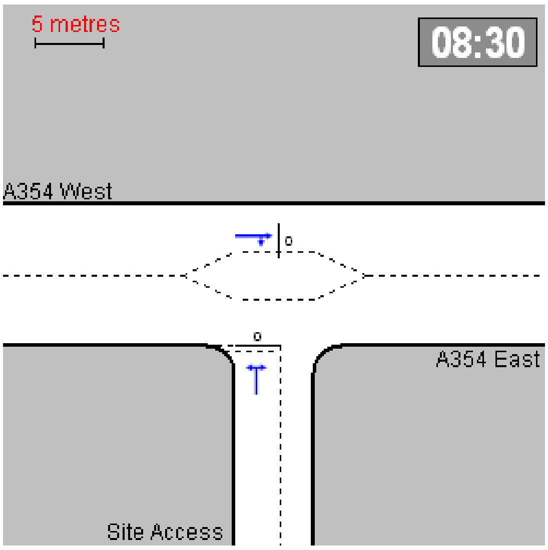
Queue Interval 1: 07:45-08:00



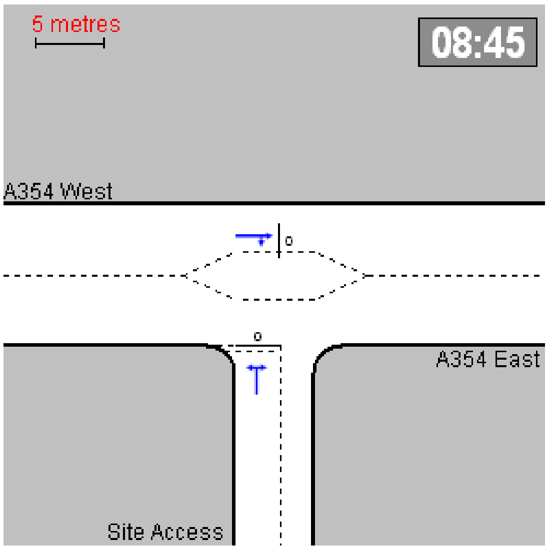
Queue Interval 2: 08:00-08:15



Queue Interval 3: 08:15-08:30

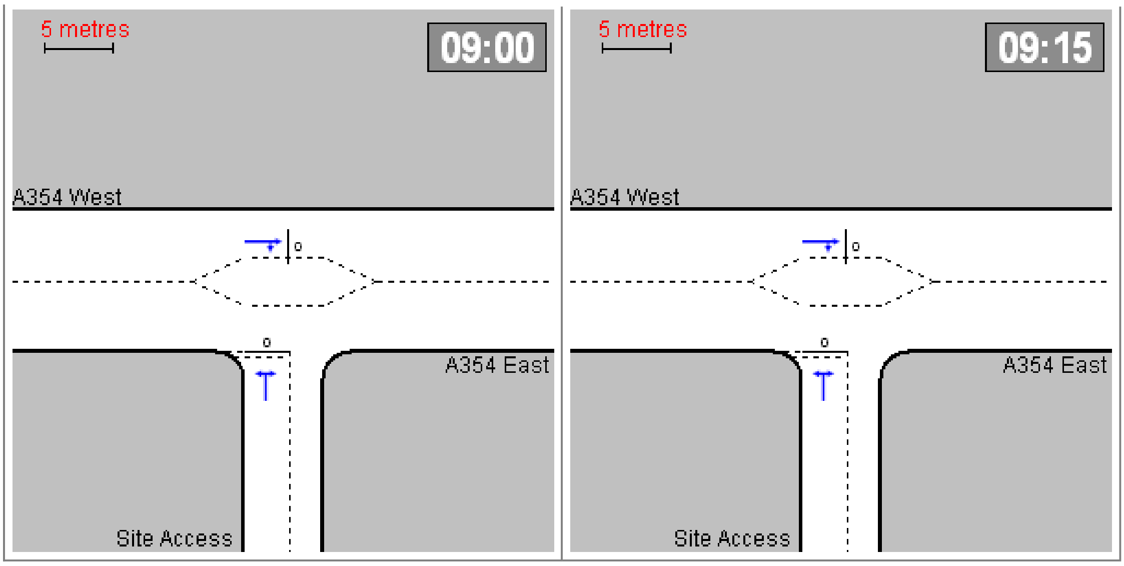


Queue Interval 4: 08:30-08:45



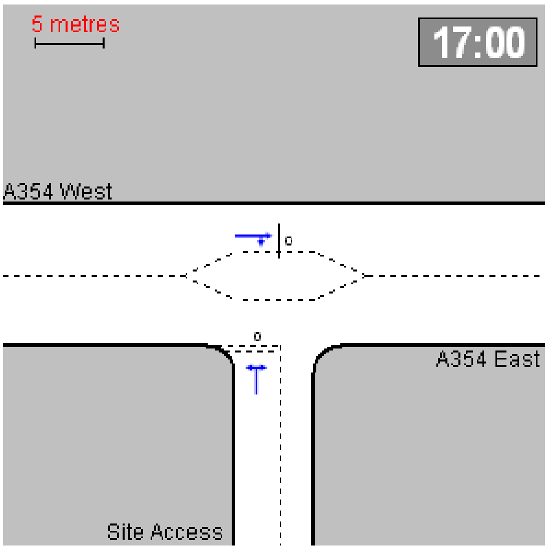
Queue Interval 5: 08:45-09:00

Queue Interval 6: 09:00-09:15

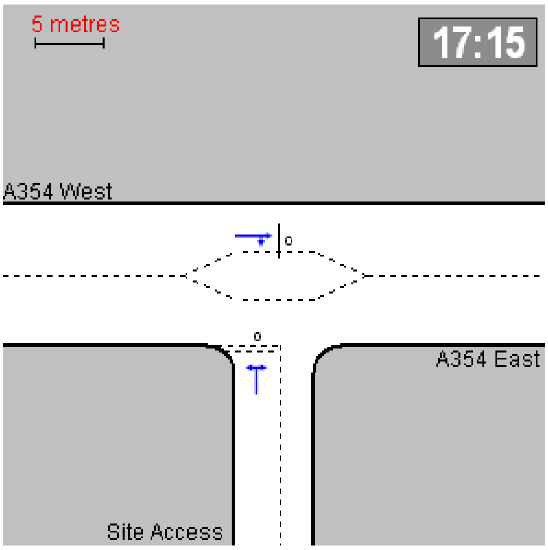

5 metres
09:00
A354 West
A354 East
Site Access
5 metres
09:15
A354 West
A354 East
Site Access

Demand Set: 2014 PM
Modelling Period: 16:45-18:15
View Extent: 40m

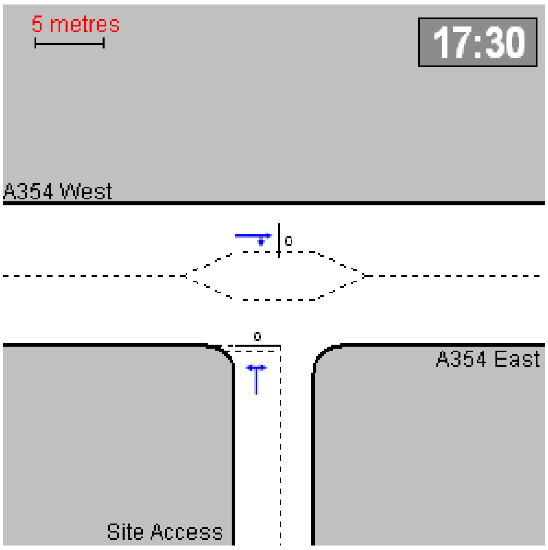
Queue Interval 1: 16:45-17:00



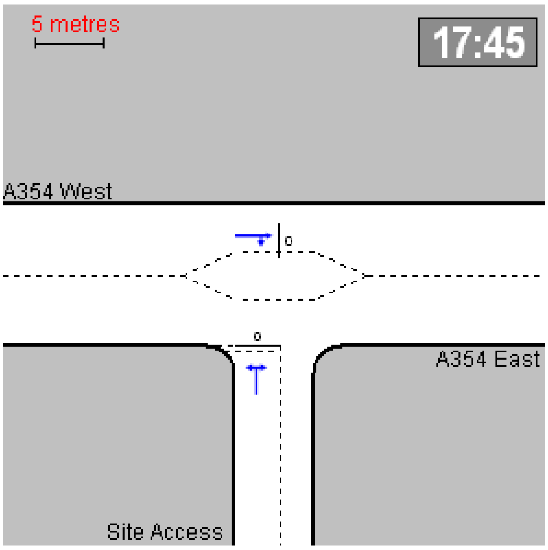
Queue Interval 2: 17:00-17:15



Queue Interval 3: 17:15-17:30

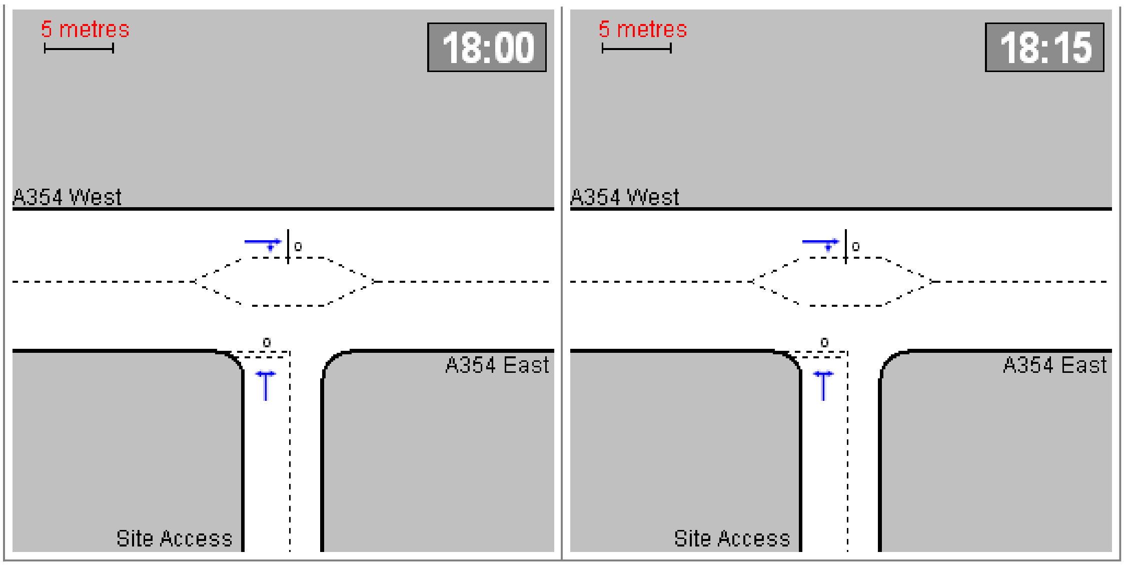


Queue Interval 4: 17:30-17:45



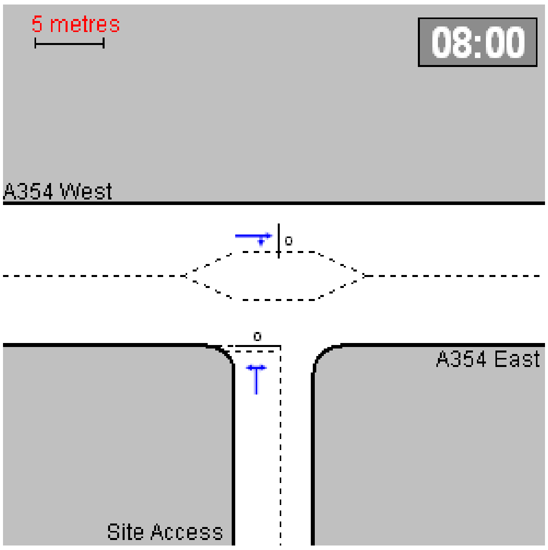
Queue Interval 5: 17:45-18:00

Queue Interval 6: 18:00-18:15

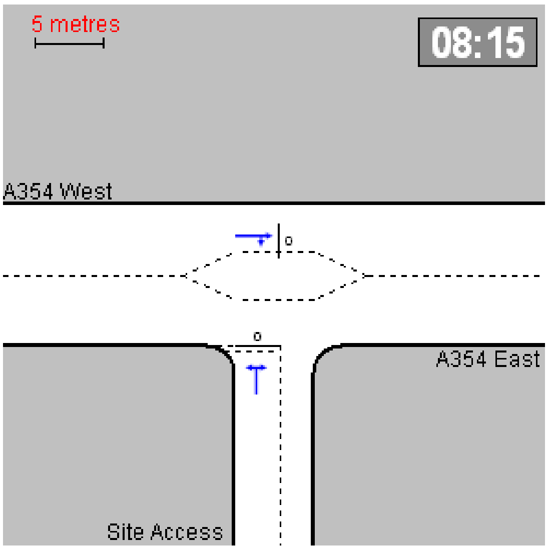

5 metres
18:00
A354 West
A354 East
Site Access
5 metres
18:15
A354 West
A354 East
Site Access

Demand Set: 2029 AM
Modelling Period: 07:45-09:15
View Extent: 40m

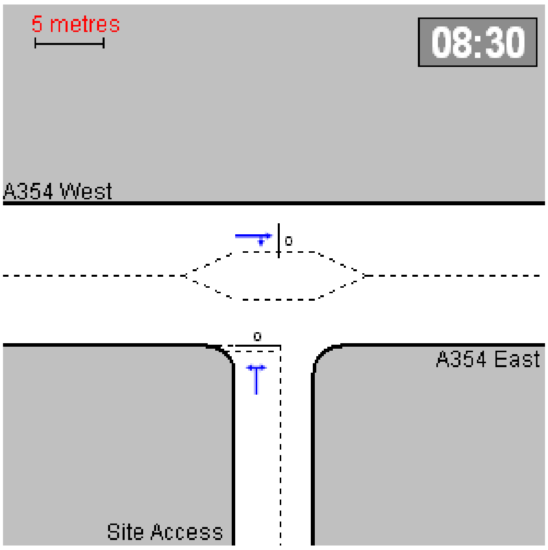
Queue Interval 1: 07:45-08:00



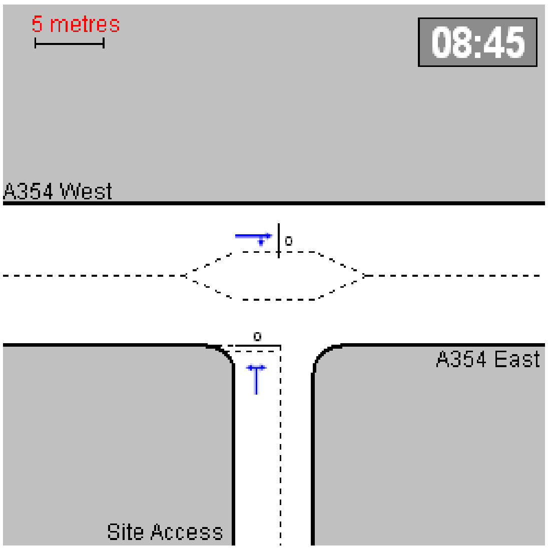
Queue Interval 2: 08:00-08:15



Queue Interval 3: 08:15-08:30

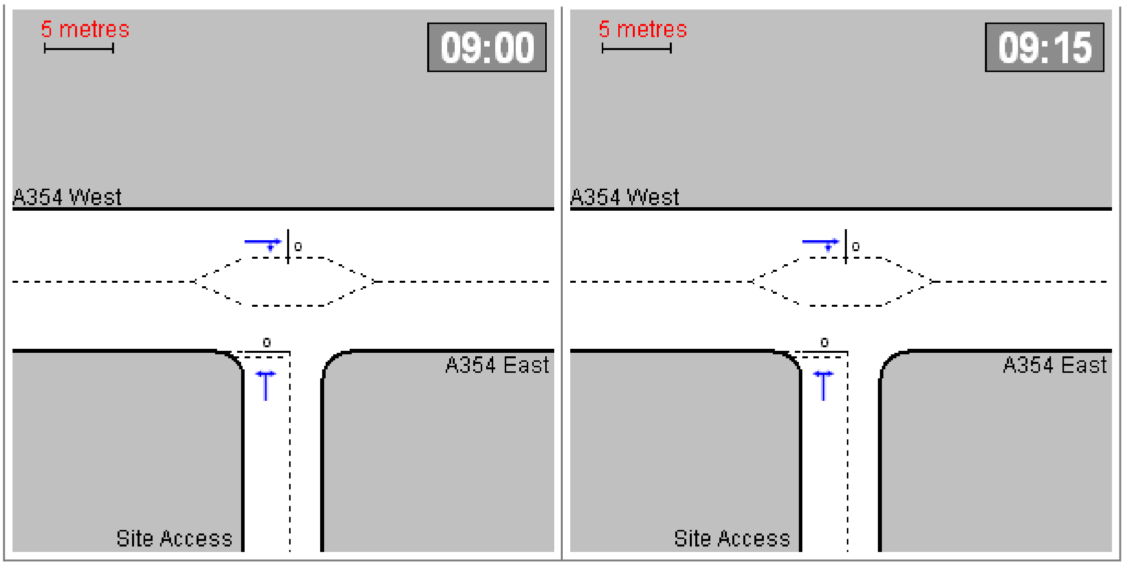


Queue Interval 4: 08:30-08:45



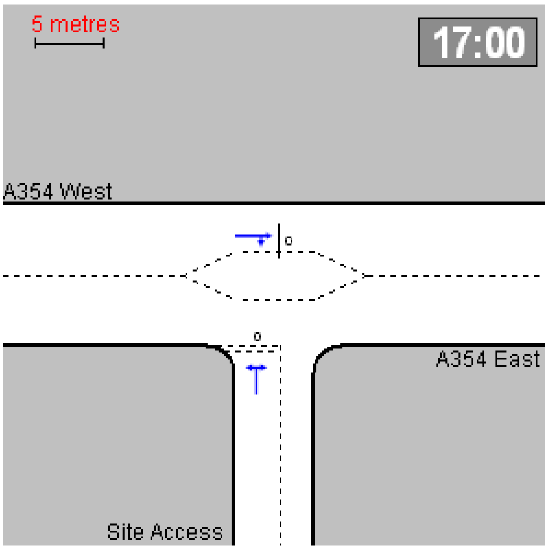
Queue Interval 5: 08:45-09:00

Queue Interval 6: 09:00-09:15

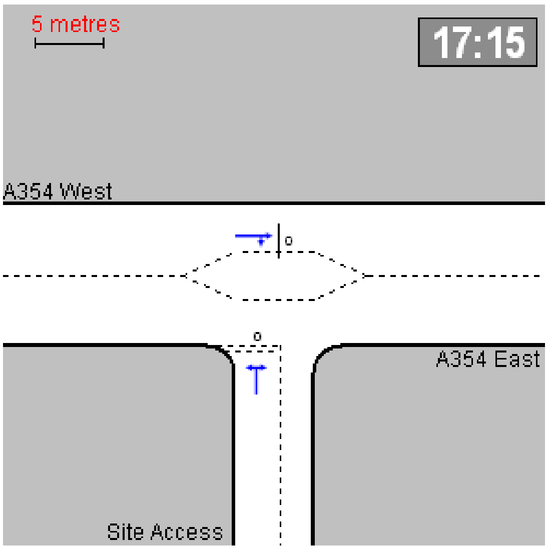

5 metres
09:00
A354 West
A354 East
Site Access
5 metres
09:15
A354 West
A354 East
Site Access

Demand Set: 2029 PM
Modelling Period: 16:45-18:15
View Extent: 40m

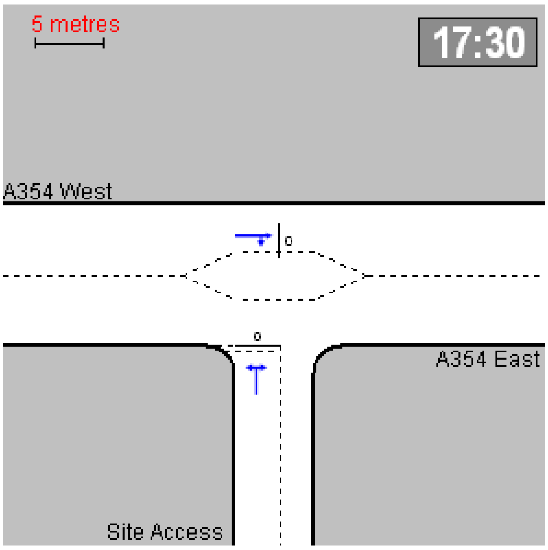
Queue Interval 1: 16:45-17:00



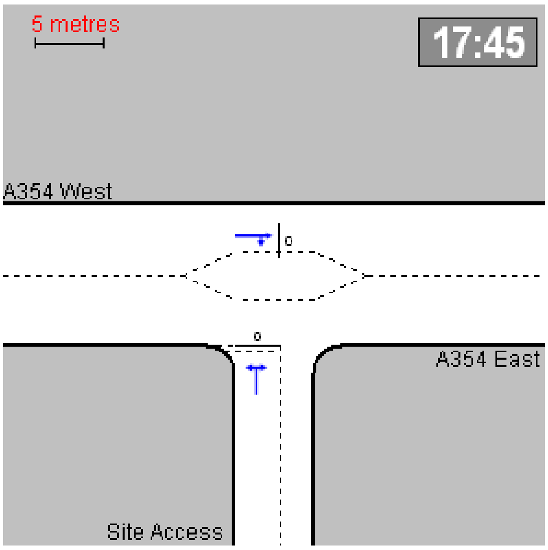
Queue Interval 2: 17:00-17:15



Queue Interval 3: 17:15-17:30

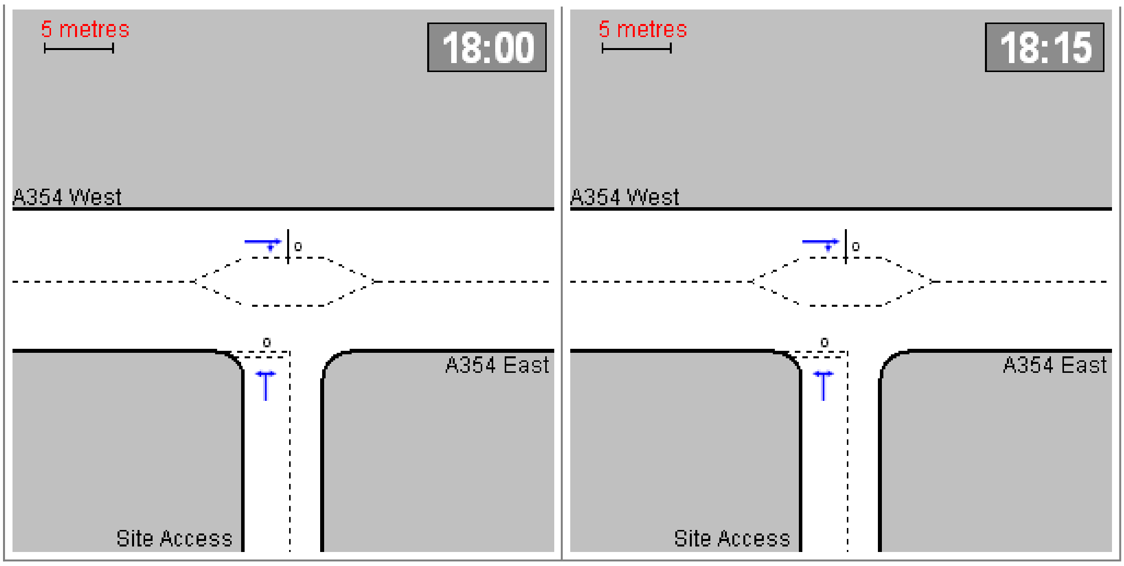


Queue Interval 4: 17:30-17:45



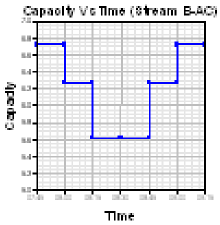
Queue Interval 5: 17:45-18:00

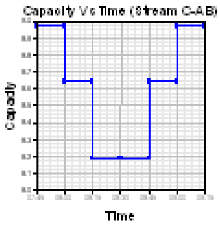
Queue Interval 6: 18:00-18:15


5 metres
18:00
A354 West
A354 East
Site Access
5 metres
18:15
A354 West
A354 East
Site Access

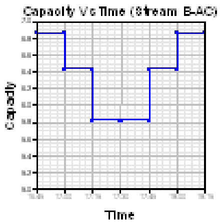
Capacity Graph

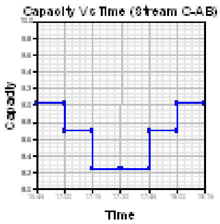
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



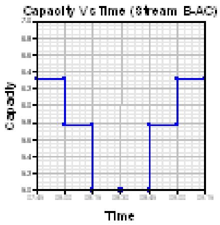


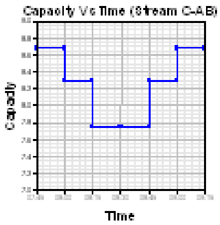
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



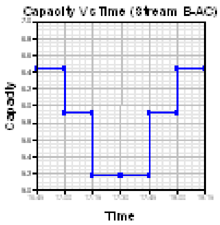


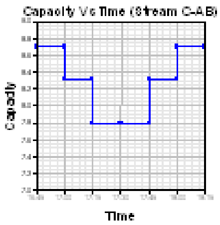
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





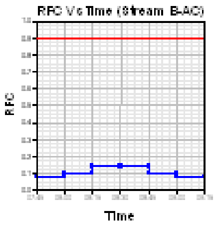
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

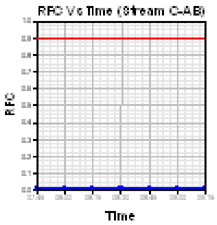




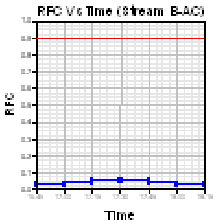
RFC Graph

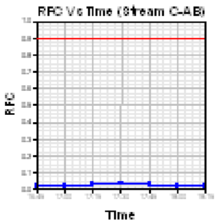
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



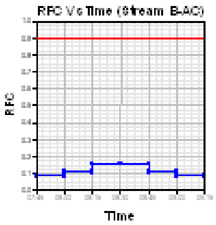


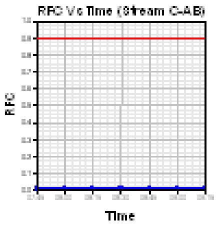
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



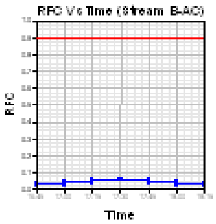


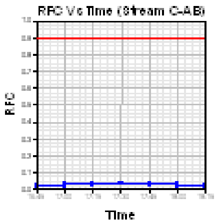
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





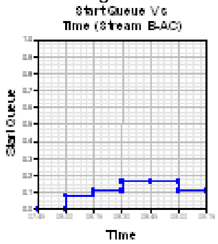
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

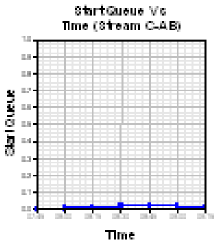




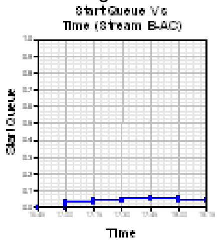
Start Queue Graph

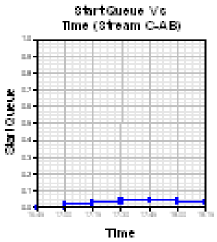
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



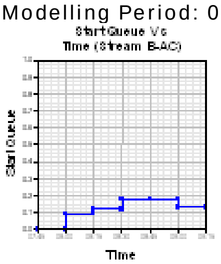


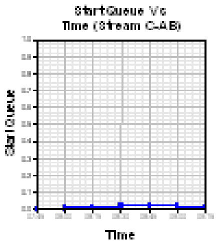
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



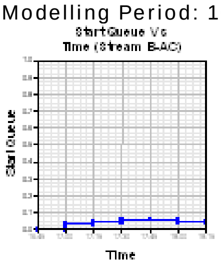


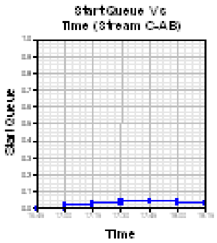
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





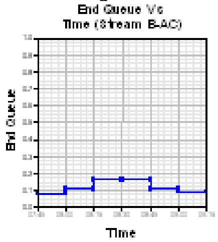
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

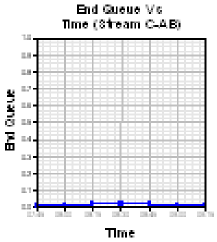




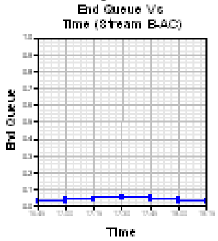
End Queue Graph

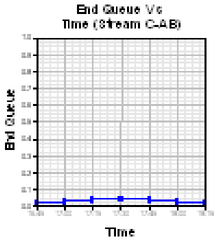
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



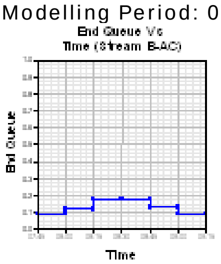


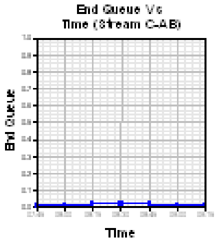
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



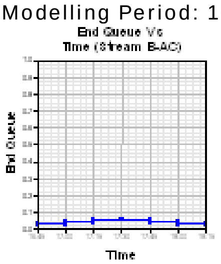


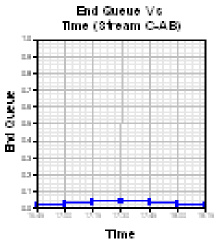
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





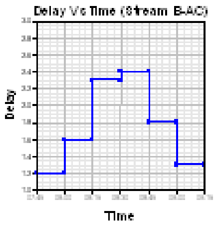
Demand Set: 2029 PM
Modelling Period: 16:45-18:15

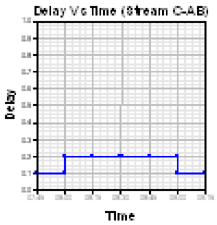




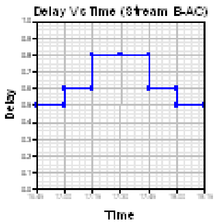
Delay Graph

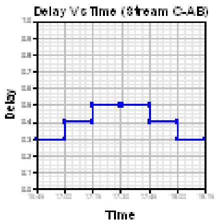
Demand Set: 2014 AM
Modelling Period: 07:45-09:15



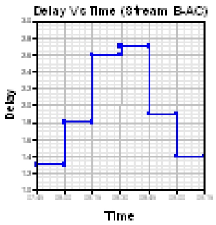


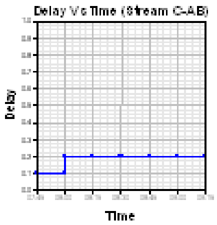
Demand Set: 2014 PM
Modelling Period: 16:45-18:15



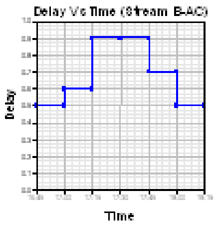


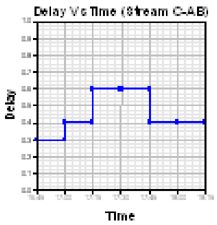
Demand Set: 2029 AM
Modelling Period: 07:45-09:15





Demand Set: 2029 PM
Modelling Period: 16:45-18:15





Queues & Delays

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.53	6.72	0.079	-	0.00	0.08	-	1.2	0.16
	C-AB	0.09	8.97	0.010	-	0.00	0.01	-	0.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	6.39	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.63	6.27	0.101	-	0.08	0.11	-	1.6	0.18
	C-AB	0.10	8.64	0.012	-	0.01	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	7.63	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.78	5.62	0.138	-	0.11	0.16	-	2.3	0.21
	C-AB	0.13	8.19	0.015	-	0.01	0.02	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	9.35	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.78	5.62	0.138	-	0.16	0.16	-	2.4	0.21
	C-AB	0.13	8.19	0.015	-	0.02	0.02	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	9.35	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.63	6.27	0.101	-	0.16	0.11	-	1.8	0.18
	C-AB	0.10	8.64	0.012	-	0.02	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	7.63	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.53	6.72	0.079	-	0.11	0.09	-	1.3	0.16
	C-AB	0.09	8.97	0.010	-	0.01	0.01	-	0.1	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	6.39	-	-	-	-	-	-	-	-

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	0.21	6.86	0.031	-	0.00	0.03	-	0.5	0.15
	C-AB	0.20	9.02	0.022	-	0.00	0.02	-	0.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	6.10	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	0.25	6.43	0.039	-	0.03	0.04	-	0.6	0.16
	C-AB	0.24	8.70	0.027	-	0.02	0.03	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	7.28	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	0.31	5.82	0.053	-	0.04	0.05	-	0.8	0.18
	C-AB	0.29	8.25	0.035	-	0.03	0.04	-	0.5	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	8.92	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	0.31	5.82	0.053	-	0.05	0.06	-	0.8	0.18
	C-AB	0.29	8.25	0.035	-	0.04	0.04	-	0.5	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	8.92	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	0.25	6.43	0.039	-	0.06	0.04	-	0.6	0.16
	C-AB	0.24	8.70	0.027	-	0.04	0.03	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	7.28	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	0.21	6.86	0.031	-	0.04	0.03	-	0.5	0.15
	C-AB	0.20	9.02	0.022	-	0.03	0.02	-	0.3	0.11
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	6.10	-	-	-	-	-	-	-	-

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
07:45-08:00	B-AC	0.53	6.32	0.084	-	0.00	0.09	-	1.3	0.17
	C-AB	0.09	8.68	0.010	-	0.00	0.01	-	0.1	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	7.51	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	0.63	5.77	0.110	-	0.09	0.12	-	1.8	0.19
	C-AB	0.10	8.29	0.012	-	0.01	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	8.97	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	0.78	5.00	0.155	-	0.12	0.18	-	2.6	0.24
	C-AB	0.13	7.75	0.016	-	0.01	0.02	-	0.2	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	10.99	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	0.78	5.00	0.155	-	0.18	0.18	-	2.7	0.24
	C-AB	0.13	7.75	0.016	-	0.02	0.02	-	0.2	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.13	-	-	-	-	-	-	-	-
	A-C	10.99	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	0.63	5.77	0.110	-	0.18	0.13	-	1.9	0.20
	C-AB	0.10	8.29	0.012	-	0.02	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.10	-	-	-	-	-	-	-	-
	A-C	8.97	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
09:00-09:15	B-AC	0.53	6.32	0.084	-	0.13	0.09	-	1.4	0.17
	C-AB	0.09	8.68	0.010	-	0.01	0.01	-	0.2	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.09	-	-	-	-	-	-	-	-
	A-C	7.51	-	-	-	-	-	-	-	-

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
16:45-17:00	B-AC	0.21	6.44	0.033	-	0.00	0.03	-	0.5	0.16
	C-AB	0.20	8.70	0.023	-	0.00	0.02	-	0.3	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	7.30	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	0.25	5.91	0.042	-	0.03	0.04	-	0.6	0.18
	C-AB	0.24	8.32	0.029	-	0.02	0.03	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	8.72	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	0.31	5.17	0.059	-	0.04	0.06	-	0.9	0.21
	C-AB	0.29	7.79	0.037	-	0.03	0.04	-	0.6	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	10.68	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	0.31	5.17	0.059	-	0.06	0.06	-	0.9	0.21
	C-AB	0.29	7.79	0.037	-	0.04	0.04	-	0.6	0.13
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.31	-	-	-	-	-	-	-	-
	A-C	10.68	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	0.25	5.91	0.042	-	0.06	0.04	-	0.7	0.18
	C-AB	0.24	8.32	0.029	-	0.04	0.03	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.25	-	-	-	-	-	-	-	-
	A-C	8.72	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/segment)	Delay (veh.min/segment)	Mean Arriving Vehicle Delay (min)
18:00-18:15	B-AC	0.21	6.44	0.033	-	0.04	0.03	-	0.5	0.16
	C-AB	0.20	8.70	0.023	-	0.03	0.02	-	0.4	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.21	-	-	-	-	-	-	-	-
	A-C	7.30	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2014 AM
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	58.2	38.8	10.6	0.2	10.6	0.2
C-AB	9.5	6.3	1.1	0.1	1.1	0.1
C-A	-	-	-	-	-	-
A-B	9.6	6.4	-	-	-	-
A-C	701.3	467.5	-	-	-	-
All	1474.4	983.0	11.7	0.0	11.7	0.0

Demand Set: 2014 PM
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	23.0	15.3	3.8	0.2	3.8	0.2
C-AB	21.9	14.6	2.6	0.1	2.6	0.1
C-A	-	-	-	-	-	-
A-B	23.3	15.5	-	-	-	-
A-C	668.9	446.0	-	-	-	-
All	1364.7	909.8	6.4	0.0	6.4	0.0

Demand Set: 2029 AM
Modelling Period: 07:45-09:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	58.2	38.8	11.8	0.2	11.8	0.2
C-AB	9.5	6.3	1.2	0.1	1.2	0.1
C-A	-	-	-	-	-	-
A-B	9.6	6.4	-	-	-	-
A-C	824.3	549.6	-	-	-	-
All	1719.6	1146.4	13.0	0.0	13.0	0.0

Demand Set: 2029 PM
Modelling Period: 16:45-18:15

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	23.0	15.3	4.2	0.2	4.2	0.2
C-AB	21.9	14.6	2.8	0.1	2.8	0.1
C-A	-	-	-	-	-	-
A-B	23.3	15.5	-	-	-	-
A-C	801.2	534.1	-	-	-	-
All	1621.0	1080.7	6.9	0.0	6.9	0.0

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

Appendix 2 – Scoping Note and Email Approval from Dorset County Council

PARSONS BRINCKERHOFF

AKERMAN INFRASTRURE SOLUTIONS (AIS)

RESIDENTIAL DEVELOPMENT AT BLANDFORD ST MARY, BLANDFORD FORUM

TRANSPORT ASSESSMENT AND TRAVEL PLAN SCOPING NOTE

FOR DISCUSSION

23 SEPTEMBER 2013
PROJECT: PTT\3513028A

Document Reference:	PTT\3513028A	Version 1
Prepared by	Carolyne Morgan	23 September 2013
Agreed by	Marcus Chick	23 September 2013
Approved for Issue	Rob Akerman	23 September 2013
Distribution (via email)	Steven Savage, Dorset County Council (DCC)	09 October 2013
	Wayne Sayers, DCC	09 October 2013
	Chris Hook, DCC	09 October 2013

1. INTRODUCTION

Parsons Brinckerhoff has been appointed by Akerman Infrastructure Solutions (AIS) to provide traffic and transportation advice in support of a development proposal for up to 350 dwellings on a site to south of the A350/A354 Blandford St Mary Roundabout, south of Blandford Forum, Dorset.

PB have undertaken some initial modelling work of the A354/A350 roundabout measuring the impact of the proposed residential development at this location, however, it is now been agreed that a full Transport Assessment is required to measure the impact of the development upon the local highway network.

The Department for Transport Guidance on Transport Assessments (March 2007) identifies in Appendix B the indicative thresholds of development that warrant either a Transport Statement or Transport Assessment (TA). It states that the development of C3 Residential Dwellings of over 80 units requires a TA and Travel Plan to measure the impact of the proposal development upon the local network.

PB contacted Wayne Sayer at Dorset County Council on the 17th September 2013 to discuss the requirements for the assessment of the transport impact of this development. Wayne confirmed the details of the TA and the need to consult with Chris Hook on the Travel Plan.

The purpose of this note is to outline the proposal and identify the assumptions and issues that will be addressed in a detailed Transport Assessment and Travel Plan.

2. DEVELOPMENT PROPOSALS

The development proposal is for up to 350 residential dwellings on a site to south of the A350/A354 Blandford St Mary Roundabout, south of Blandford Forum. The detail of exact site layout if yet to be confirmed but the location of the proposed development is shown within Figure 1.

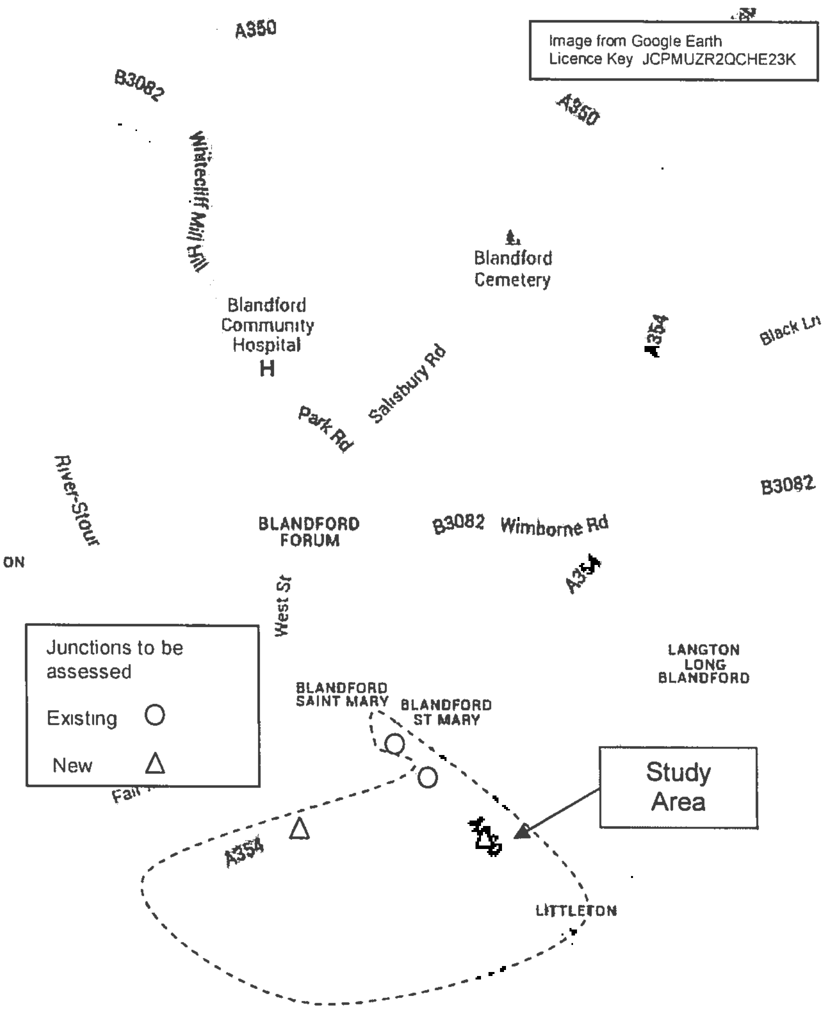


Figure 1 – Location Plan

3. STUDY AREA AND EXISTING NETWORK

The study area for this proposal will include the new access points from the proposed site location with the A350 and the A354, as well as the A350/A354 roundabout junction itself. In addition the Bournemouth Road, Stour Park and Birch Avenue Roundabout will be assessed to determine the impact of the proposed development at these locations.

An assessment of the existing area and access to facilitate all other modes of transport including pedestrian connectivity, cycle paths and public transport will also be undertaken to determine any deficiencies in these provisions currently available within the transport system.

4. ACCIDENT DATA

Collision data will be obtained from Dorset County Council (Mike Potter m.potter@dorsetcc.gov.uk) for the local network around the site including the A354/A354 and Bournemouth Road, Stour Park and Birch Avenue Roundabout. Accident data will be obtained for a five year period and will cover the study area identified in Figure 1 above.

5. PLANNING POLICY

The following policy documents will be considered when the TA is prepared:

- Department for Transport Guidance on Transport Assessments (March 2007)
- National Planning Policy Framework (March 2012)
- North Dorset District Council Local Plan to 2011(including any relevant Supplementary Planning Guidance Notes)
- New Plan for North Dorset (Draft Core Strategy and Development Management Policies Development Plan Document)
- Local Transport Plan 3 (2011-2026)

6. COMMITTED DEVELOPMENTS

Following PB's consultation with DCC on the 17th September it was confirmed that that the following sites need to be considered within any committed development assessments.

- Tesco Extension at Blandford Forum (Planning application ref 2/2010/1222/PLNG) - The supporting TA (July 2010) and TA addendum (May 2011) have been obtained and identify that the following additional trips will be generated from the Tesco site as a result of the store extension.

	AM Peak		PM Peak	
	Arr	Dep	Arr	Dep
Tesco Extension additional trips	26	50	51	53

  These trips will be included within any assessment work as committed development traffic from the extension to the Tesco store.

- Brewery Mixed Use Planning permission (Planning application ref 2/2006/1353) - Details regarding this site will be extracted from the agreed Transport Assessment once this has been obtained from North District Council.
- In consultation with Dorset District Council it was also suggested that there could be additional housing development within the local area (namely the Black Lane housing development) that has been built since the April 2013 traffic count and is now occupied and open to traffic. Again the agreed TA will be obtained from North District Council.

7. TRAFFIC FLOWS

A manual classified count was undertaken at the A350/A354 Blandford St Mary Roundabout on the 30th April 2013. The data from that survey will be used as a the basis for the assessment of that junction. Traffic flow data collected in April 2010 as part of the Tesco Extension TA will be used as a basis for the assessment of the Bournemouth Road, Stour Park and Birch Avenue roundabout.

Due to the multiple sources of data being used both data sets will be normalised to a common year, for example 2013. The normalisation will use growth factors from both local (ATC data/2013 traffic count) and national (using NTEM) sources. When developing a network of consistent junction counts the April 2013 data will be taken as the constraint and any other data will be factored to that level of traffic.

PARSONS BRINCKERHOFF

Concern has been raised by DCC over an issue with queuing at the A354/A350 junction in both the AM and PM peaks (although previous ARCADY modelling work has not demonstrated this). A video survey of the junction was undertaken on the day of the survey in April 2013 and this will be utilised to augment the traffic analysis.

8. TRIP GENERATION

In order to predict the amount of traffic expected to be generated as a result of the proposed development, an initial assessment of trip rates was derived from the TRICS 2013(a) v6.11.2 database and used in the previous junction modelling work undertaken. DCC confirmed in our consultation with them that these rates were acceptable and will be used in the TA work undertaken.

The multi-modal trip rate was derived from the aggregate trip rate for sites of a similar nature within the 'Mixed Private / Non-Private Housing' category in the TRICS database, of which some of the sites had established Travel Plans. Full details on the sites selected from the TRICS database and assumptions made will be provided in the TA. Average trip rates from the proxy sites have been used. A summary of the peak hour person trip rates is illustrated below.

TRICS Person Trip Rates - Mixed Private / Non-Private Housing			
Time	Arrivals	Departures	Total
08:00 - 09:00	0.210	0.642	0.852
17:00 - 18:00	0.498	0.254	0.752

Modal split was then taken from the Travel to Work Census data "Portman ward (2011)" to calculate the modal split for residential developments, again this approach was accepted as suitable for the TA by DCC.

As the development proposal is for residential dwellings only, it has been assumed that there are no Heavy Goods Vehicle (HGV) movements associated with the site during peak hours. The resulting vehicle trips and are summarised below.

New Trips - Proposed Development			
AM Peak Hour		PM Peak Hour	
In	Out	In	Out
48	148	115	59

Trips from the proposed site for all other modes will also be detailed within the TA.

9. TRIP DISTRIBUTION/ASSIGNMENT

The distribution of development traffic will be done according to the proportion of traffic travelling through the study area. Traffic through the Blandford St Mary junction and the Bournemouth Road, Stour Park and Birch Avenue roundabout will be distributed proportionately according to those traffic surveys.

10. FORECAST YEARS

Growth factors will be generated using the latest versions of TEMpro (versions 6.2) and National Trip End Model (NTEM) dataset versions for the application year and ten years after opening. Where committed development is explicitly modelled the growth factors will be adjusted in TEMpro to take account of this. These growth factors will then be applied to the background traffic (but not to the residential development) and utilised within the modelling work undertaken.

11. ASSESSMENT WORK

PICADY junction modelling will be undertaken for both access points into the proposed site as set out in the earlier PB work undertaken. In addition ARCADY modelling will be undertaken for the

A354/A350 roundabout as well as the Bournemouth Road, Stour Park and Birch Avenue roundabout. Assessments will be undertaken for the following scenarios in both the AM and PM peak:

- 2013 base year
- 2014 (assumed application year) with committed development
- 2014 (assumed application year) with committed development and development
- 2025 (assumed 10 year post opening) with committed development
- 2025 (assumed 10 year post opening) with committed development and development

12. INTERPREATATION OF IMPACT

To determine if there is a need for the proposal to mitigate its impact at any of the junctions assessed the following scenarios will be considered:

- If in the assessment year (2014 or 2025) the highway network is operating under capacity[1] and the introduction of traffic from the development does not cause the highway network to go over capacity, then no remedial measures are required.

- If in the assessment year (2014 or 2025), the highway network is operating under capacity without the development and the introduction of traffic from the development causes the highway network to go over capacity, the remedial measures in the form of either highway infrastructure improvement or further soft measures through the travel plan will be considered to return the highway network to a position where it operates at no worse than capacity.

- If in the assessment year (2014 or 2025) the highway network without the development is operating over capacity and the introduction of the development worsens this situation, then remedial measures in the form of either highway infrastructure improvements or further soft measures through the travel plan will be considered to return the highway network to a level of service as would be expected should the development have not taken place.

13. TRAVEL PLAN

It is understood that a Residential Travel Plan (TP) is required to support the proposal. The TP will be written in accordance with DfT Making Residential Travel Plans work: Guidance for new developments (September 2005) as well as Dorset's Supplementary Planning Guidance "Development related Travel Plans in Dorset". Between these two documents it can be indentified that the following areas need to be considered within a Residential Travel Plan:

- Objectives
- Measures/actions
- Targets
- Monitoring
- Alternative measures
- Promotion/Dissemination

PB is currently consulting with Chris Hook of DCC to understand what exactly DCC would expect to see within a Residential Travel Plan, over and above what is set out above.

[1] Capacity for both PICADY and ARCADY assessments are assume to be 100% RFC

14. PEDESTRIAN CONNECTIVITY

Following our consultation with DCC it was apparent that the council's main concern is with regards to pedestrian connectivity between the site and Blandford town centre. The site and the town centre are separated by the A354, a strategic corridor in Blandford. DCC suggested that an at grade crossing would not be acceptable due to the strategic nature of the A354.

It was suggested by DCC that a footbridge with stairs and/or ramp is likely to be necessary improvement to connect pedestrians from the site into Blandford town centre. Beyond the A354 pedestrian improvements have been improved/enhanced as a result of work undertaken by the Tesco Extension (as detailed within the referred ARUP TA).

The existing pedestrian connectivity will be considered within the TA and the need for improvements, if any, will be identified.

15. WAY FORWARD

On agreement of this scoping note a full TA and TP will be produced to support the residential proposal for Blandford Forum.

Morgan, Carolyne

From: Sayers, Wayne [w.sayers@dorsetcc.gov.uk]
Sent: 15 October 2013 17:06
To: Morgan, Carolyne
Cc: Savage, Steve K.
Subject: RE: Blandford St Mary's

Hi Carolyne,

I just tried to phone you to discuss your scoping note but understand that you're now out for the rest of the week. I've detailed my main comments below and will be around next Monday if you'd like to discuss any of them further.

As far as trip rates are concerned I am interested to know why you have used census data to provide a mode split rather than using the mode split data available within TRICS. The census data will be based only on journey to work information and will therefore miss out other journeys that occur within the peak hours, especially in the am peak where trips to school are significant. TRICS data on the other hand is based on surveys of actual sites and picks up all trips in that time period. I would prefer if the TRICS data for mode split is used unless there is a good reason why not.

[redacted]

I would advise that a suitable reduction to the trip rate is applied to acknowledge the impact of the TP before any junction modelling takes place. This follows that TA guidance and helps you by showing the likely reduced impact of the development. The only word of caution here is that some of your TRICS sites already have travel plans and that you would need to avoid double counting any reductions.

My final point relates to section 12 of your note - Interpretation of Impact. We would be unlikely to accept the approach that you outline as it is very prescriptive in its examination of the modelling results. It assumes that 100% RFC is to be considered to represent capacity, rather than 85, 90 or 95 nor does it acknowledge that, once a level of 90 to 95% is reached the operation of the junction becomes more erratic. It also does not take into account the individual characteristics of a specific junction. For example, here it may be the queues that cause us more of a concern that the actual RFC.

We would base our request for mitigation, if we think any is required, on an overall assessment of the junction capacity and its immediate surroundings and traffic characteristics.

As I said at the start, feel free to give me a call on Monday if you'd like to discuss any of the above.

Kind regards,

Wayne

Wayne Sayers MSc, MIHE, Associate Member RTPI
Transportation Development Management
Dorset County Council

01305 224161
07917 072924

Dorset County Council - County Hall - Colliton Park - Dorchester - Dorset - DT1 1XJ
(01305) 224161 - w.sayers@dorsetcc.gov.uk - www.dorsetforyou.com/395972

From: Morgan, Carolyne [mailto:MorganC@pbworld.com]
Sent: Wed 09 October 2013 11:14
To: Sayers, Wayne

Cc: Savage, Steve K.; Hook, Christopher P.; Rob Akerman
Subject: RE: Blandford St Mary's

Wayne

Please find attached the TA scoping note for the proposed residential site at Blandford St Mary.

The note has been prepared in accordance with our earlier consultations (as detailed in the email history below).

I look forward to hearing from you and your colleagues with any comments prior to us commencing with the Transport Assessment and Travel Plan work.

Kind regards
Carolyne

From: Sayers, Wayne [mailto:w.sayers@dorsetcc.gov.uk]
Sent: 19 September 2013 14:06
To: Morgan, Carolyne
Cc: Akerman, Rob; Savage, Steve K.
Subject: RE: Blandford St Mary's

Hi Carolyne,

As far as junction modelling goes there will be no need to model the mini roundabout at the western end of Bournemouth Road or the next junction to the north on the Blandford By-pass. I am of the opinion that there are queues from the south at the A350/A354 roundabout in the am peak (there may be queues on the other arms but I've not approached from these directions on a regular basis). In the PM peak there were regularly queues approaching the roundabout from the west.

The Black Lane housing development and the Brewery proposals are the only committed developments we could think of that should be considered.

I'm happy for the existing traffic counts to be used.

Accident data can be obtained from Mike Potter on M.Potter@dorsetcc.gov.uk.

Kind regards,

Wayne

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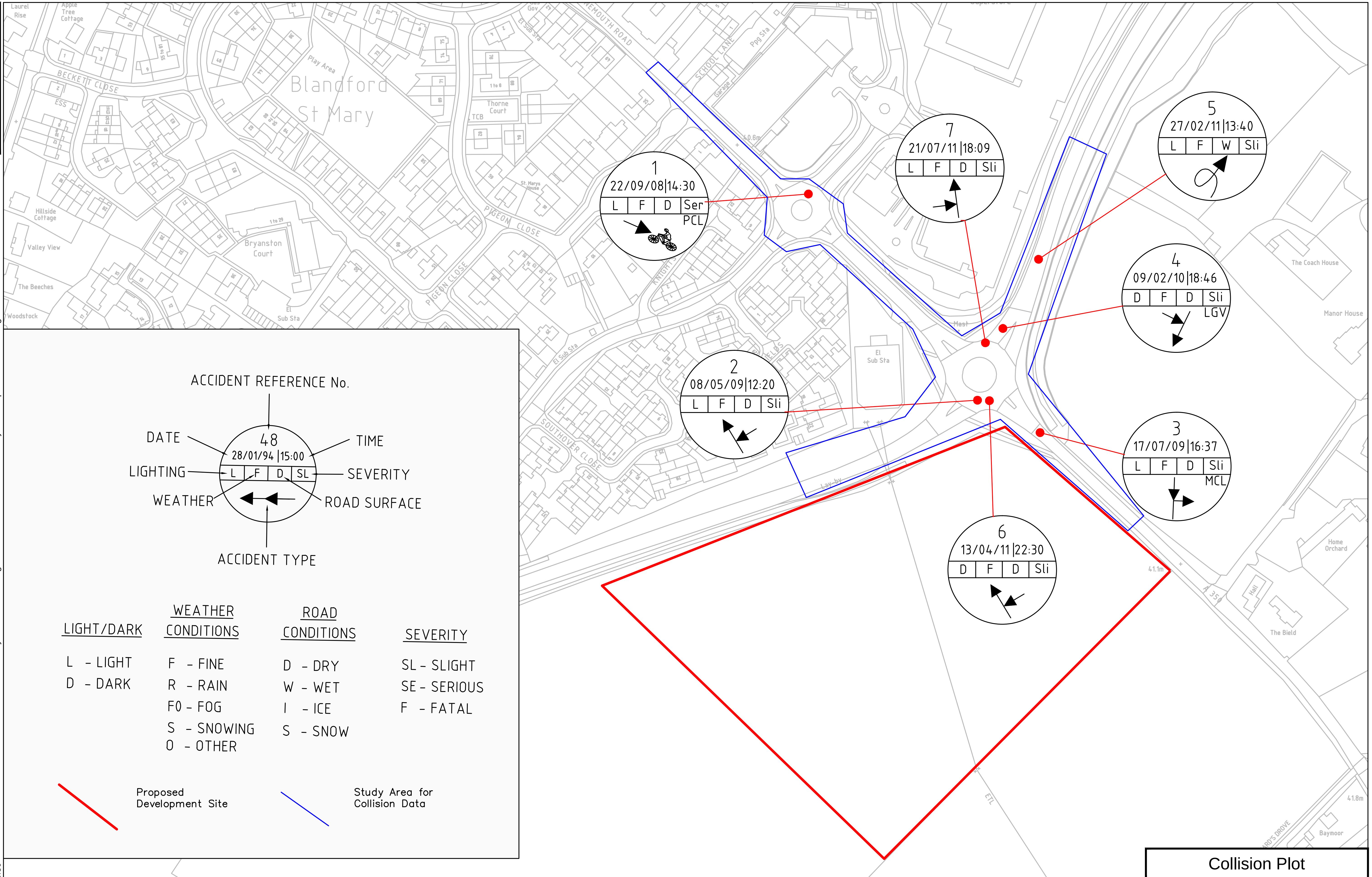
(01305) 224161 - w.sayers@dorsetcc.gov.uk - www.dorsetforyou.com/395972

From: Morgan, Carolyne [mailto:MorganC@pbworld.com]
Sent: Wed 18 September 2013 09:38
To: Sayers, Wayne
Cc: Akerman, Rob
Subject: RE: Blandford St Mary's

Morning Wayne

Appendix 3 – Collision Plot



File Name: T:\PTT\3513028A-PTT Blandford St Mary Junction Modelling\TA and TP work\Blandford St.Mary collision plot 18-11-2013.dwg

Project Number: 3513028A | Drawing Number: 1 | Revision: 1

Login: Curson, Thomas
Plot Date: 19/11/2013 12:55:30

Rev	Date	Description	By	Chk	App

Notes:

PARSONS BRINCKERHOFF

Riverside Chambers
Castle Street, Taunton
Somerset TA1 4AP
Tel: 44-(0)1823-281190

Client:
Akerman Infrastructure Solutions (AIS)

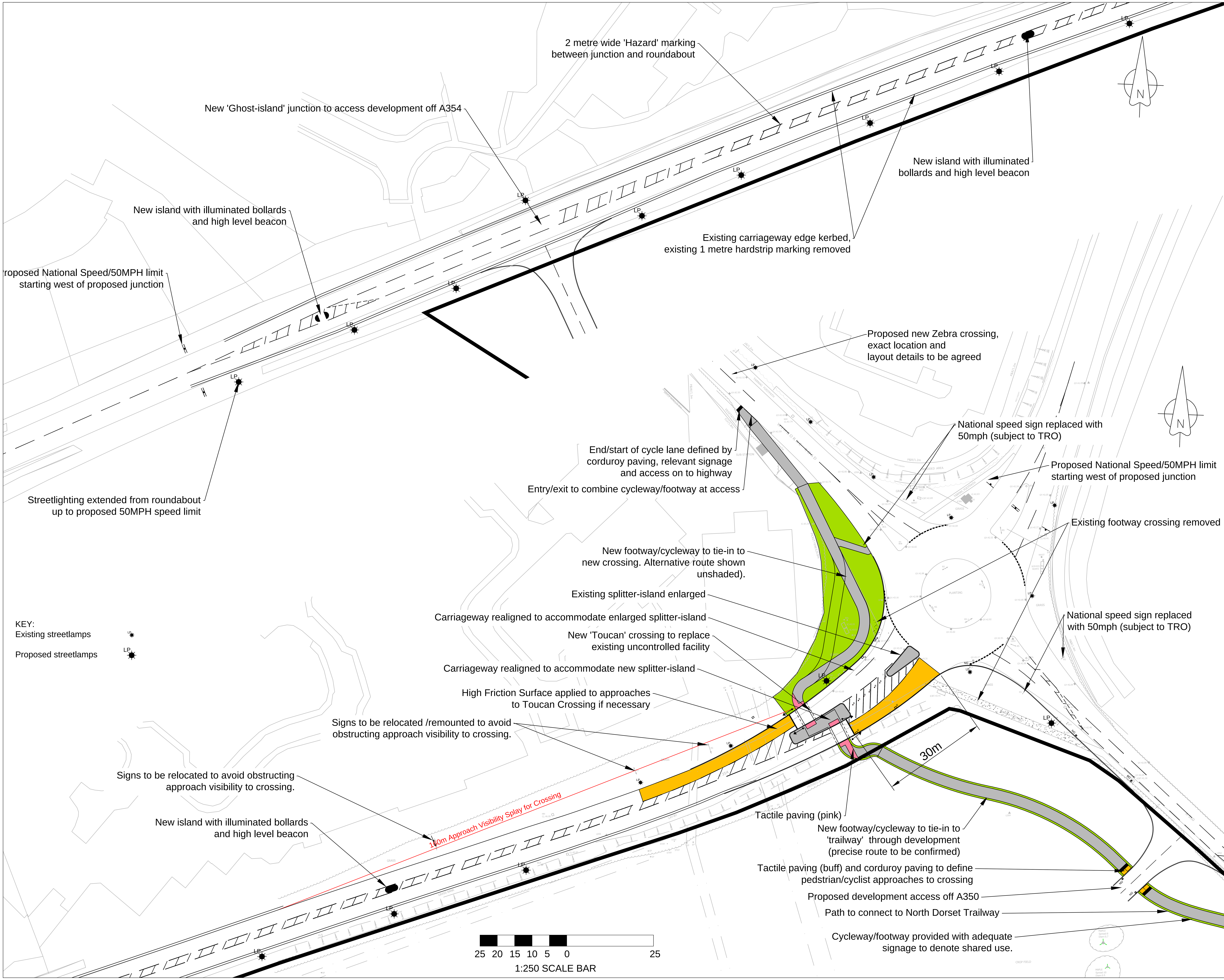
Project:
Blandford St. Mary
Transport Assessment

Title:
Appendix 2
Blandford St. Mary
Collision Plot
September 2008 to August 2013

Collision Plot

Drawn: TC		Checked: AW	
Designed: TC		Approved: CM	
Date: 18/11/2013	Scale: 1:2000	A3	Sheet: 1 of 1
Project Number: 3513028A-PTT	Drawing Number: 1	Revision: 1	

Appendix 4 – Proposed Access Arrangements



DO NOT SCALE THIS DRAWING

Notes

1. Lighting layout is indicative only. Detailed lighting to current design guidelines to be provided during detailed design stage.
2. Footway/cycleway route may change during design of development.
3. Speed limit revisions subject to TRO application. 40mph speed limit to be considered in place of 50mph speed limit.
4. Cycleway signage and roadmarkings to be included during next stage of design.
5. Alternative route of shared footway/cycleway on north side subject to utility plant constraints.

Rev	Date	Description
01	09.05.14	Crossing Location Clarified
00	24.03.14	First Issue

Drawing status

PRELIMINARY

akerman
INFRASTRUCTURE SOLUTIONS
Civil Engineering Design and Services
146 Hendford Hill
YEOVIL
Somerset
BA20 2RG
Tel:01935 508073
Email:rob@akermandesign.co.uk

Architect --

Project Blandford St Mary

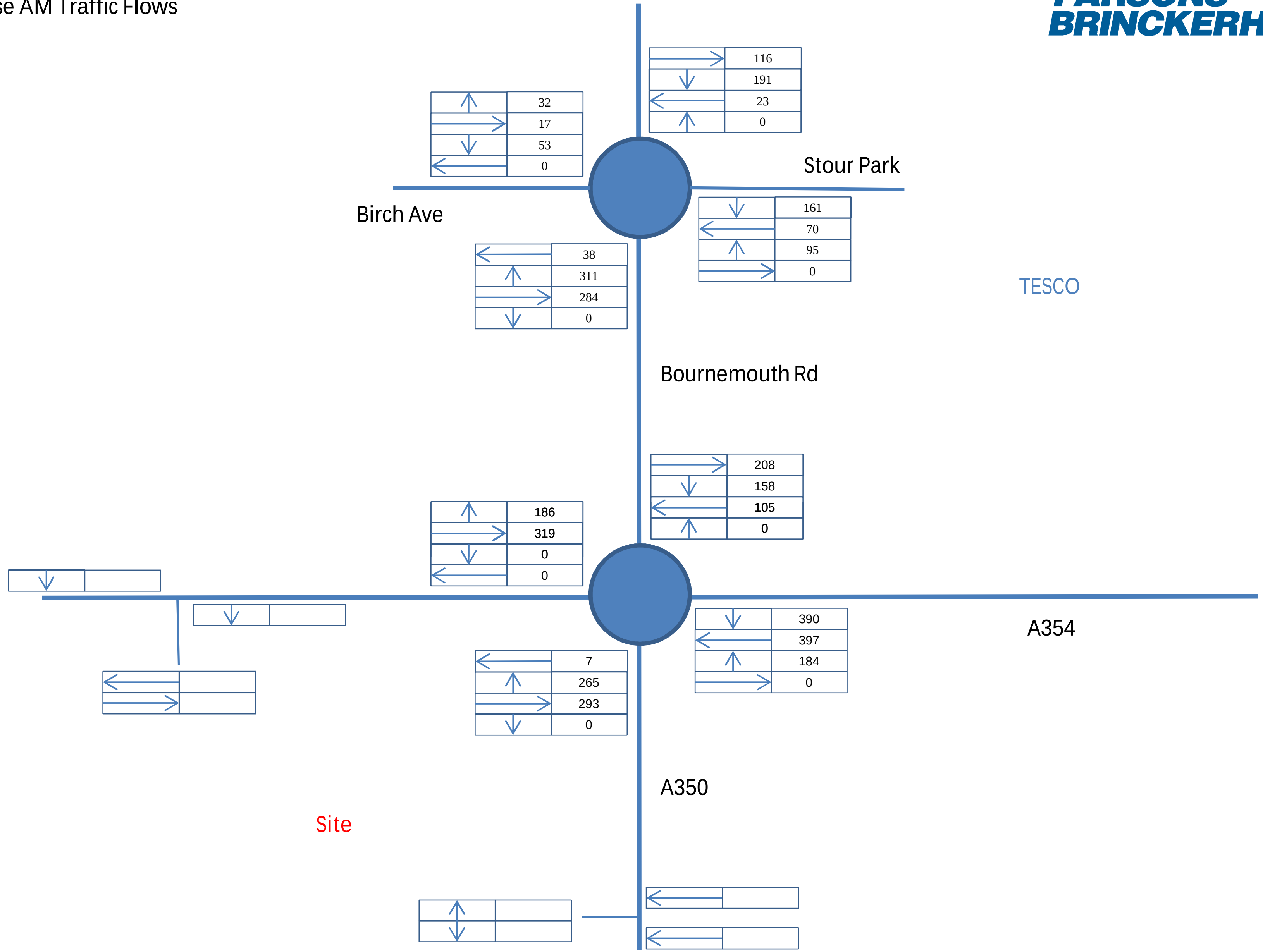
Drawing A354 Pedestrian/Cycle At Grade Crossing (Controlled) Option 3

Scale @ A1	1:250
Drawn by	CGR
Checked by	RA
Date	24.03.2014
Job No.	AIS 061
Drg No.	AIS061/09/01
Rev	01

Appendix 5 – Traffic Flows

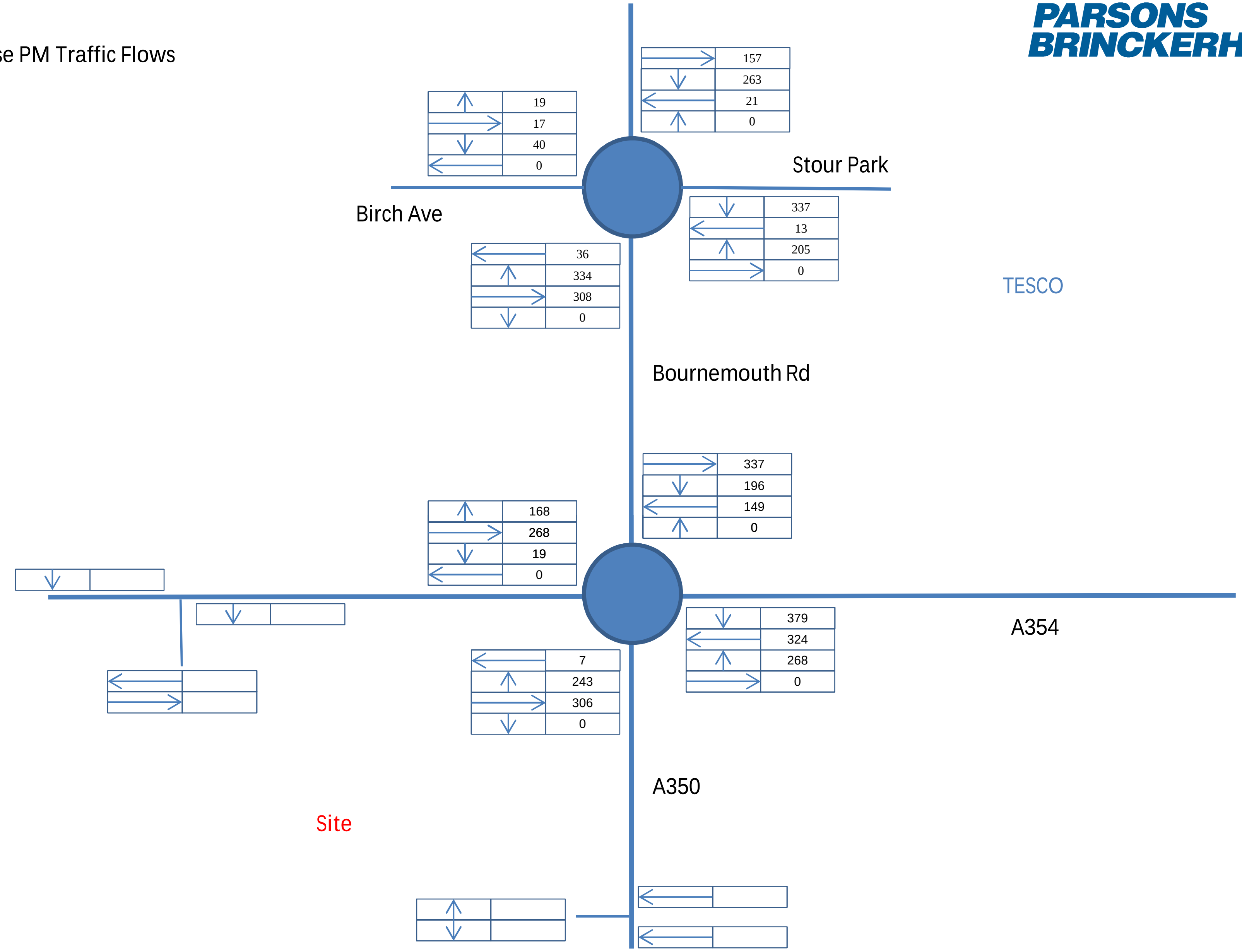
PARSONS BRINCKERHOFF

2013 Base AM Traffic Flows



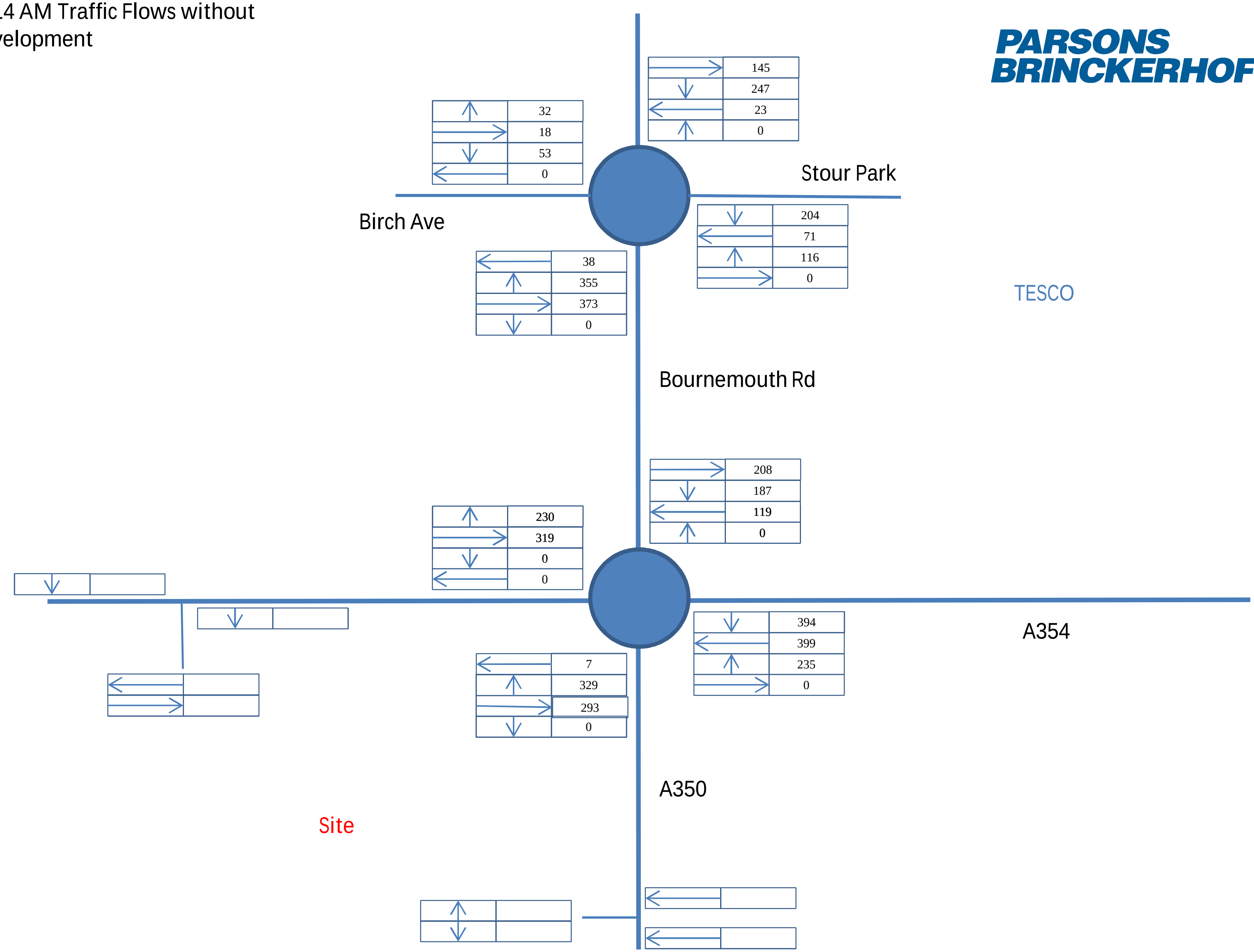
PARSONS BRINCKERHOFF

2013 Base PM Traffic Flows

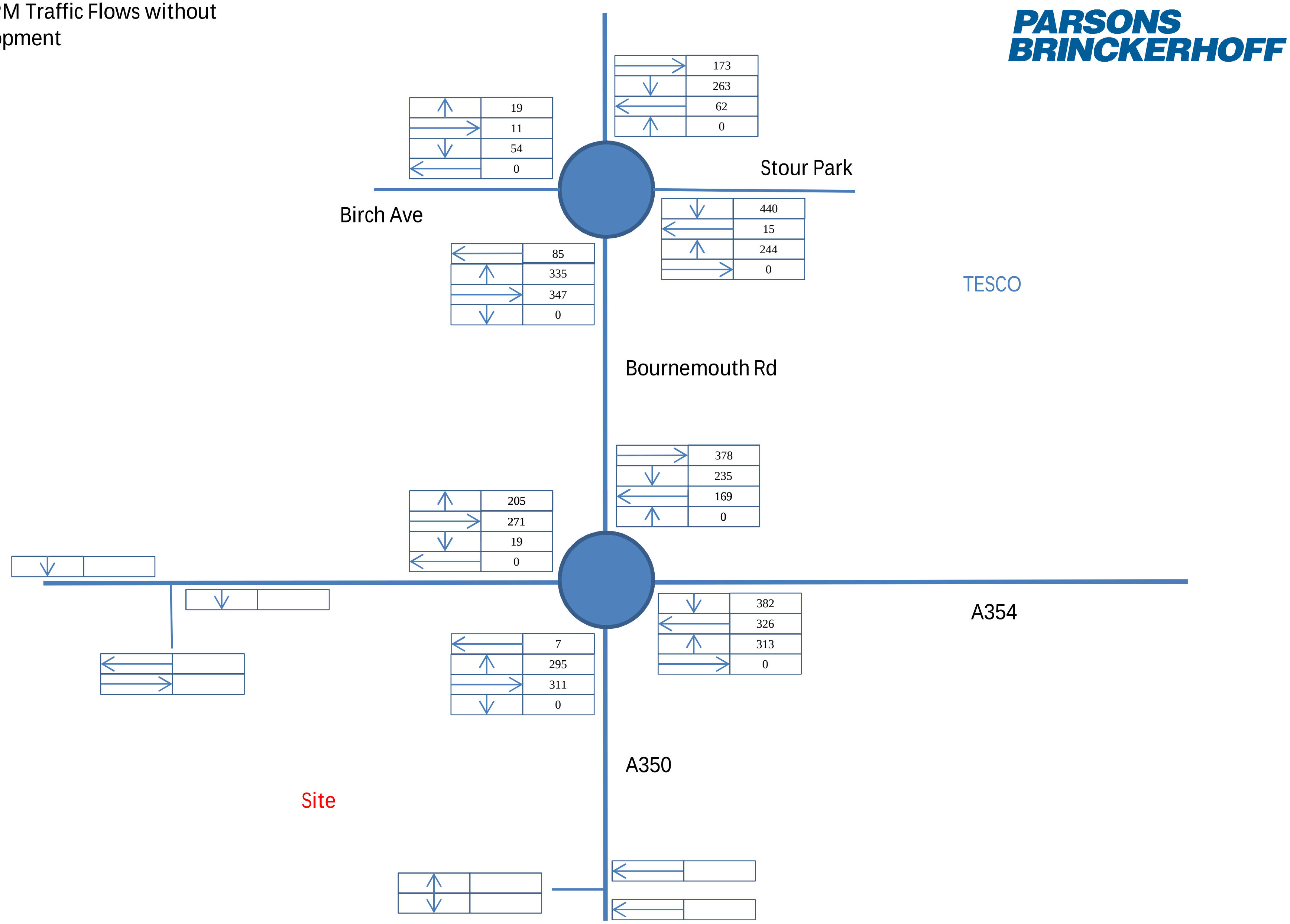


2014 AM Traffic Flows without development

PARSONS BRINCKERHOFF

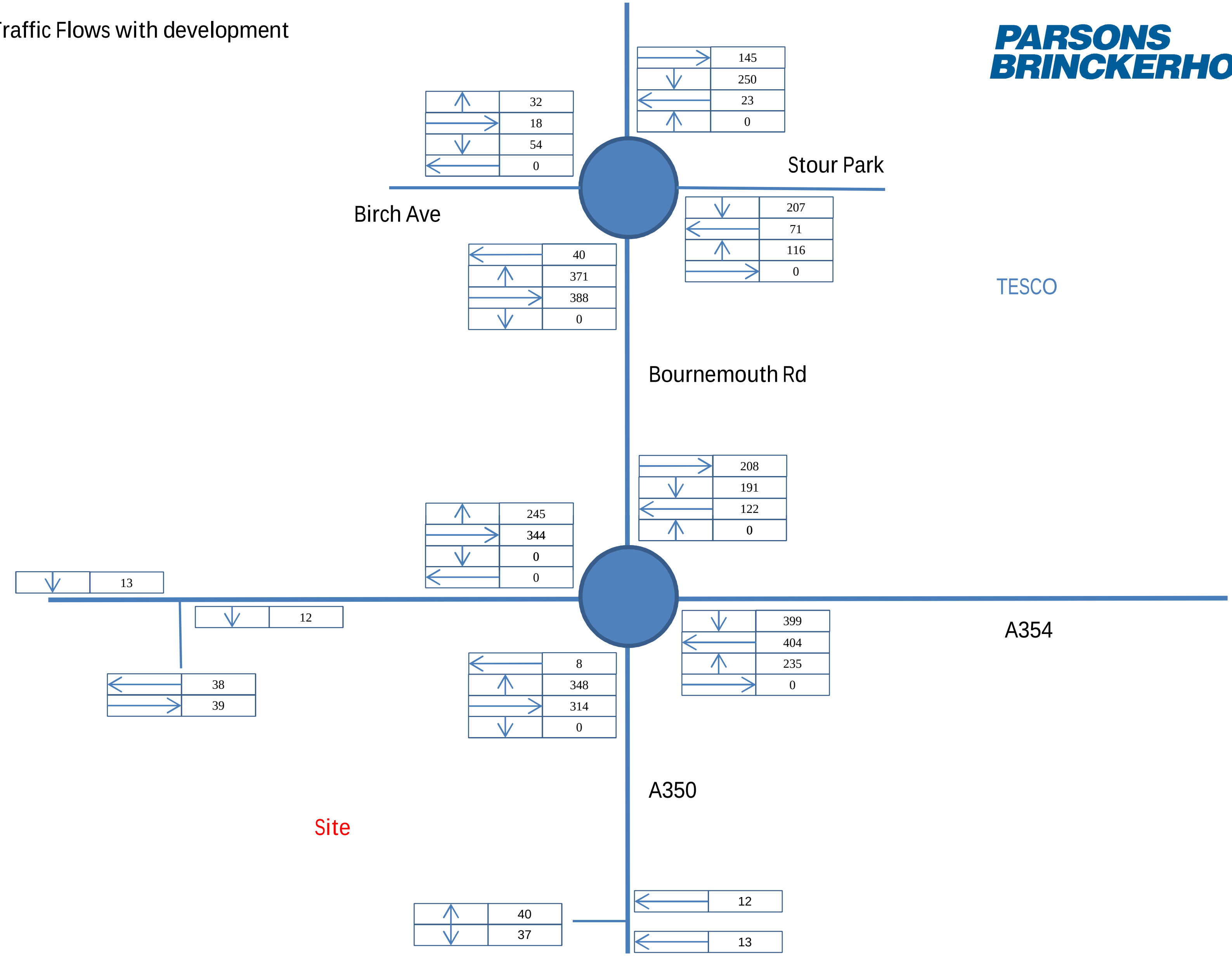


2014 PM Traffic Flows without development

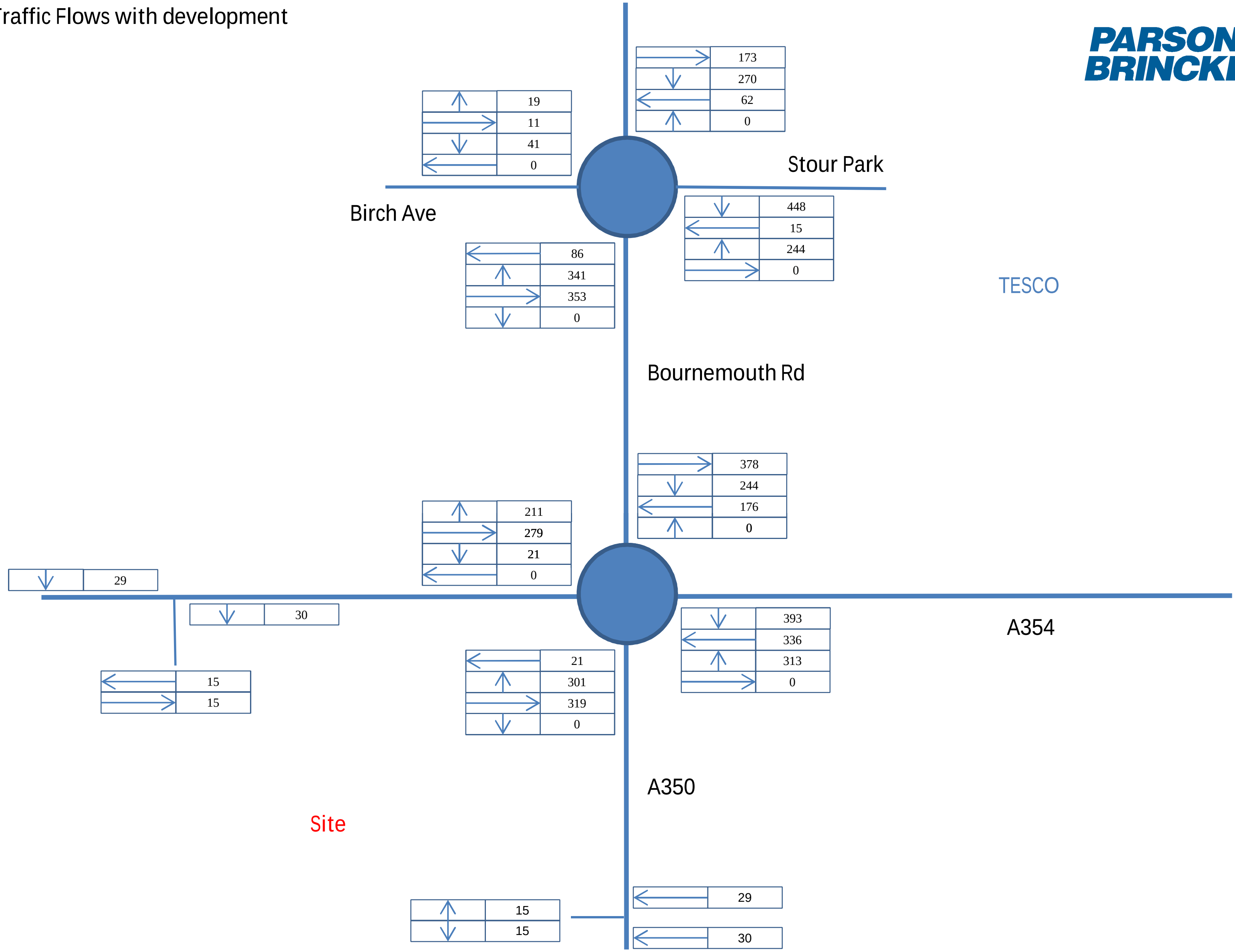


PARSONS BRINCKERHOFF

2014 AM Traffic Flows with development

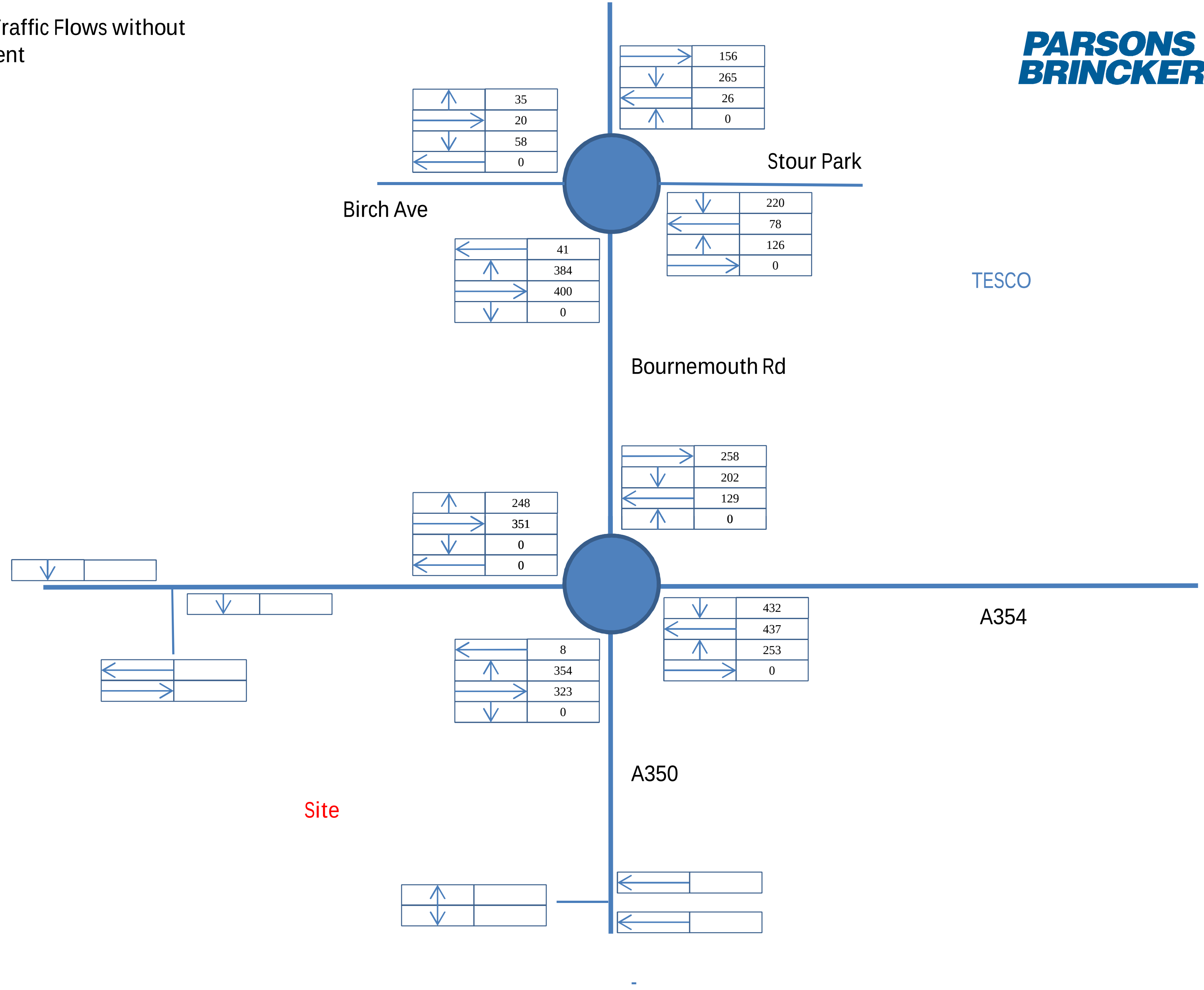


2014 PM Traffic Flows with development

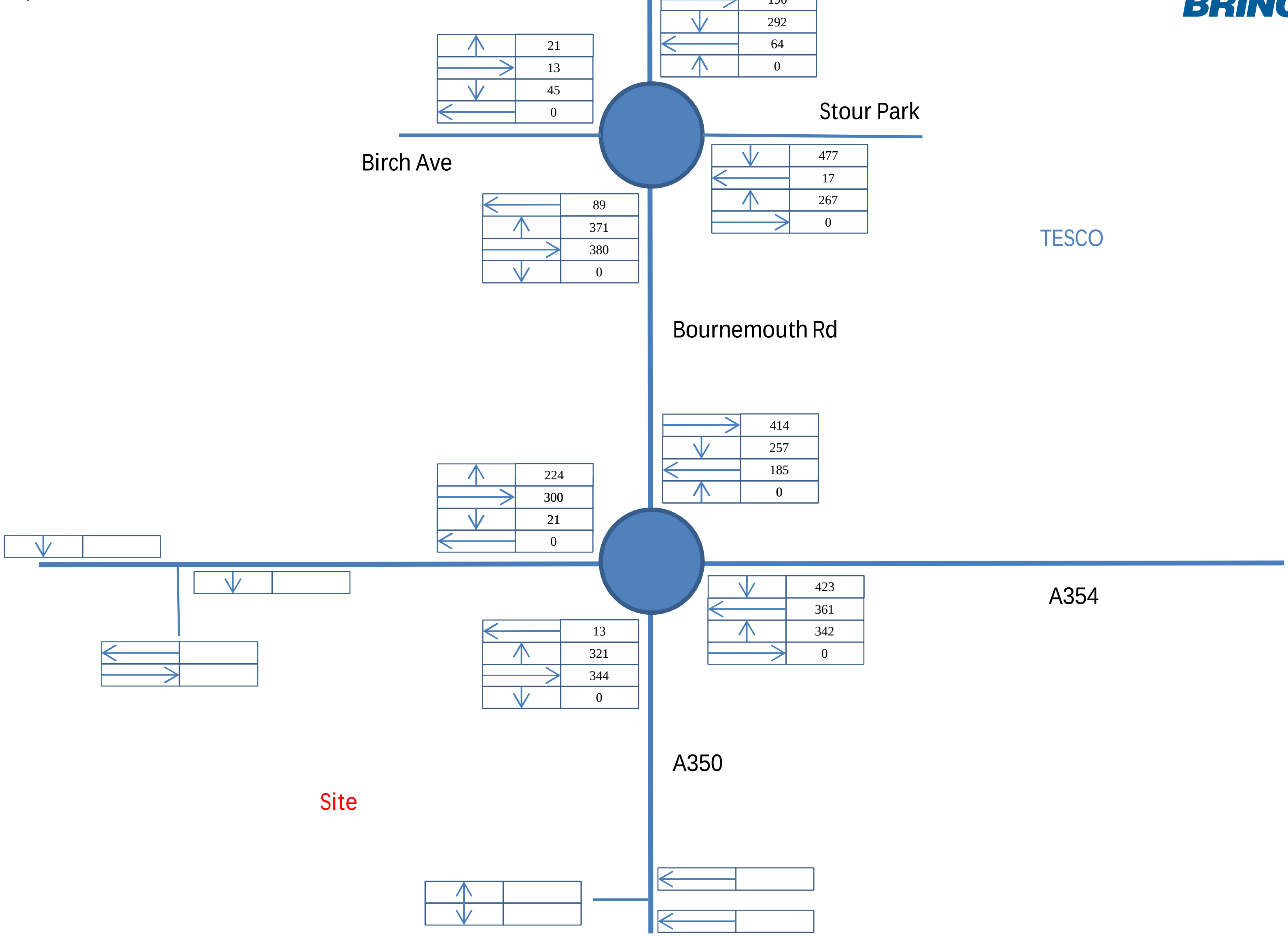


2025 AM Traffic Flows without development

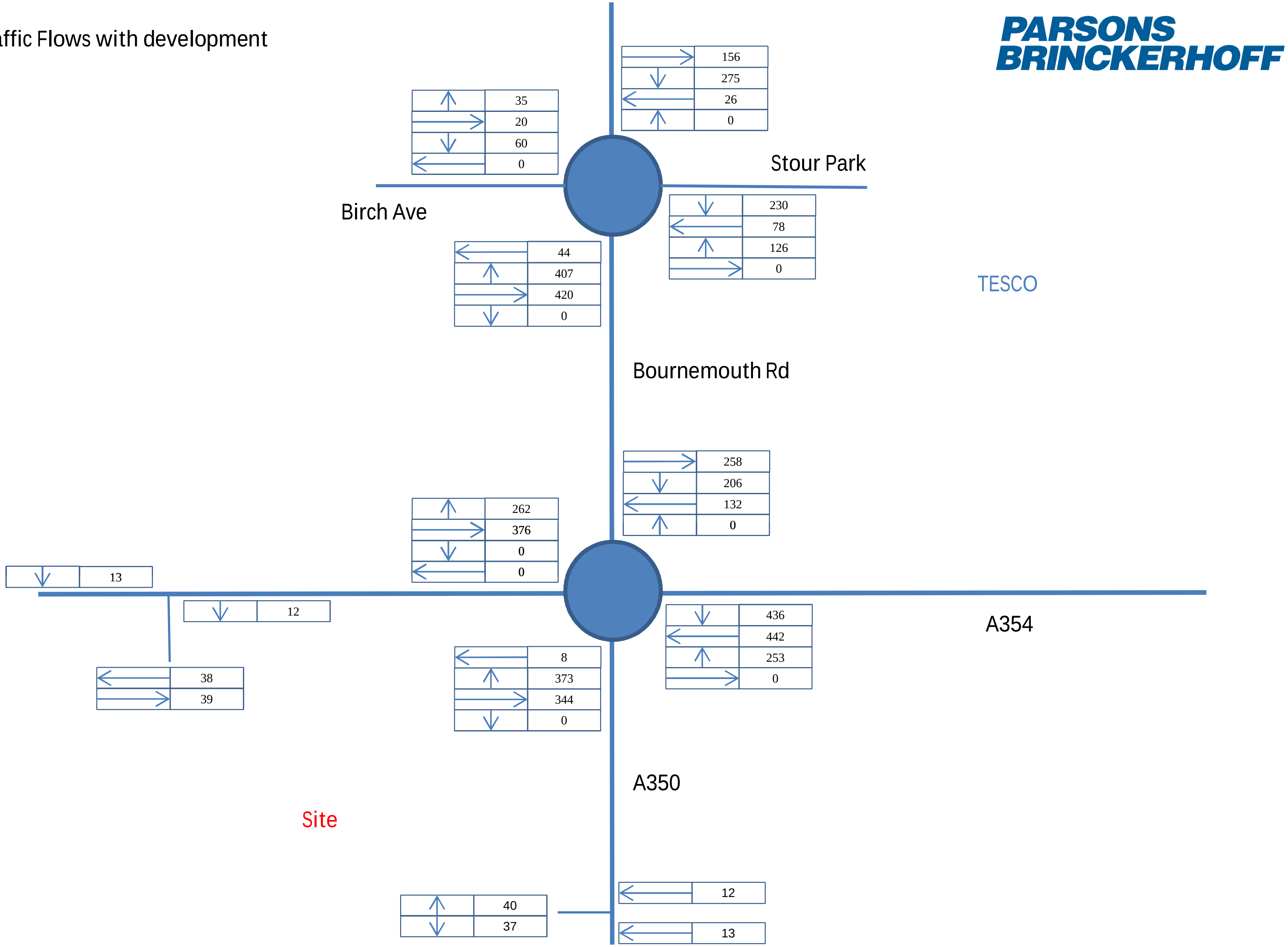
PARSONS BRINCKERHOFF



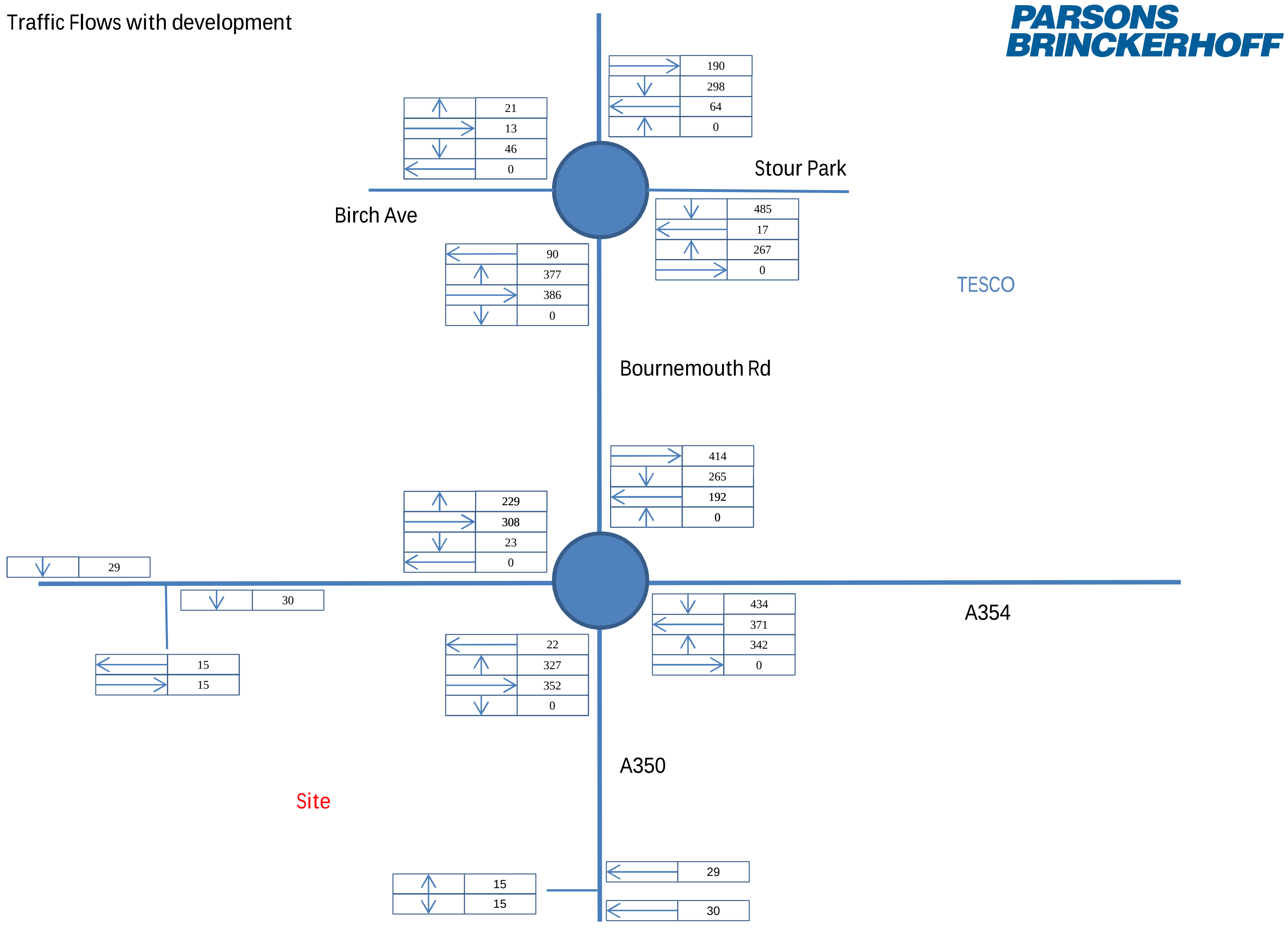
2025 PM Traffic Flows without development



2025 AM Traffic Flows with development



2025 PM Traffic Flows with development



Appendix 6 – PICADY Outputs

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: (new file)
Path:
Report generation date: 22/11/2013 09:03:44

File summary

File Description

Title	Blandford Forum Traffic Modelling
Location	Blandford Forum, Dorset
Site Number	
Date	14/11/2013
Version	
Status	-
Identifier	
Client	AIS
Jobnumber	3513028A
Enumerator	haywardr [W-EAPBL-L-20035]
Description	Proposed development access onto A350 to the south of Blandford Forum

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perMin	s	-Min	perMin

(Default Analysis Set) - 2014 AM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2014 AM, AM	2014 AM	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		11.74	B

Junction Network Options

Driving Side	Lighting

Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A350 South		Major
B	Site Access		Minor
C	A350 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.85		0.00	✓	3.50	170.00	✓	8.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.80	3.30	3.00	3.00	✓	1.00	90	120

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	10.294	0.108	0.274	0.172	0.391

1	B-C	12.846	0.114	0.288	-	-
1	C-B	12.792	0.286	0.286	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	10.75	100.000
B	ONE HOUR	✓	1.28	100.000
C	ONE HOUR	✓	9.89	100.000

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	0.220	10.530
	B	0.610	0.000	0.670
	C	9.690	0.200	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.48	0.00	0.52
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.09	8.33	0.10	A	0.61	55.33	6.99	7.58	0.08	6.99	7.58
B-A	0.16	16.87	0.19	C	0.56	50.38	11.56	13.77	0.13	11.56	13.77
C-AB	0.03	7.48	0.03	A	0.18	16.52	1.93	7.02	0.02	1.93	7.02
C-A	-	-	-	-	8.89	800.25	-	-	-	-	-

A-B	-	-	-	-	0.20	18.17	-	-	-	-	-
A-C	-	-	-	-	9.66	869.63	-	-	-	-	-

(Default Analysis Set) - 2014 PM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2014 PM, PM	2014 PM	PM		Varies by Arm	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS

untitled	T-Junction	Two-way	A,B,C		9.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A350 South		Major
B	Site Access		Minor
C	A350 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.85		0.00	✓	3.50	170.00	✓	8.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.80	3.30	3.00	3.00	✓	1.00	90	120

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	10.331	0.109	0.275	0.173	0.393
1	B-C	12.800	0.113	0.287	-	-
1	C-B	12.792	0.286	0.286	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	10.80	100.000
B	ONE HOUR	✓	0.51	100.000
C	ONE HOUR	✓	11.10	100.000

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.000	0.510	10.290

	B	0.250	0.000	0.260
	C	10.610	0.490	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.00	0.05	0.95
	B	0.49	0.00	0.51
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
From		A	B	C
	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
From		A	B	C
	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)

B-C	0.04	7.61	0.04	A	0.24	21.47	2.53	7.07	0.03	2.53	7.07
B-A	0.07	16.17	0.07	C	0.23	20.65	4.59	13.34	0.05	4.59	13.34
C-AB	0.07	7.81	0.07	A	0.45	40.47	4.91	7.27	0.05	4.91	7.27
C-A	-	-	-	-	9.74	876.23	-	-	-	-	-
A-B	-	-	-	-	0.47	42.12	-	-	-	-	-
A-C	-	-	-	-	9.44	849.81	-	-	-	-	-

(Default Analysis Set) - 2025 AM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2025 AM, AM	2025 AM	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		13.05	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A350 South		Major
B	Site Access		Minor
C	A350 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.85		0.00	✓	3.50	170.00	✓	8.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.80	3.30	3.00	3.00	✓	1.00	90	120

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None

C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	10.294	0.108	0.274	0.172	0.391
1	B-C	12.846	0.114	0.288	-	-
1	C-B	12.792	0.286	0.286	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	11.75	100.000
B	ONE HOUR	✓	1.28	100.000
C	ONE HOUR	✓	10.81	100.000

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.220	11.530
	B	0.610	0.000	0.670
	C	10.610	0.200	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.48	0.00	0.52
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.10	8.77	0.11	A	0.61	55.33	7.27	7.88	0.08	7.27	7.88
B-A	0.18	19.48	0.22	C	0.56	50.38	12.86	15.31	0.14	12.86	15.31
C-AB	0.03	7.79	0.03	A	0.18	16.52	2.00	7.26	0.02	2.00	7.26
C-A	-	-	-	-	9.74	876.23	-	-	-	-	-
A-B	-	-	-	-	0.20	18.17	-	-	-	-	-
A-C	-	-	-	-	10.58	952.21	-	-	-	-	-

(Default Analysis Set) - 2025 PM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2025	2025 PM	PM		Varies by	16:45	18:15	90	15				✓		

PM, PM				Arm										

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		10.83	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A350 South		Major
B	Site Access		Minor
C	A350 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.85		0.00	✓	3.50	170.00	✓	8.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	5.80	3.30	3.00	3.00	✓	1.00	90	120

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	10.331	0.109	0.275	0.173	0.393
1	B-C	12.800	0.113	0.287	-	-
1	C-B	12.792	0.286	0.286	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	11.91	100.000
B	ONE HOUR	✓	0.51	100.000
C	ONE HOUR	✓	12.24	100.000

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.510	11.400
	B	0.250	0.000	0.260
	C	11.750	0.490	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.49	0.00	0.51
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.04	7.98	0.04	A	0.24	21.47	2.63	7.34	0.03	2.63	7.34
B-A	0.08	19.00	0.09	C	0.23	20.65	5.18	15.05	0.06	5.18	15.05
C-AB	0.07	8.18	0.07	A	0.45	40.47	5.09	7.55	0.06	5.09	7.55
C-A	-	-	-	-	10.78	970.38	-	-	-	-	-
A-B	-	-	-	-	0.47	42.12	-	-	-	-	-
A-C	-	-	-	-	10.46	941.48	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: (new file)
Path:
Report generation date: 22/11/2013 08:58:43

File summary

File Description

Title	Blandford Forum Traffic Modelling
Location	Blandford Forum, Dorset
Site Number	
Date	14/11/2013
Version	
Status	-
Identifier	
Client	AIS
Jobnumber	3513028A
Enumerator	haywardr [W-EAPBL-L-20035]
Description	Proposed development access onto A354 to the South of Blandford Forum

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perMin	s	-Min	perMin

(Default Analysis Set) - 2014 AM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2014 AM, AM	2014 AM	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		8.68	A

Junction Network Options

Driving Side	Lighting

Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A354 East		Major
B	Site Access		Minor
C	A354 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.32		0.00	✓	3.50	250.00	✓	13.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	7.30	4.20	3.60	3.60	✓	1.00	215	215

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	12.581	0.130	0.328	0.206	0.468

1	B-C	14.280	0.124	0.313	-	-
1	C-B	13.674	0.300	0.300	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	8.96	100.000
B	ONE HOUR	✓	1.28	100.000
C	ONE HOUR	✓	9.39	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/min)	DirectDemandEntryFlowInPCU (PCU/min)	Direct Demand Exit Flow (Veh/min)	Direct Demand Pedestrian Flow (Ped/min)
07:45-08:00	**A**	6.75	7.42	N/A	N/A
07:45-08:00	**B**	0.97	1.06	N/A	N/A
07:45-08:00	**C**	7.07	7.78	N/A	N/A
08:00-08:15	**A**	8.06	8.86	N/A	N/A
08:00-08:15	**B**	1.15	1.27	N/A	N/A

08:00-08:15	**C**	8.44	9.29	N/A	N/A
08:15-08:30	**A**	9.87	10.86	N/A	N/A
08:15-08:30	**B**	1.41	1.55	N/A	N/A
08:15-08:30	**C**	10.34	11.37	N/A	N/A
08:30-08:45	**A**	9.87	10.86	N/A	N/A
08:30-08:45	**B**	1.41	1.55	N/A	N/A
08:30-08:45	**C**	10.34	11.37	N/A	N/A
08:45-09:00	**A**	8.06	8.86	N/A	N/A
08:45-09:00	**B**	1.15	1.27	N/A	N/A
08:45-09:00	**C**	8.44	9.29	N/A	N/A
09:00-09:15	**A**	6.75	7.42	N/A	N/A
09:00-09:15	**B**	0.97	1.06	N/A	N/A
09:00-09:15	**C**	7.07	7.78	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	0.205	8.758
	B	0.656	0.000	0.626
	C	9.175	0.215	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.02	0.98
	B	0.51	0.00	0.49
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.07	6.72	0.08	A	0.57	51.73	5.40	6.26	0.06	5.40	6.26
B-A	0.12	11.25	0.13	B	0.60	54.20	8.74	9.67	0.10	8.74	9.67
C-AB	0.02	6.49	0.03	A	0.20	17.73	1.83	6.18	0.02	1.83	6.18
C-A	-	-	-	-	8.42	757.75	-	-	-	-	-
A-B	-	-	-	-	0.19	16.92	-	-	-	-	-
A-C	-	-	-	-	8.04	723.31	-	-	-	-	-

(Default Analysis Set) - 2014 PM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2014 PM, PM	2014 PM	PM		Varies by Arm	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		7.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A354 East		Major
B	Site Access		Minor
C	A354 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.32		0.00	✓	3.50	250.00	✓	13.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	7.30	4.20	3.60	3.60	✓	1.00	215	215

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	12.509	0.129	0.326	0.205	0.465
1	B-C	14.361	0.124	0.315	-	-
1	C-B	13.674	0.300	0.300	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	8.95	100.000
B	ONE HOUR	✓	0.51	100.000
C	ONE HOUR	✓	8.74	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/min)	DirectDemandEntryFlowInPCU (PCU/min)	Direct Demand Exit Flow (Veh/min)	Direct Demand Pedestrian Flow (Ped/min)
16:45-17:00	A	6.74	7.42	N/A	N/A
16:45-17:00	B	0.38	0.42	N/A	N/A
16:45-17:00	C	6.58	7.24	N/A	N/A
17:00-17:15	A	8.05	8.86	N/A	N/A
17:00-17:15	B	0.46	0.50	N/A	N/A
17:00-17:15	C	7.86	8.65	N/A	N/A
17:15-17:30	A	9.86	10.85	N/A	N/A
17:15-17:30	B	0.56	0.61	N/A	N/A
17:15-17:30	C	9.63	10.59	N/A	N/A
17:30-17:45	A	9.86	10.85	N/A	N/A

17:30-17:45	B	0.56	0.61	N/A	N/A
17:30-17:45	C	9.63	10.59	N/A	N/A
17:45-18:00	A	8.05	8.86	N/A	N/A
17:45-18:00	B	0.46	0.50	N/A	N/A
17:45-18:00	C	7.86	8.65	N/A	N/A
18:00-18:15	A	6.74	7.42	N/A	N/A
18:00-18:15	B	0.38	0.42	N/A	N/A
18:00-18:15	C	6.58	7.24	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.000	0.503	8.451
	B	0.251	0.000	0.257
	C	8.251	0.492	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.00	0.06	0.94
	B	0.49	0.00	0.51
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
From		A	B	C
	A	1.100	1.100	1.100

	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	6.21	0.03	A	0.24	21.21	2.08	5.87	0.02	2.08	5.87
B-A	0.04	10.20	0.05	B	0.23	20.70	3.10	8.98	0.03	3.10	8.98
C-AB	0.06	6.71	0.06	A	0.45	40.59	4.30	6.35	0.05	4.30	6.35
C-A	-	-	-	-	7.57	681.41	-	-	-	-	-
A-B	-	-	-	-	0.46	41.58	-	-	-	-	-
A-C	-	-	-	-	7.76	697.96	-	-	-	-	-

(Default Analysis Set) - 2025 AM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?

Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2025 AM, AM	2025 AM	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		9.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A354 East		Major
B	Site Access		Minor

C	A354 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.32		0.00	✓	3.50	250.00	✓	13.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	7.30	4.20	3.60	3.60	✓	1.00	215	215

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	12.581	0.130	0.328	0.206	0.468
1	B-C	14.280	0.124	0.313	-	-
1	C-B	13.674	0.300	0.300	-	-

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 Flows

Demand Set Data Options

Default	Vehicle Mix	Vehicle Mix	Vehicle Mix	Vehicle Mix	PCU Factor	Default Turning	Estimate from	Turning Proportions	Turning Proportions	Turning Proportions

Vehicle Mix	Varies Over Time	Varies Over Turn	Varies Over Entry	Source	for a HV (PCU)	Proportions	entry/exit counts	Vary Over Time	Vary Over Turn	Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	9.80	100.000
B	ONE HOUR	✓	1.28	100.000
C	ONE HOUR	✓	10.26	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/min)	DirectDemandEntryFlowInPCU (PCU/min)	Direct Demand Exit Flow (Veh/min)	Direct Demand Pedestrian Flow (Ped/min)
07:45-08:00	A	7.38	8.11	N/A	N/A
07:45-08:00	B	0.97	1.06	N/A	N/A
07:45-08:00	C	7.73	8.50	N/A	N/A
08:00-08:15	A	8.81	9.69	N/A	N/A
08:00-08:15	B	1.15	1.27	N/A	N/A
08:00-08:15	C	9.23	10.15	N/A	N/A
08:15-08:30	A	10.79	11.86	N/A	N/A
08:15-08:30	B	1.41	1.55	N/A	N/A
08:15-08:30	C	11.30	12.43	N/A	N/A
08:30-08:45	A	10.79	11.86	N/A	N/A
08:30-08:45	B	1.41	1.55	N/A	N/A
08:30-08:45	C	11.30	12.43	N/A	N/A
08:45-09:00	A	8.81	9.69	N/A	N/A
08:45-09:00	B	1.15	1.27	N/A	N/A

08:45-09:00	**C**	9.23	10.15	N/A	N/A
09:00-09:15	**A**	7.38	8.11	N/A	N/A
09:00-09:15	**B**	0.97	1.06	N/A	N/A
09:00-09:15	**C**	7.73	8.50	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	0.205	9.592
	B	0.656	0.000	0.626
	C	10.049	0.215	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.02	0.98
	B	0.51	0.00	0.49
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.07	6.97	0.08	A	0.57	51.73	5.55	6.44	0.06	5.55	6.44
B-A	0.13	12.41	0.15	B	0.60	54.20	9.42	10.43	0.10	9.42	10.43
C-AB	0.03	6.69	0.03	A	0.20	17.73	1.87	6.34	0.02	1.87	6.34
C-A	-	-	-	-	9.22	829.86	-	-	-	-	-
A-B	-	-	-	-	0.19	16.92	-	-	-	-	-
A-C	-	-	-	-	8.80	792.14	-	-	-	-	-

(Default Analysis Set) - 2025 PM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2014 AM, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2014 PM, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 AM, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 PM, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2025 PM, PM	2025 PM	PM		Varies by Arm	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		7.88	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	A354 East		Major
B	Site Access		Minor
C	A354 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)

C	7.32		0.00	✓	3.50	250.00	✓	13.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	7.30	4.20	3.60	3.60	✓	1.00	215	215

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	12.509	0.129	0.326	0.205	0.465
1	B-C	14.361	0.124	0.315	-	-
1	C-B	13.674	0.300	0.300	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
✓			✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)
A	ONE HOUR	✓	9.87	100.000
B	ONE HOUR	✓	0.51	100.000
C	ONE HOUR	✓	9.63	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/min)	DirectDemandEntryFlowInPCU (PCU/min)	Direct Demand Exit Flow (Veh/min)	Direct Demand Pedestrian Flow (Ped/min)
16:45-17:00	A	7.43	8.17	N/A	N/A
16:45-17:00	B	0.38	0.42	N/A	N/A
16:45-17:00	C	7.25	7.98	N/A	N/A
17:00-17:15	A	8.87	9.76	N/A	N/A
17:00-17:15	B	0.46	0.50	N/A	N/A
17:00-17:15	C	8.66	9.53	N/A	N/A
17:15-17:30	A	10.86	11.95	N/A	N/A
17:15-17:30	B	0.56	0.61	N/A	N/A
17:15-17:30	C	10.61	11.67	N/A	N/A
17:30-17:45	A	10.86	11.95	N/A	N/A
17:30-17:45	B	0.56	0.61	N/A	N/A
17:30-17:45	C	10.61	11.67	N/A	N/A
17:45-18:00	A	8.87	9.76	N/A	N/A
17:45-18:00	B	0.46	0.50	N/A	N/A
17:45-18:00	C	8.66	9.53	N/A	N/A
18:00-18:15	A	7.43	8.17	N/A	N/A
18:00-18:15	B	0.38	0.42	N/A	N/A
18:00-18:15	C	7.25	7.98	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.503	9.363
	B	0.251	0.000	0.257
	C	9.141	0.492	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.05	0.95
	B	0.49	0.00	0.51
	C	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-C	0.03	6.43	0.03	A	0.24	21.21	2.13	6.04	0.02	2.13	6.04
B-A	0.05	11.21	0.05	B	0.23	20.70	3.33	9.66	0.04	3.33	9.66
C-AB	0.06	6.95	0.06	A	0.45	40.59	4.42	6.53	0.05	4.42	6.53
C-A	-	-	-	-	8.39	754.89	-	-	-	-	-
A-B	-	-	-	-	0.46	41.58	-	-	-	-	-
A-C	-	-	-	-	8.59	773.22	-	-	-	-	-

Appendix 7 – ARCADY Outputs

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.1.305 [25 May 2012]

Filename: (new file)
Path:
Report generation date: 01/04/2014 17:02:07

» (Default Analysis Set) - 2014 DM, AM
» (Default Analysis Set) - 2014 DM, PM
» (Default Analysis Set) - 2014 DS, AM
» (Default Analysis Set) - 2014 DS, PM
» (Default Analysis Set) - 2025 DM, AM
» (Default Analysis Set) - 2025 DM, PM
» (Default Analysis Set) - 2025 DS, AM
» (Default Analysis Set) - 2025 DS, PM
» (Default Analysis Set) - 2013 BY, AM
» (Default Analysis Set) - 2013 BY, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013 BY							
Arm 1	0.29	2.95	0.22	A	0.66	3.88	0.38	A
Arm 2	1.23	6.38	0.53	A	1.51	7.36	0.58	A
Arm 3	0.14	4.61	0.12	A	0.11	5.03	0.09	A
Arm 4	0.55	5.44	0.34	A	0.88	6.59	0.45	A
	A1 - 2014 DM							
Arm 1	0.27	2.98	0.20	A	0.64	3.91	0.37	A
Arm 2	1.40	6.76	0.56	A	1.53	7.49	0.58	A
Arm 3	0.14	4.76	0.11	A	0.10	4.73	0.08	A
Arm 4	0.68	5.90	0.39	A	0.86	6.30	0.44	A
	A1 - 2014 DS							
Arm 1	0.27	2.99	0.20	A	2.81	8.99	0.73	A
Arm 2	1.54	7.16	0.58	A	5.50	25.38	0.84	D
Arm 3	0.15	4.88	0.12	A	0.93	9.05	0.48	A
Arm 4	0.70	6.00	0.39	A	6.13	30.03	0.86	D
	A1 - 2025 DM							
Arm 1	0.30	3.08	0.22	A	0.74	4.22	0.41	A
Arm 2	1.68	7.60	0.60	A	1.97	8.85	0.64	A
Arm 3	0.16	5.04	0.13	A	0.12	5.09	0.10	A
Arm 4	0.79	6.35	0.42	A	1.06	7.06	0.50	A
	A1 - 2025 DS							
Arm 1	0.31	3.13	0.23	A	0.76	4.29	0.42	A
Arm 2	1.95	8.33	0.64	A	2.05	9.09	0.65	A
Arm 3	0.17	5.23	0.14	A	0.12	5.14	0.10	A
Arm 4	0.84	6.59	0.44	A	1.09	7.19	0.50	A

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

"D1 - 2014 DM, AM " model duration: 07:45 - 09:15
"D2 - 2014 DM, PM" model duration: 16:45 - 18:15
"D3 - 2014 DS, AM" model duration: 07:45 - 09:15
"D4 - 2014 DS, PM" model duration: 16:45 - 18:15
"D5 - 2025 DM, AM" model duration: 07:45 - 09:15
"D6 - 2025 DM, PM" model duration: 16:45 - 18:15
"D7 - 2025 DS, AM" model duration: 07:45 - 09:15
"D8 - 2025 DS, PM" model duration: 16:45 - 18:15
"D9 - 2013 BY, AM" model duration: 07:45 - 09:15
"D10 - 2013 BY, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.1.305 at 01/04/2014 17:02:03

File summary

File Description

Title	Bournemouth Rd/ Stour Park Capacity Assessment
Location	Blandford St Mary
Site Number	2
Date	14/01/2013
Version	1
Status	-
Identifier	
Client	AIS
Jobnumber	3513028A
Enumerator	CORP\haywardr
Description	2014 with and without dev 2025 with and without dev

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2014 DM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, AM	2014 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			5.63	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	294.00	100.000
2	ONE HOUR	✓	681.00	100.000
3	ONE HOUR	✓	98.00	100.000
4	ONE HOUR	✓	380.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	156.000	50.000	88.000
	2	288.000	0.000	38.000	355.000
	3	13.000	53.000	0.000	32.000
	4	110.000	247.000	23.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.53	0.17	0.30
	2	0.42	0.00	0.06	0.52
	3	0.13	0.54	0.00	0.33
	4	0.29	0.65	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000

	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	2.98	0.27	A
2	0.56	6.76	1.40	A
3	0.11	4.76	0.14	A
4	0.39	5.90	0.68	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	221.34	220.70	241.99	0.00	1678.33	0.132	0.16	2.608	A
2	512.69	510.07	120.82	0.00	1377.49	0.372	0.66	4.611	A
3	73.78	73.46	547.67	0.00	1094.95	0.067	0.08	3.873	A
4	286.08	284.66	265.19	0.00	1153.95	0.248	0.36	4.501	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	264.30	264.13	289.99	0.00	1645.50	0.161	0.20	2.753	A
2	612.21	611.23	144.63	0.00	1362.97	0.449	0.90	5.330	A
3	88.10	88.01	656.18	0.00	1029.20	0.086	0.10	4.204	A
4	341.61	341.15	317.76	0.00	1123.88	0.304	0.47	5.003	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	323.70	323.44	354.96	0.00	1601.08	0.202	0.27	2.977	A
2	749.79	747.85	177.09	0.00	1343.17	0.558	1.39	6.717	A
3	107.90	107.74	802.93	0.00	940.28	0.115	0.14	4.753	A
4	418.39	417.56	388.83	0.00	1083.24	0.386	0.68	5.880	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	323.70	323.70	355.62	0.00	1600.62	0.202	0.27	2.978	A
2	749.79	749.75	177.26	0.00	1343.06	0.558	1.40	6.760	A
3	107.90	107.90	804.80	0.00	939.15	0.115	0.14	4.760	A
4	418.39	418.37	389.74	0.00	1082.72	0.386	0.68	5.898	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	264.30	264.56	291.03	0.00	1644.79	0.161	0.20	2.757	A
2	612.21	614.12	144.91	0.00	1362.80	0.449	0.92	5.371	A

3	88.10	88.25	659.04	0.00	1027.47	0.086	0.10	4.213	A
4	341.61	342.42	319.15	0.00	1123.09	0.304	0.48	5.025	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	221.34	221.51	243.56	0.00	1677.26	0.132	0.16	2.614	A
2	512.69	513.70	121.32	0.00	1377.19	0.372	0.67	4.652	A
3	73.78	73.87	551.34	0.00	1092.72	0.068	0.08	3.885	A
4	286.08	286.56	267.00	0.00	1152.91	0.248	0.36	4.525	A

(Default Analysis Set) - 2014 DM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, PM	2014 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			5.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	

2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	533.00	100.000
2	ONE HOUR	✓	674.00	100.000
3	ONE HOUR	✓	67.00	100.000
4	ONE HOUR	✓	450.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	0.000	339.000	11.000	183.000
	2	254.000	0.000	85.000	335.000
	3	8.000	40.000	0.000	19.000
	4	125.000	263.000	62.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.64	0.02	0.34
	2	0.38	0.00	0.13	0.50
	3	0.12	0.60	0.00	0.28
	4	0.28	0.58	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	3.91	0.64	A
2	0.58	7.49	1.53	A
3	0.08	4.73	0.10	A
4	0.44	6.30	0.86	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	401.27	399.91	273.40	0.00	1656.85	0.242	0.34	3.056	A
2	507.42	504.70	192.00	0.00	1334.08	0.380	0.68	4.838	A
3	50.44	50.23	578.36	0.00	1076.35	0.047	0.05	3.863	A
4	338.78	337.04	226.18	0.00	1176.25	0.288	0.44	4.649	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	479.16	478.73	327.66	0.00	1619.74	0.296	0.45	3.369	A
2	605.91	604.83	229.90	0.00	1310.95	0.462	0.95	5.693	A
3	60.23	60.17	692.92	0.00	1006.94	0.060	0.07	4.187	A
4	404.54	403.95	271.04	0.00	1150.60	0.352	0.58	5.231	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	586.84	586.10	401.02	0.00	1569.58	0.374	0.63	3.906	A
2	742.09	739.83	281.44	0.00	1279.52	0.580	1.52	7.427	A
3	73.77	73.66	847.76	0.00	913.13	0.081	0.10	4.723	A
4	495.46	494.37	331.58	0.00	1115.98	0.444	0.86	6.277	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	586.84	586.83	401.86	0.00	1569.01	0.374	0.64	3.913	A
2	742.09	742.03	281.85	0.00	1279.27	0.580	1.53	7.489	A
3	73.77	73.77	849.93	0.00	911.81	0.081	0.10	4.730	A
4	495.46	495.44	332.49	0.00	1115.46	0.444	0.86	6.304	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	479.16	479.89	328.96	0.00	1618.85	0.296	0.45	3.376	A
2	605.91	608.14	230.55	0.00	1310.56	0.462	0.97	5.750	A
3	60.23	60.34	696.21	0.00	1004.94	0.060	0.07	4.197	A
4	404.54	405.61	272.41	0.00	1149.82	0.352	0.59	5.259	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	401.27	401.70	275.27	0.00	1655.57	0.242	0.34	3.068	A
2	507.42	508.54	192.97	0.00	1333.48	0.381	0.69	4.885	A
3	50.44	50.51	582.33	0.00	1073.95	0.047	0.05	3.875	A
4	338.78	339.39	227.83	0.00	1175.31	0.288	0.44	4.679	A

(Default Analysis Set) - 2014 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, AM	2014 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			5.88	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	296.00	100.000
2	ONE HOUR	✓	711.00	100.000
3	ONE HOUR	✓	99.00	100.000
4	ONE HOUR	✓	383.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	158.000	50.000	88.000
	2	300.000	0.000	40.000	371.000
	3	13.000	54.000	0.000	32.000
	4	110.000	250.000	23.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.53	0.17	0.30
	2	0.42	0.00	0.06	0.52
	3	0.13	0.55	0.00	0.32
	4	0.29	0.65	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000

	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	2.99	0.27	A
2	0.58	7.16	1.54	A
3	0.12	4.88	0.15	A
4	0.39	6.00	0.70	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	222.84	222.20	244.97	0.00	1676.29	0.133	0.16	2.614	A
2	535.28	532.47	120.82	0.00	1377.49	0.389	0.70	4.733	A
3	74.53	74.21	568.57	0.00	1082.28	0.069	0.08	3.925	A
4	288.34	286.89	274.89	0.00	1148.40	0.251	0.36	4.542	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	266.10	265.93	293.58	0.00	1643.05	0.162	0.20	2.762	A
2	639.17	638.09	144.63	0.00	1362.97	0.469	0.97	5.526	A
3	89.00	88.90	681.25	0.00	1014.01	0.088	0.11	4.278	A
4	344.31	343.83	329.40	0.00	1117.22	0.308	0.48	5.064	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	325.90	325.64	359.33	0.00	1598.08	0.204	0.27	2.989	A
2	782.83	780.60	177.09	0.00	1343.17	0.583	1.53	7.102	A
3	109.00	108.84	833.50	0.00	921.76	0.118	0.15	4.867	A
4	421.69	420.83	403.03	0.00	1075.12	0.392	0.70	5.983	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	325.90	325.90	360.02	0.00	1597.61	0.204	0.27	2.990	A
2	782.83	782.77	177.26	0.00	1343.06	0.583	1.54	7.157	A
3	109.00	109.00	835.62	0.00	920.48	0.118	0.15	4.877	A
4	421.69	421.67	404.05	0.00	1074.54	0.392	0.70	6.003	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	266.10	266.36	294.65	0.00	1642.31	0.162	0.21	2.764	A

2	639.17	641.36	144.91	0.00	1362.80	0.469	1.00	5.579	A
3	89.00	89.16	684.47	0.00	1012.06	0.088	0.11	4.290	A
4	344.31	345.15	330.96	0.00	1116.33	0.308	0.49	5.089	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	222.84	223.01	246.58	0.00	1675.19	0.133	0.16	2.621	A
2	535.28	536.40	121.32	0.00	1377.19	0.389	0.71	4.777	A
3	74.53	74.63	572.53	0.00	1079.89	0.069	0.08	3.939	A
4	288.34	288.83	276.84	0.00	1147.28	0.251	0.37	4.568	A

(Default Analysis Set) - 2014 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, PM	2014 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			18.57	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only

1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1041.63	100.000
2	ONE HOUR	✓	746.10	100.000
3	ONE HOUR	✓	339.50	100.000
4	ONE HOUR	✓	709.08	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	393.290	335.770	312.570
	2	319.090	0.000	85.960	341.050
	3	279.430	41.400	0.000	18.670

	4	377.720	269.620	61.740	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.38	0.32	0.30
	2	0.43	0.00	0.12	0.46
	3	0.82	0.12	0.00	0.05
	4	0.53	0.38	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.73	8.99	2.81	A
2	0.84	25.38	5.50	D
3	0.48	9.05	0.93	A
4	0.86	30.03	6.13	D

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	784.19	780.46	278.33	0.00	1653.47	0.474	0.93	4.288	A
2	561.70	557.33	531.87	0.00	1126.77	0.499	1.09	7.002	A
3	255.59	254.18	727.32	0.00	986.10	0.259	0.35	5.002	A
4	533.83	529.28	478.56	0.00	1031.93	0.517	1.14	7.670	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	936.40	934.46	333.49	0.00	1615.75	0.580	1.42	5.502	A
2	670.73	667.68	636.85	0.00	1062.73	0.631	1.85	10.088	B
3	305.20	304.54	871.16	0.00	898.94	0.340	0.52	6.164	A
4	637.45	634.17	573.35	0.00	977.72	0.652	1.96	11.212	B

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1146.86	1141.54	403.48	0.00	1567.89	0.731	2.75	8.707	A
2	821.47	808.48	777.25	0.00	977.09	0.841	5.10	22.287	C
3	373.80	372.24	1057.89	0.00	785.81	0.476	0.91	8.835	A
4	780.71	766.28	697.54	0.00	906.70	0.861	5.57	25.430	D

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1146.86	1146.59	409.34	0.00	1563.89	0.733	2.81	8.993	A
2	821.47	819.89	781.45	0.00	974.53	0.843	5.50	25.379	D
3	373.80	373.71	1069.49	0.00	778.78	0.480	0.93	9.051	A
4	780.71	778.44	703.81	0.00	903.12	0.864	6.13	30.030	D

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	936.40	941.76	342.77	0.00	1609.41	0.582	1.47	5.675	A
2	670.73	684.77	643.08	0.00	1058.93	0.633	1.99	11.114	B
3	305.20	306.76	888.48	0.00	888.45	0.344	0.54	6.324	A
4	637.45	653.46	582.75	0.00	972.34	0.656	2.13	12.760	B

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	784.19	786.27	282.49	0.00	1650.63	0.475	0.95	4.358	A
2	561.70	565.13	536.21	0.00	1124.12	0.500	1.13	7.231	A
3	255.59	256.30	735.96	0.00	980.86	0.261	0.36	5.066	A
4	533.83	537.62	483.90	0.00	1028.87	0.519	1.19	7.976	A

(Default Analysis Set) - 2025 DM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked

2025 DM, AM	2025 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			6.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	316.00	100.000
2	ONE HOUR	✓	732.00	100.000
3	ONE HOUR	✓	107.00	100.000
4	ONE HOUR	✓	409.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	167.000	55.000	94.000
	2	307.000	0.000	41.000	384.000
	3	14.000	58.000	0.000	35.000
	4	118.000	265.000	26.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.53	0.17	0.30
	2	0.42	0.00	0.06	0.52
	3	0.13	0.54	0.00	0.33
	4	0.29	0.65	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
	1	0.000	8.000	0.000	5.000

From	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.22	3.08	0.30	A
2	0.60	7.60	1.68	A
3	0.13	5.04	0.16	A
4	0.42	6.35	0.79	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	237.90	237.20	261.42	0.00	1665.04	0.143	0.18	2.661	A
2	551.09	548.12	131.32	0.00	1371.09	0.402	0.74	4.857	A
3	80.56	80.20	587.98	0.00	1070.52	0.075	0.09	3.996	A
4	307.92	306.32	283.85	0.00	1143.28	0.269	0.40	4.674	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	284.08	283.89	313.30	0.00	1629.56	0.174	0.22	2.825	A
2	658.05	656.86	157.20	0.00	1355.30	0.486	1.04	5.735	A
3	96.19	96.08	704.52	0.00	999.91	0.096	0.12	4.379	A
4	367.68	367.14	340.14	0.00	1111.08	0.331	0.53	5.264	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	347.92	347.62	383.44	0.00	1581.60	0.220	0.30	3.081	A
2	805.95	803.43	192.47	0.00	1333.78	0.604	1.67	7.528	A
3	117.81	117.62	861.84	0.00	904.59	0.130	0.16	5.028	A
4	450.32	449.31	416.11	0.00	1067.64	0.422	0.78	6.327	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	347.92	347.92	384.24	0.00	1581.05	0.220	0.30	3.083	A
2	805.95	805.88	192.68	0.00	1333.66	0.604	1.68	7.598	A
3	117.81	117.81	864.24	0.00	903.14	0.130	0.16	5.039	A
4	450.32	450.30	417.26	0.00	1066.98	0.422	0.79	6.354	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS

1	284.08	284.37	314.55	0.00	1628.71	0.174	0.22	2.830	A
2	658.05	660.53	157.52	0.00	1355.10	0.486	1.06	5.798	A
3	96.19	96.38	708.13	0.00	997.73	0.096	0.12	4.391	A
4	367.68	368.67	341.88	0.00	1110.09	0.331	0.54	5.294	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	237.90	238.09	263.20	0.00	1663.82	0.143	0.18	2.669	A
2	551.09	552.32	131.87	0.00	1370.75	0.402	0.76	4.911	A
3	80.56	80.67	592.21	0.00	1067.96	0.075	0.09	4.010	A
4	307.92	308.47	285.92	0.00	1142.09	0.270	0.40	4.705	A

(Default Analysis Set) - 2025 DM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 DM, PM	2025 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			6.82	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	574.00	100.000
2	ONE HOUR	✓	738.00	100.000
3	ONE HOUR	✓	75.00	100.000
4	ONE HOUR	✓	493.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	364.000	12.000	198.000
	2	278.000	0.000	89.000	371.000

	3	9.000	45.000	0.000	21.000
	4	137.000	292.000	64.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.63	0.02	0.34
	2	0.38	0.00	0.12	0.50
	3	0.12	0.60	0.00	0.28
	4	0.28	0.59	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.41	4.22	0.74	A
2	0.64	8.85	1.97	A
3	0.10	5.09	0.12	A
4	0.50	7.06	1.06	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	432.14	430.61	300.29	0.00	1638.46	0.264	0.38	3.178	A
2	555.61	552.41	205.46	0.00	1325.86	0.419	0.80	5.184	A
3	56.46	56.21	634.33	0.00	1042.44	0.054	0.06	4.019	A

4	371.16	369.14	248.56	0.00	1163.45	0.319	0.50	4.911	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	516.01	515.51	359.91	0.00	1597.69	0.323	0.51	3.549	A
2	663.45	662.05	246.04	0.00	1301.11	0.510	1.15	6.284	A
3	67.42	67.35	760.03	0.00	966.28	0.070	0.08	4.410	A
4	443.20	442.46	297.88	0.00	1135.25	0.390	0.69	5.638	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	631.99	631.07	440.39	0.00	1542.65	0.410	0.74	4.212	A
2	812.55	809.36	301.16	0.00	1267.49	0.641	1.95	8.724	A
3	82.58	82.44	929.44	0.00	863.63	0.096	0.12	5.075	A
4	542.80	541.37	364.24	0.00	1097.30	0.495	1.05	7.015	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	631.99	631.97	441.48	0.00	1541.91	0.410	0.74	4.223	A
2	812.55	812.45	301.67	0.00	1267.18	0.641	1.97	8.845	A
3	82.58	82.57	932.47	0.00	861.80	0.096	0.12	5.087	A
4	542.80	542.77	365.50	0.00	1096.58	0.495	1.06	7.060	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	516.01	516.92	361.59	0.00	1596.54	0.323	0.51	3.565	A
2	663.45	666.61	246.83	0.00	1300.63	0.510	1.18	6.378	A
3	67.42	67.56	764.53	0.00	963.55	0.070	0.08	4.425	A
4	443.20	444.61	299.75	0.00	1134.18	0.391	0.70	5.681	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	432.14	432.65	302.49	0.00	1636.96	0.264	0.38	3.194	A
2	555.61	557.07	206.57	0.00	1325.19	0.419	0.82	5.249	A
3	56.46	56.54	639.13	0.00	1039.53	0.054	0.06	4.035	A
4	371.16	371.92	250.55	0.00	1162.31	0.319	0.51	4.953	A

(Default Analysis Set) - 2025 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked

2025 DS, AM	2025 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			6.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	324.00	100.000
2	ONE HOUR	✓	774.00	100.000
3	ONE HOUR	✓	109.00	100.000
4	ONE HOUR	✓	419.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	175.000	55.000	94.000
	2	323.000	0.000	44.000	407.000
	3	14.000	60.000	0.000	35.000
	4	118.000	275.000	26.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.54	0.17	0.29
	2	0.42	0.00	0.06	0.53
	3	0.13	0.55	0.00	0.32
	4	0.28	0.66	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
	1	0.000	8.000	0.000	5.000

From	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.23	3.13	0.31	A
2	0.64	8.33	1.95	A
3	0.14	5.23	0.17	A
4	0.44	6.59	0.84	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	243.92	243.20	270.38	0.00	1658.91	0.147	0.18	2.686	A
2	582.71	579.44	131.31	0.00	1371.09	0.425	0.82	5.049	A
3	82.06	81.69	617.06	0.00	1052.90	0.078	0.09	4.076	A
4	315.45	313.78	297.27	0.00	1135.60	0.278	0.42	4.760	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	291.27	291.07	324.05	0.00	1622.21	0.180	0.23	2.858	A
2	695.81	694.43	157.20	0.00	1355.30	0.513	1.16	6.059	A
3	97.99	97.87	739.40	0.00	978.78	0.100	0.12	4.495	A
4	376.67	376.09	356.24	0.00	1101.88	0.342	0.56	5.396	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	356.73	356.42	396.57	0.00	1572.62	0.227	0.31	3.128	A
2	852.19	849.13	192.47	0.00	1333.79	0.639	1.92	8.227	A
3	120.01	119.81	904.27	0.00	878.89	0.137	0.17	5.215	A
4	461.33	460.24	435.69	0.00	1056.44	0.437	0.83	6.562	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	356.73	356.73	397.45	0.00	1572.02	0.227	0.31	3.130	A
2	852.19	852.10	192.68	0.00	1333.66	0.639	1.95	8.328	A
3	120.01	120.01	907.15	0.00	877.14	0.137	0.17	5.229	A
4	461.33	461.30	437.06	0.00	1055.66	0.437	0.84	6.594	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	291.27	291.58	325.41	0.00	1621.28	0.180	0.23	2.863	A
2	695.81	698.83	157.53	0.00	1355.10	0.513	1.19	6.143	A
3	97.99	98.19	743.70	0.00	976.17	0.100	0.12	4.512	A
4	376.67	377.74	358.29	0.00	1100.70	0.342	0.57	5.429	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	243.92	244.12	272.27	0.00	1657.62	0.147	0.18	2.691	A
2	582.71	584.15	131.88	0.00	1370.75	0.425	0.83	5.109	A
3	82.06	82.18	621.77	0.00	1050.05	0.078	0.09	4.092	A
4	315.45	316.04	299.56	0.00	1134.29	0.278	0.42	4.793	A

(Default Analysis Set) - 2025 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 DS, PM	2025 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			6.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	581.00	100.000
2	ONE HOUR	✓	749.00	100.000
3	ONE HOUR	✓	76.00	100.000
4	ONE HOUR	✓	499.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To				
		1	2	3	4

From	1	0.000	371.000	12.000	198.000
	2	282.000	0.000	90.000	377.000
	3	9.000	46.000	0.000	21.000
	4	137.000	298.000	64.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.64	0.02	0.34
	2	0.38	0.00	0.12	0.50
	3	0.12	0.61	0.00	0.28
	4	0.27	0.60	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.42	4.29	0.76	A
2	0.65	9.09	2.05	A
3	0.10	5.14	0.12	A
4	0.50	7.19	1.09	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	437.41	435.85	305.51	0.00	1634.89	0.268	0.39	3.201	A

2	563.89	560.61	205.46	0.00	1325.87	0.425	0.82	5.238	A
3	57.22	56.96	641.78	0.00	1037.92	0.055	0.06	4.041	A
4	375.67	373.61	252.29	0.00	1161.32	0.323	0.52	4.952	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	522.31	521.79	366.18	0.00	1593.40	0.328	0.52	3.585	A
2	673.34	671.88	246.04	0.00	1301.11	0.518	1.18	6.386	A
3	68.32	68.24	768.97	0.00	960.86	0.071	0.08	4.442	A
4	448.59	447.83	302.35	0.00	1132.69	0.396	0.71	5.705	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	639.69	638.74	448.05	0.00	1537.42	0.416	0.75	4.273	A
2	824.66	821.29	301.15	0.00	1267.50	0.651	2.03	8.951	A
3	83.68	83.54	940.28	0.00	857.07	0.098	0.12	5.127	A
4	549.41	547.91	369.67	0.00	1094.20	0.502	1.08	7.138	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	639.69	639.68	449.19	0.00	1536.64	0.416	0.76	4.285	A
2	824.66	824.55	301.67	0.00	1267.18	0.651	2.05	9.086	A
3	83.68	83.68	943.47	0.00	855.13	0.098	0.12	5.140	A
4	549.41	549.37	371.00	0.00	1093.44	0.502	1.09	7.188	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	522.31	523.24	367.93	0.00	1592.20	0.328	0.52	3.601	A
2	673.34	676.68	246.85	0.00	1300.62	0.518	1.22	6.484	A
3	68.32	68.46	773.69	0.00	958.00	0.071	0.09	4.460	A
4	448.59	450.06	304.31	0.00	1131.57	0.396	0.72	5.752	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	437.41	437.93	307.78	0.00	1633.34	0.268	0.39	3.216	A
2	563.89	565.41	206.57	0.00	1325.18	0.426	0.84	5.309	A
3	57.22	57.30	646.72	0.00	1034.93	0.055	0.06	4.058	A
4	375.67	376.46	254.34	0.00	1160.15	0.324	0.52	4.997	A

(Default Analysis Set) - 2013 BY, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 BY, AM	2013 BY	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			5.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	326.00	100.000
2	ONE HOUR	✓	633.00	100.000
3	ONE HOUR	✓	102.00	100.000
4	ONE HOUR	✓	330.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	161.000	70.000	95.000
	2	284.000	0.000	38.000	311.000
	3	17.000	53.000	0.000	32.000
	4	116.000	191.000	23.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.49	0.21	0.29
	2	0.45	0.00	0.06	0.49
	3	0.17	0.52	0.00	0.31
	4	0.35	0.58	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To

		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.22	2.95	0.29	A
2	0.53	6.38	1.23	A
3	0.12	4.61	0.14	A
4	0.34	5.44	0.55	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	245.43	244.72	200.08	0.00	1706.99	0.144	0.18	2.591	A
2	476.56	474.19	141.10	0.00	1365.12	0.349	0.59	4.487	A
3	76.79	76.47	517.03	0.00	1113.51	0.069	0.08	3.801	A
4	248.44	247.26	265.22	0.00	1153.92	0.215	0.30	4.308	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	293.07	292.89	239.74	0.00	1679.86	0.174	0.22	2.733	A
2	569.05	568.20	168.89	0.00	1348.17	0.422	0.81	5.134	A
3	91.70	91.60	619.44	0.00	1051.46	0.087	0.10	4.106	A
4	296.66	296.30	317.79	0.00	1123.86	0.264	0.39	4.724	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	358.93	358.65	293.49	0.00	1643.11	0.218	0.29	2.951	A
2	696.95	695.30	206.80	0.00	1325.04	0.526	1.22	6.348	A
3	112.30	112.15	758.07	0.00	967.47	0.116	0.14	4.609	A
4	363.34	362.71	388.91	0.00	1083.19	0.335	0.54	5.424	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	358.93	358.93	293.96	0.00	1642.79	0.218	0.29	2.952	A
2	696.95	696.91	206.99	0.00	1324.93	0.526	1.23	6.381	A
3	112.30	112.30	759.67	0.00	966.50	0.116	0.14	4.614	A
4	363.34	363.33	389.74	0.00	1082.72	0.336	0.55	5.436	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	293.07	293.35	240.51	0.00	1679.34	0.175	0.22	2.737	A
2	569.05	570.68	169.19	0.00	1347.98	0.422	0.82	5.168	A
3	91.70	91.85	621.90	0.00	1049.97	0.087	0.11	4.116	A
4	296.66	297.28	319.07	0.00	1123.13	0.264	0.39	4.740	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	245.43	245.61	201.30	0.00	1706.15	0.144	0.18	2.595	A
2	476.56	477.43	141.66	0.00	1364.78	0.349	0.60	4.521	A
3	76.79	76.89	520.35	0.00	1111.50	0.069	0.08	3.812	A
4	248.44	248.81	266.97	0.00	1152.93	0.215	0.30	4.327	A

(Default Analysis Set) - 2013 BY, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 BY, PM	2013 BY	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Bournemouth Rd'Stour Park Roundabout	Roundabout	1,2,3,4			5.96	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Stour Park	Stour Park
2	Bournemouth Rd (South)	Bournemouth Rd (South)
3	Birch Avenue	Birch Avenue
4	Bournemouth Rd (North)	Bournemouth Road (North)

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	6.01	6.14	1.30	19.86	32.00	31.00	
2	3.76	5.30	8.00	27.05	32.00	29.00	
3	3.45	5.65	8.00	24.37	32.00	27.00	
4	3.50	5.99	4.18	18.47	32.00	32.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.684	1843.810
2		(calculated)	(calculated)	0.610	1451.185
3		(calculated)	(calculated)	0.606	1426.773
4		(calculated)	(calculated)	0.572	1305.596

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	555.00	100.000
2	ONE HOUR	✓	678.00	100.000
3	ONE HOUR	✓	70.00	100.000
4	ONE HOUR	✓	441.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4

From	1	0.000	337.000	13.000	205.000
	2	308.000	0.000	36.000	334.000
	3	11.000	40.000	0.000	19.000
	4	157.000	263.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.61	0.02	0.37
	2	0.45	0.00	0.05	0.49
	3	0.16	0.57	0.00	0.27
	4	0.36	0.60	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.080	1.000	1.050
	2	1.090	1.000	1.160	1.130
	3	1.000	1.120	1.000	1.110
	4	1.070	1.100	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	8.000	0.000	5.000
	2	9.000	0.000	16.000	13.000
	3	0.000	12.000	0.000	11.000
	4	7.000	10.000	6.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.38	3.88	0.66	A
2	0.58	7.36	1.51	A
3	0.09	5.03	0.11	A
4	0.45	6.59	0.88	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	417.83	416.42	242.67	0.00	1677.87	0.249	0.35	3.042	A

2	510.43	507.72	179.30	0.00	1341.82	0.380	0.68	4.788	A
3	52.70	52.47	634.58	0.00	1042.29	0.051	0.06	3.987	A
4	332.01	330.26	268.87	0.00	1151.84	0.288	0.44	4.754	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	498.93	498.49	290.84	0.00	1644.92	0.303	0.46	3.350	A
2	609.51	608.44	214.65	0.00	1320.25	0.462	0.94	5.621	A
3	62.93	62.86	760.26	0.00	966.14	0.065	0.08	4.370	A
4	396.45	395.84	322.20	0.00	1121.34	0.354	0.59	5.390	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	611.07	610.30	355.92	0.00	1600.42	0.382	0.65	3.873	A
2	746.49	744.27	262.79	0.00	1290.90	0.578	1.50	7.301	A
3	77.07	76.95	930.18	0.00	863.19	0.089	0.11	5.021	A
4	485.55	484.40	394.17	0.00	1080.19	0.450	0.88	6.559	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	611.07	611.06	356.71	0.00	1599.88	0.382	0.66	3.883	A
2	746.49	746.44	263.14	0.00	1290.68	0.578	1.51	7.358	A
3	77.07	77.07	932.51	0.00	861.78	0.089	0.11	5.030	A
4	485.55	485.53	395.24	0.00	1079.57	0.450	0.88	6.588	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	498.93	499.69	292.06	0.00	1644.08	0.303	0.47	3.357	A
2	609.51	611.69	215.21	0.00	1319.92	0.462	0.97	5.676	A
3	62.93	63.05	763.79	0.00	964.00	0.065	0.08	4.382	A
4	396.45	397.58	323.81	0.00	1120.42	0.354	0.60	5.422	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	417.83	418.28	244.37	0.00	1676.70	0.249	0.36	3.054	A
2	510.43	511.54	180.14	0.00	1341.31	0.381	0.69	4.836	A
3	52.70	52.77	638.88	0.00	1039.68	0.051	0.06	4.001	A
4	332.01	332.63	270.83	0.00	1150.72	0.289	0.44	4.787	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.1.305 [25 May 2012]

Filename: (new file)
Path:
Report generation date: 22/11/2013 08:32:10

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013 BY							
Arm 1	1.41	4.77	0.57	A	1.51	5.13	0.60	A
Arm 2	1.17	6.80	0.53	A	1.21	7.09	0.55	A
Arm 3	0.59	3.86	0.36	A	0.56	4.04	0.34	A
Arm 4	0.67	4.69	0.40	A	1.32	6.38	0.57	A
	A1 - 2014 DM							
Arm 1	1.70	5.44	0.62	A	1.85	5.98	0.65	A
Arm 2	1.64	8.64	0.62	A	1.67	8.94	0.62	A
Arm 3	0.76	4.53	0.42	A	0.70	4.64	0.39	A
Arm 4	0.78	4.99	0.43	A	1.89	8.01	0.66	A
	A1 - 2014 DS							
Arm 1	1.76	5.58	0.63	A	2.01	6.37	0.67	A
Arm 2	1.96	9.73	0.66	A	1.91	9.86	0.66	A
Arm 3	0.89	4.97	0.46	A	0.75	4.81	0.41	A
Arm 4	0.84	5.27	0.45	A	2.06	8.58	0.68	A
	A1 - 2025 DM							
Arm 1	2.24	6.60	0.68	A	2.67	7.86	0.73	A

Arm 2	2.35	11.41	0.70	B	2.56	12.64	0.72	B
Arm 3	0.95	5.24	0.48	A	0.90	5.46	0.46	A
Arm 4	1.08	6.02	0.51	A	2.84	11.10	0.74	B
	A1 - 2025 DS							
Arm 1	2.32	6.79	0.69	A	2.94	8.54	0.75	A
Arm 2	2.89	13.38	0.74	B	3.04	14.55	0.76	B
Arm 3	1.13	5.84	0.52	A	0.97	5.70	0.47	A
Arm 4	1.16	6.43	0.53	A	3.17	12.21	0.76	B

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

"D1 - 2014 DM, AM " model duration: 07:45 - 09:15
"D2 - 2014 DM, PM" model duration: 16:45 - 18:15
"D3 - 2014 DS, AM" model duration: 07:45 - 09:15
"D4 - 2014 DS, PM" model duration: 16:45 - 18:15
"D5 - 2025 DM, AM" model duration: 07:45 - 09:15
"D6 - 2025 DM, PM" model duration: 16:45 - 18:15
"D7 - 2025 DS, AM" model duration: 07:45 - 09:15
"D8 - 2025 DS, PM" model duration: 16:45 - 18:15
"D9 - 2013 BY, AM" model duration: 07:45 - 09:15
"D10 - 2013 BY, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.1.305 at 22/11/2013 08:32:06

File summary

File Description

Title	A354/A350 Capacity Assessment
Location	Blandford St Mary
Site Number	1
Date	14/01/2013
Version	1
Status	-
Identifier	
Client	AIS
Jobnumber	3513028A
Enumerator	CORP\haywardr
Description	2014 with and without dev 2025 with and without dev

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)

5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2014 DM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, AM	2014 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			5.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1028.92	100.000
2	ONE HOUR	✓	629.54	100.000
3	ONE HOUR	✓	549.48	100.000
4	ONE HOUR	✓	514.45	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	394.370	399.380	235.170
	2	293.280	0.000	7.010	329.250
	3	319.300	0.000	0.000	230.180
	4	208.200	187.150	119.100	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.38	0.39	0.23
	2	0.47	0.00	0.01	0.52
	3	0.58	0.00	0.00	0.42

	4	0.40	0.36	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.62	5.44	1.70	A
2	0.62	8.64	1.64	A
3	0.42	4.53	0.76	A
4	0.43	4.99	0.78	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	774.62	771.76	229.67	0.00	1905.93	0.406	0.72	3.329	A
2	473.95	471.55	565.28	0.00	1285.01	0.369	0.60	4.563	A
3	413.68	412.30	642.70	0.00	1657.35	0.250	0.35	3.011	A
4	387.30	385.81	459.26	0.00	1442.04	0.269	0.37	3.483	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	924.98	923.77	274.99	0.00	1873.20	0.494	1.02	3.982	A
2	565.94	564.79	676.65	0.00	1217.13	0.465	0.89	5.694	A
3	493.97	493.44	769.64	0.00	1563.38	0.316	0.48	3.505	A
4	462.48	461.93	549.85	0.00	1383.88	0.334	0.51	3.993	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1132.86	1130.19	336.55	0.00	1828.74	0.619	1.69	5.399	A
2	693.14	690.21	827.89	0.00	1124.95	0.616	1.62	8.503	A
3	604.99	603.90	940.84	0.00	1436.64	0.421	0.75	4.501	A
4	566.42	565.35	672.46	0.00	1305.17	0.434	0.78	4.972	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1132.86	1132.81	337.18	0.00	1828.29	0.620	1.70	5.443	A
2	693.14	693.05	829.75	0.00	1123.82	0.617	1.64	8.635	A
3	604.99	604.97	944.25	0.00	1434.12	0.422	0.76	4.525	A
4	566.42	566.40	674.41	0.00	1303.92	0.434	0.78	4.994	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	924.98	927.63	275.94	0.00	1872.52	0.494	1.04	4.019	A
2	565.94	568.87	679.40	0.00	1215.45	0.466	0.91	5.783	A
3	493.97	495.06	774.55	0.00	1559.74	0.317	0.49	3.530	A
4	462.48	463.54	552.69	0.00	1382.06	0.335	0.52	4.014	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	774.62	775.87	230.89	0.00	1905.05	0.407	0.73	3.358	A
2	473.95	475.15	568.28	0.00	1283.17	0.369	0.61	4.612	A
3	413.68	414.22	647.20	0.00	1654.02	0.250	0.35	3.027	A
4	387.30	387.86	462.06	0.00	1440.24	0.269	0.38	3.504	A

(Default Analysis Set) - 2014 DM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DM, PM	2014 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			6.92	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812

2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1020.07	100.000
2	ONE HOUR	✓	617.21	100.000
3	ONE HOUR	✓	494.97	100.000
4	ONE HOUR	✓	782.46	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	381.810	325.690	312.570
	2	310.660	0.000	12.030	294.520
	3	270.570	19.040	0.000	205.360
	4	377.720	235.420	169.320	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.37	0.32	0.31
	2	0.50	0.00	0.02	0.48
	3	0.55	0.04	0.00	0.41
	4	0.48	0.30	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.65	5.98	1.85	A

2	0.62	8.94	1.67	A
3	0.39	4.64	0.70	A
4	0.66	8.01	1.89	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	767.96	765.07	317.58	0.00	1842.44	0.417	0.72	3.391	A
2	464.67	462.32	605.59	0.00	1260.44	0.369	0.59	4.560	A
3	372.64	371.35	687.74	0.00	1624.00	0.229	0.32	3.111	A
4	589.08	586.34	449.98	0.00	1448.00	0.407	0.68	4.182	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	917.02	915.71	380.26	0.00	1797.17	0.510	1.05	4.149	A
2	554.86	553.69	724.89	0.00	1187.73	0.467	0.88	5.746	A
3	444.97	444.47	823.49	0.00	1523.51	0.292	0.44	3.612	A
4	703.42	702.09	538.76	0.00	1391.01	0.506	1.02	5.239	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1123.12	1120.00	464.79	0.00	1736.12	0.647	1.83	5.915	A
2	679.56	676.52	886.47	0.00	1089.24	0.624	1.64	8.777	A
3	544.97	543.97	1006.52	0.00	1388.02	0.393	0.69	4.615	A
4	861.50	858.10	658.79	0.00	1313.95	0.656	1.87	7.872	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1123.12	1123.04	466.53	0.00	1734.86	0.647	1.85	5.983	A

2	679.56	679.46	889.09	0.00	1087.65	0.625	1.67	8.935	A
3	544.97	544.95	1010.34	0.00	1385.19	0.393	0.70	4.641	A
4	861.50	861.40	660.85	0.00	1312.63	0.656	1.89	8.007	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	917.02	920.13	382.77	0.00	1795.36	0.511	1.07	4.198	A
2	554.86	557.91	728.68	0.00	1185.42	0.468	0.90	5.845	A
3	444.97	445.96	828.98	0.00	1519.45	0.293	0.45	3.635	A
4	703.42	706.82	541.75	0.00	1389.09	0.506	1.04	5.326	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	767.96	769.32	319.78	0.00	1840.85	0.417	0.73	3.421	A
2	464.67	465.89	609.14	0.00	1258.27	0.369	0.60	4.612	A
3	372.64	373.14	692.54	0.00	1620.45	0.230	0.32	3.129	A
4	589.08	590.46	452.82	0.00	1446.17	0.407	0.70	4.233	A

(Default Analysis Set) - 2014 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, AM	2014 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			6.38	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1039.06	100.000
2	ONE HOUR	✓	668.76	100.000
3	ONE HOUR	✓	587.80	100.000
4	ONE HOUR	✓	521.43	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	399.350	404.540	235.170
	2	313.540	0.000	7.650	347.570
	3	343.510	0.000	0.000	244.290
	4	208.200	191.310	121.920	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.38	0.39	0.23
	2	0.47	0.00	0.01	0.52
	3	0.58	0.00	0.00	0.42
	4	0.40	0.37	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240

	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.63	5.58	1.76	A
2	0.66	9.73	1.96	A
3	0.46	4.97	0.89	A
4	0.45	5.27	0.84	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	782.26	779.34	234.88	0.00	1902.17	0.411	0.73	3.363	A
2	503.48	500.82	571.23	0.00	1281.37	0.393	0.66	4.752	A
3	442.53	440.99	671.48	0.00	1636.04	0.270	0.38	3.136	A
4	392.56	391.01	492.52	0.00	1420.69	0.276	0.39	3.573	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	934.09	932.85	281.23	0.00	1868.69	0.500	1.04	4.040	A
2	601.20	599.84	683.78	0.00	1212.78	0.496	1.00	6.058	A
3	528.42	527.79	804.11	0.00	1537.86	0.344	0.54	3.713	A
4	468.75	468.17	589.67	0.00	1358.32	0.345	0.54	4.136	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS

1	1144.03	1141.22	344.16	0.00	1823.24	0.627	1.74	5.527	A
2	736.32	732.62	836.57	0.00	1119.66	0.658	1.93	9.526	A
3	647.18	645.83	982.53	0.00	1405.77	0.460	0.88	4.928	A
4	574.11	572.92	720.90	0.00	1274.07	0.451	0.83	5.245	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1144.03	1143.97	344.86	0.00	1822.74	0.628	1.76	5.577	A
2	736.32	736.19	838.53	0.00	1118.47	0.658	1.96	9.727	A
3	647.18	647.15	986.68	0.00	1402.70	0.461	0.89	4.966	A
4	574.11	574.08	723.35	0.00	1272.50	0.451	0.84	5.274	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	934.09	936.88	282.29	0.00	1867.93	0.500	1.06	4.079	A
2	601.20	604.91	686.68	0.00	1211.01	0.496	1.03	6.178	A
3	528.42	529.76	810.04	0.00	1533.47	0.345	0.55	3.745	A
4	468.75	469.92	593.20	0.00	1356.05	0.346	0.54	4.164	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	782.26	783.54	236.18	0.00	1901.23	0.411	0.74	3.390	A
2	503.48	504.90	574.33	0.00	1279.49	0.394	0.68	4.813	A
3	442.53	443.17	676.47	0.00	1632.35	0.271	0.39	3.156	A
4	392.56	393.16	495.71	0.00	1418.64	0.277	0.39	3.593	A

(Default Analysis Set) - 2014 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014 DS, PM	2014 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			7.44	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	

4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1041.67	100.000

2	ONE HOUR	✓	641.73	100.000
3	ONE HOUR	✓	510.93	100.000
4	ONE HOUR	✓	797.52	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	393.130	335.970	312.570
	2	319.200	0.000	21.230	301.300
	3	279.260	20.870	0.000	210.800
	4	377.720	243.750	176.050	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.38	0.32	0.30
	2	0.50	0.00	0.03	0.47
	3	0.55	0.04	0.00	0.41
	4	0.47	0.31	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.67	6.37	2.01	A
2	0.66	9.86	1.91	A
3	0.41	4.81	0.75	A
4	0.68	8.58	2.06	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	784.22	781.20	330.20	0.00	1833.33	0.428	0.76	3.470	A
2	483.13	480.60	618.28	0.00	1252.70	0.386	0.63	4.712	A
3	384.65	383.31	699.12	0.00	1615.58	0.238	0.34	3.162	A
4	600.41	597.56	464.22	0.00	1438.86	0.417	0.71	4.283	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	936.44	935.02	395.38	0.00	1786.26	0.524	1.11	4.295	A

2	576.90	575.59	740.09	0.00	1178.46	0.490	0.96	6.040	A
3	459.32	458.79	837.11	0.00	1513.43	0.303	0.47	3.696	A
4	716.95	715.52	555.80	0.00	1380.06	0.520	1.07	5.428	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1146.90	1143.40	483.13	0.00	1722.88	0.666	1.99	6.283	A
2	706.56	702.91	904.87	0.00	1078.03	0.655	1.87	9.636	A
3	562.54	561.45	1022.75	0.00	1376.00	0.409	0.74	4.782	A
4	878.09	874.26	679.44	0.00	1300.69	0.675	2.03	8.402	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1146.90	1146.81	485.12	0.00	1721.44	0.666	2.01	6.371	A
2	706.56	706.42	907.80	0.00	1076.25	0.657	1.91	9.860	A
3	562.54	562.52	1027.17	0.00	1372.73	0.410	0.75	4.813	A
4	878.09	877.95	681.81	0.00	1299.17	0.676	2.06	8.577	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	936.44	939.93	398.22	0.00	1784.20	0.525	1.13	4.355	A
2	576.90	580.57	744.31	0.00	1175.89	0.491	0.99	6.166	A
3	459.32	460.40	843.40	0.00	1508.77	0.304	0.48	3.726	A
4	716.95	720.79	559.23	0.00	1377.86	0.520	1.10	5.533	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	784.22	785.70	332.57	0.00	1831.61	0.428	0.77	3.505	A
2	483.13	484.51	622.04	0.00	1250.41	0.386	0.64	4.775	A
3	384.65	385.20	704.24	0.00	1611.79	0.239	0.34	3.180	A
4	600.41	601.92	467.27	0.00	1436.90	0.418	0.73	4.339	A

(Default Analysis Set) - 2025 DM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 DM, AM	2025 DM	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			7.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South

4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1121.41	100.000
2	ONE HOUR	✓	685.35	100.000
3	ONE HOUR	✓	598.58	100.000
4	ONE HOUR	✓	589.31	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	431.520	437.190	252.700
	2	323.190	0.000	7.670	354.490
	3	350.690	0.000	0.000	247.890
	4	258.010	202.200	129.100	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.38	0.39	0.23
	2	0.47	0.00	0.01	0.52
	3	0.59	0.00	0.00	0.41
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To

		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.68	6.60	2.24	A
2	0.70	11.41	2.35	B
3	0.48	5.24	0.95	A
4	0.51	6.02	1.08	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	844.26	840.89	248.37	0.00	1892.43	0.446	0.84	3.588	A

2	515.97	513.11	614.10	0.00	1255.25	0.411	0.71	4.996	A
3	450.64	449.04	696.85	0.00	1617.26	0.279	0.40	3.208	A
4	443.66	441.80	505.04	0.00	1412.65	0.314	0.47	3.788	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1008.12	1006.55	297.40	0.00	1857.02	0.543	1.24	4.443	A
2	616.12	614.53	735.12	0.00	1181.49	0.521	1.11	6.545	A
3	538.11	537.43	834.47	0.00	1515.38	0.355	0.57	3.835	A
4	529.78	529.01	604.66	0.00	1348.70	0.393	0.66	4.491	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1234.70	1230.79	363.84	0.00	1809.03	0.683	2.21	6.503	A
2	754.58	749.85	898.96	0.00	1081.63	0.698	2.29	11.061	B
3	659.05	657.55	1018.81	0.00	1378.92	0.478	0.94	5.192	A
4	648.84	647.20	738.85	0.00	1262.56	0.514	1.07	5.971	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1234.70	1234.59	364.75	0.00	1808.38	0.683	2.24	6.595	A
2	754.58	754.38	901.65	0.00	1079.99	0.699	2.35	11.411	B
3	659.05	659.01	1024.14	0.00	1374.97	0.479	0.95	5.241	A
4	648.84	648.80	741.84	0.00	1260.64	0.515	1.08	6.020	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1008.12	1012.02	298.75	0.00	1856.04	0.543	1.26	4.505	A
2	616.12	620.91	739.01	0.00	1179.12	0.523	1.15	6.722	A
3	538.11	539.60	842.01	0.00	1509.80	0.356	0.58	3.875	A
4	529.78	531.41	608.94	0.00	1345.95	0.394	0.67	4.533	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS

1	844.26	845.89	249.86	0.00	1891.35	0.446	0.85	3.628	A
2	515.97	517.64	617.76	0.00	1253.02	0.412	0.73	5.073	A
3	450.64	451.34	702.46	0.00	1613.11	0.279	0.41	3.233	A
4	443.66	444.45	508.53	0.00	1410.41	0.315	0.47	3.815	A

(Default Analysis Set) - 2025 DM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 DM, PM	2025 DM	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			9.33	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1125.00	100.000
2	ONE HOUR	✓	677.82	100.000
3	ONE HOUR	✓	544.13	100.000
4	ONE HOUR	✓	856.16	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	422.770	360.700	341.530
	2	343.720	0.000	13.320	320.780
	3	299.530	21.090	0.000	223.510
	4	414.140	256.600	185.420	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.38	0.32	0.30
	2	0.51	0.00	0.02	0.47
	3	0.55	0.04	0.00	0.41

	4	0.48	0.30	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.73	7.86	2.67	A
2	0.72	12.64	2.56	B
3	0.46	5.46	0.90	A
4	0.74	11.10	2.84	B

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	846.96	843.45	346.88	0.00	1821.28	0.465	0.88	3.731	A
2	510.30	507.43	665.36	0.00	1224.01	0.417	0.72	5.073	A
3	409.65	408.13	753.51	0.00	1575.32	0.260	0.38	3.337	A
4	644.56	641.24	497.80	0.00	1417.30	0.455	0.83	4.640	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1011.35	1009.52	415.33	0.00	1771.85	0.571	1.34	4.792	A
2	609.35	607.67	796.42	0.00	1144.13	0.533	1.14	6.781	A
3	489.16	488.52	902.20	0.00	1465.24	0.334	0.54	3.990	A
4	769.67	767.78	596.00	0.00	1354.26	0.568	1.30	6.145	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1238.65	1233.52	506.81	0.00	1705.78	0.726	2.62	7.672	A
2	746.29	740.89	972.85	0.00	1036.60	0.720	2.49	12.124	B
3	599.10	597.68	1100.80	0.00	1318.22	0.454	0.89	5.401	A
4	942.65	936.78	727.88	0.00	1269.60	0.742	2.77	10.677	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1238.65	1238.46	509.74	0.00	1703.66	0.727	2.67	7.864	A
2	746.29	746.00	977.14	0.00	1033.99	0.722	2.56	12.640	B
3	599.10	599.06	1107.32	0.00	1313.40	0.456	0.90	5.459	A
4	942.65	942.36	731.28	0.00	1267.41	0.744	2.84	11.097	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1011.35	1016.51	419.47	0.00	1768.86	0.572	1.37	4.902	A
2	609.35	614.86	802.49	0.00	1140.43	0.534	1.18	7.014	A
3	489.16	490.57	911.38	0.00	1458.45	0.335	0.55	4.035	A
4	769.67	775.64	600.86	0.00	1351.14	0.570	1.35	6.345	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	846.96	848.89	349.72	0.00	1819.23	0.466	0.89	3.780	A
2	510.30	512.09	669.91	0.00	1221.24	0.418	0.73	5.160	A
3	409.65	410.31	759.73	0.00	1570.71	0.261	0.38	3.362	A
4	644.56	646.57	501.45	0.00	1414.95	0.456	0.85	4.718	A

(Default Analysis Set) - 2025 DS, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 DS, AM	2025 DS	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			8.07	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812

2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1131.56	100.000
2	ONE HOUR	✓	724.58	100.000
3	ONE HOUR	✓	636.91	100.000
4	ONE HOUR	✓	596.29	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	**2**	**3**	**4**
From	**1**	0.000	436.500	442.360	252.700
	2	343.450	0.000	8.310	372.820
	3	374.900	0.000	0.000	262.010
	4	258.010	206.360	131.920	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.39	0.22
	2	0.47	0.00	0.01	0.51
	3	0.59	0.00	0.00	0.41
	4	0.43	0.35	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.69	6.79	2.32	A

2	0.74	13.38	2.89	B
3	0.52	5.84	1.13	A
4	0.53	6.43	1.16	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	851.90	848.47	253.58	0.00	1888.67	0.451	0.86	3.627	A
2	545.50	542.34	620.06	0.00	1251.62	0.436	0.79	5.224	A
3	479.50	477.72	725.60	0.00	1595.98	0.300	0.45	3.349	A
4	448.92	446.98	538.26	0.00	1391.32	0.323	0.48	3.893	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1017.25	1015.61	303.64	0.00	1852.51	0.549	1.27	4.514	A
2	651.38	649.51	742.25	0.00	1177.14	0.553	1.26	7.027	A
3	572.57	571.77	868.86	0.00	1489.92	0.384	0.65	4.084	A
4	536.05	535.23	644.42	0.00	1323.17	0.405	0.69	4.670	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1245.87	1241.76	371.41	0.00	1803.56	0.691	2.30	6.689	A
2	797.78	791.58	907.59	0.00	1076.38	0.741	2.81	12.796	B
3	701.25	699.38	1059.81	0.00	1348.57	0.520	1.11	5.764	A
4	656.53	654.69	786.88	0.00	1231.72	0.533	1.15	6.363	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1245.87	1245.76	372.43	0.00	1802.83	0.691	2.32	6.789	A

2	797.78	797.44	910.44	0.00	1074.64	0.742	2.89	13.383	B
3	701.25	701.19	1066.50	0.00	1343.62	0.522	1.13	5.841	A
4	656.53	656.48	790.73	0.00	1229.25	0.534	1.16	6.431	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1017.25	1021.36	305.14	0.00	1851.42	0.549	1.30	4.582	A
2	651.38	657.72	746.37	0.00	1174.64	0.555	1.31	7.284	A
3	572.57	574.44	878.27	0.00	1482.96	0.386	0.66	4.140	A
4	536.05	537.88	649.89	0.00	1319.66	0.406	0.71	4.722	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	851.90	853.60	255.16	0.00	1887.52	0.451	0.87	3.669	A
2	545.50	547.50	623.83	0.00	1249.32	0.437	0.81	5.317	A
3	479.50	480.33	731.85	0.00	1591.35	0.301	0.45	3.382	A
4	448.92	449.78	542.25	0.00	1388.76	0.323	0.49	3.926	A

(Default Analysis Set) - 2025 DS, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 DS, PM	2025 DS	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			10.32	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1146.59	100.000
2	ONE HOUR	✓	702.34	100.000
3	ONE HOUR	✓	560.09	100.000
4	ONE HOUR	✓	871.22	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
From		1	2	3	4
	1	0.000	434.080	370.980	341.530
	2	352.260	0.000	22.520	327.560
	3	308.210	22.920	0.000	228.960
	4	414.140	264.930	192.150	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
From		1	2	3	4
	1	0.00	0.38	0.32	0.30
	2	0.50	0.00	0.03	0.47
	3	0.55	0.04	0.00	0.41
	4	0.48	0.30	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
From		1	2	3	4
	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
From		1	2	3	4
	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340

	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.75	8.54	2.94	A
2	0.76	14.55	3.04	B
3	0.47	5.70	0.97	A
4	0.76	12.21	3.17	B

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	863.21	859.54	359.48	0.00	1812.18	0.476	0.92	3.830	A
2	528.76	525.67	678.03	0.00	1216.29	0.435	0.77	5.262	A
3	421.67	420.08	764.84	0.00	1566.93	0.269	0.40	3.396	A
4	655.90	652.43	512.01	0.00	1408.18	0.466	0.87	4.762	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1030.76	1028.76	430.40	0.00	1760.96	0.585	1.42	4.987	A
2	631.39	629.48	811.58	0.00	1134.89	0.556	1.25	7.193	A
3	503.51	502.82	915.73	0.00	1455.23	0.346	0.57	4.093	A
4	783.21	781.15	612.99	0.00	1343.35	0.583	1.38	6.408	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS

1	1262.42	1256.56	524.87	0.00	1692.73	0.746	2.88	8.286	A
2	773.29	766.57	990.91	0.00	1025.59	0.754	2.93	13.747	B
3	616.67	615.12	1116.28	0.00	1306.76	0.472	0.96	5.626	A
4	959.23	952.46	748.14	0.00	1256.59	0.763	3.07	11.635	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1262.42	1262.17	528.28	0.00	1690.26	0.747	2.94	8.542	A
2	773.29	772.85	995.81	0.00	1022.61	0.756	3.04	14.549	B
3	616.67	616.62	1124.03	0.00	1301.02	0.474	0.97	5.698	A
4	959.23	958.84	752.18	0.00	1254.00	0.765	3.17	12.209	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1030.76	1036.69	435.21	0.00	1757.48	0.587	1.46	5.123	A
2	631.39	638.32	818.48	0.00	1130.68	0.558	1.31	7.515	A
3	503.51	505.06	926.65	0.00	1447.14	0.348	0.58	4.148	A
4	783.21	790.15	618.75	0.00	1339.66	0.585	1.44	6.661	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	863.21	865.32	362.55	0.00	1809.96	0.477	0.94	3.885	A
2	528.76	530.81	682.87	0.00	1213.33	0.436	0.79	5.364	A
3	421.67	422.38	771.54	0.00	1561.97	0.270	0.40	3.426	A
4	655.90	658.10	515.95	0.00	1405.65	0.467	0.89	4.852	A

(Default Analysis Set) - 2013 BY, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 BY, AM	2013 BY	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			5.03	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South
4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	

4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	971.00	100.000

2	ONE HOUR	✓	565.00	100.000
3	ONE HOUR	✓	505.00	100.000
4	ONE HOUR	✓	471.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	390.000	397.000	184.000
	2	293.000	0.000	7.000	265.000
	3	319.000	0.000	0.000	186.000
	4	208.000	158.000	105.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.41	0.19
	2	0.52	0.00	0.01	0.47
	3	0.63	0.00	0.00	0.37
	4	0.44	0.34	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.052	1.052	1.052	1.052
	2	1.034	1.034	1.034	1.034
	3	1.042	1.042	1.042	1.042
	4	1.023	1.023	1.023	1.023

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	5.160	5.160	5.160	5.160
	2	3.380	3.380	3.380	3.380
	3	4.240	4.240	4.240	4.240
	4	2.330	2.330	2.330	2.330

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.77	1.41	A
2	0.53	6.80	1.17	A
3	0.36	3.86	0.59	A
4	0.40	4.69	0.67	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	728.47	197.26	0.00	1929.34	0.379	0.64	3.146	A
2	425.36	423.40	514.63	0.00	1315.87	0.323	0.49	4.161	A
3	380.19	379.01	556.20	0.00	1721.39	0.221	0.29	2.793	A
4	354.59	353.27	458.98	0.00	1442.22	0.246	0.33	3.378	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	871.92	236.17	0.00	1901.24	0.459	0.89	3.674	A

2	507.92	507.10	616.00	0.00	1254.09	0.405	0.70	4.977	A
3	453.98	453.57	666.04	0.00	1640.07	0.277	0.40	3.163	A
4	423.42	422.95	549.49	0.00	1384.12	0.306	0.45	3.830	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1067.04	289.08	0.00	1863.03	0.574	1.40	4.743	A
2	622.08	620.24	753.88	0.00	1170.06	0.532	1.16	6.745	A
3	556.02	555.24	814.76	0.00	1529.97	0.363	0.59	3.846	A
4	518.58	517.70	672.38	0.00	1305.22	0.397	0.67	4.673	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1069.06	289.56	0.00	1862.68	0.574	1.41	4.770	A
2	622.08	622.04	755.28	0.00	1169.21	0.532	1.17	6.801	A
3	556.02	556.00	816.91	0.00	1528.38	0.364	0.59	3.859	A
4	518.58	518.57	673.80	0.00	1304.31	0.398	0.67	4.688	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	874.94	236.92	0.00	1900.70	0.459	0.90	3.699	A
2	507.92	509.74	618.11	0.00	1252.80	0.405	0.71	5.022	A
3	453.98	454.75	669.22	0.00	1637.71	0.277	0.40	3.176	A
4	423.42	424.29	551.60	0.00	1382.76	0.306	0.45	3.846	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	732.04	198.27	0.00	1928.62	0.379	0.65	3.165	A
2	425.36	426.22	517.17	0.00	1314.32	0.324	0.50	4.194	A
3	380.19	380.61	559.65	0.00	1718.83	0.221	0.30	2.806	A
4	354.59	355.07	461.45	0.00	1440.63	0.246	0.34	3.394	A

(Default Analysis Set) - 2013 BY, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 BY, PM	2013 BY	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
Blandford St Mary Roundabout	Roundabout	1,2,3,4			5.68	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A354 North	A354 North
2	A350 South	
3	A354 South	A354 South

4	Bournemouth Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.95	9.13	9.70	19.74	40.00	24.00	
2	2.96	7.63	21.70	7.17	40.00	22.27	
3	4.73	8.52	14.20	26.88	40.00	22.27	
4	3.63	7.13	20.00	13.08	40.00	29.50	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.722	2071.812
2		(calculated)	(calculated)	0.609	1629.524
3		(calculated)	(calculated)	0.740	2133.133
4		(calculated)	(calculated)	0.642	1736.865

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	971.00	100.000
2	ONE HOUR	✓	561.00	100.000
3	ONE HOUR	✓	455.00	100.000
4	ONE HOUR	✓	682.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	379.000	324.000	268.000
	2	306.000	0.000	12.000	243.000
	3	268.000	19.000	0.000	168.000
	4	337.000	196.000	149.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.33	0.28
	2	0.55	0.00	0.02	0.43
	3	0.59	0.04	0.00	0.37
	4	0.49	0.29	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To

		1	2	3	4
From	1	1.017	1.017	1.017	1.017
	2	1.014	1.014	1.014	1.014
	3	1.083	1.083	1.083	1.083
	4	1.004	1.004	1.004	1.004

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.730	1.730	1.730	1.730
	2	1.380	1.380	1.380	1.380
	3	8.340	8.340	8.340	8.340
	4	0.430	0.430	0.430	0.430

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.60	5.13	1.51	A
2	0.55	7.09	1.21	A
3	0.34	4.04	0.56	A
4	0.57	6.38	1.32	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.02	728.43	272.89	0.00	1874.72	0.390	0.65	3.188	A

2	422.35	420.39	555.81	0.00	1290.77	0.327	0.49	4.184	A
3	342.55	341.44	612.45	0.00	1679.74	0.204	0.28	2.911	A
4	513.45	511.26	444.68	0.00	1451.40	0.354	0.55	3.837	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	871.84	326.74	0.00	1835.83	0.475	0.91	3.796	A
2	504.33	503.47	665.28	0.00	1224.05	0.412	0.70	5.058	A
3	409.04	408.65	733.33	0.00	1590.25	0.257	0.37	3.301	A
4	613.10	612.17	532.38	0.00	1395.10	0.439	0.78	4.612	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1066.74	399.67	0.00	1783.15	0.600	1.50	5.096	A
2	617.67	615.71	813.96	0.00	1133.44	0.545	1.19	7.022	A
3	500.96	500.23	896.97	0.00	1469.12	0.341	0.56	4.023	A
4	750.90	748.79	651.37	0.00	1318.71	0.569	1.31	6.321	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1069.09	1069.05	400.75	0.00	1782.38	0.600	1.51	5.133	A
2	617.67	617.63	815.82	0.00	1132.31	0.546	1.21	7.090	A
3	500.96	500.95	899.47	0.00	1467.26	0.341	0.56	4.035	A
4	750.90	750.85	652.87	0.00	1317.75	0.570	1.32	6.377	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	872.91	875.24	328.32	0.00	1834.69	0.476	0.93	3.825	A
2	504.33	506.28	668.02	0.00	1222.38	0.413	0.72	5.111	A
3	409.04	409.76	737.02	0.00	1587.53	0.258	0.38	3.312	A
4	613.10	615.20	534.62	0.00	1393.66	0.440	0.80	4.656	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS

1	731.02	732.12	274.54	0.00	1873.53	0.390	0.65	3.213	A
2	422.35	423.24	558.75	0.00	1288.98	0.328	0.50	4.219	A
3	342.55	342.94	616.25	0.00	1676.93	0.204	0.28	2.923	A
4	513.45	514.41	447.17	0.00	1449.80	0.354	0.55	3.868	A