REPORT N^{O} 70009242-01

CROSS STREET, MONK BRETTON

TRANSPORT ASSESSMENT

CONFIDENTIAL

MAY 2015

WSP | PARSONS BRINCKERHOFF

CROSS STREET, MONK BRETTON

TRANSPORT ASSESSMENT

Bellway Homes Yorkshire

Confidential

Project no: 70009242
Date: May 2015

WSP | Parsons Brinckerhoff
Three White Rose Office Park
Millshaw Park Lane
Leeds
LS11 0DL

Tel: 0113 395 6200
www.wspgroup.com
www.pbworld.com

QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
Remarks	Draft	Final		
Date	April 2015	18th May 2015		
Prepared by	Aimee Hanson	Aimee Hanson		
Signature				
Checked by	Andrew Moseley	Andrew Moseley		
Signature				
Authorised by	Andrew Moseley	Andrew Moseley		
Signature				
Project number	70009242	70009242		
Report number	02	02		
File reference				

PRODUCTION TEAM

CLIENT

Planning Manager	Sarah Mustill Sarah.Mustill@bellway.co.uk

WSP GLOBAL INC. (WSP)

Principal Engineer	Aimee Hanson Aimee.Hanson@WSPGroup.com 0113 395 6620
Associate Director	Andrew Moseley Andrew.Moseley@WSPGroup.com 0113 395 6385

TABLE OF CONTENTS

1 INTRODUCTION....1

1.1 OVERVIEW....1

1.2 POLICY BACKGROUND....1

1.3 STRUCTURE OF REPORT....2

2 DEVELOPMENT PROPOSALS....4

2.1 SITE LAYOUT PROPOSALS....4

2.2 PROPOSED ACCESS AND SERVICING ARRANGEMENTS....4

3 EXISTING CONDITIONS....6

3.1 SURROUNDING HIGHWAY NETWORK....6

3.2 EXISTING TRAFFIC FLOWS....6

3.3 EXISTING JUNCTION CAPACITY ANALYSES....7

3.4 PERSONAL INJURY ACCIDENT RECORDS....9

4 EXISTING SUSTAINABLE TRANSPORT PROVISION....10

4.2 WALKING AND CYCLING....10

4.3 PUBLIC TRANSPORT....11

4.4 TRAVEL PATTERNS AND KEY DESTINATIONS....12

4.5 SUMMARY....13

5 ASSESSMENT PARAMETERS....14

5.1 ASSESSMENT YEARS....14

5.2 GROWTH AND COMMITTED DEVELOPMENT....14

5.3 DEVELOPMENT TRAFFIC GENERATION....14

5.4 DEVELOPMENT TRAFFIC DISTRIBUTION AND ASSIGNMENT....16

5.5 ASSESSMENT TRAFFIC FLOWS....17

6 FUTURE YEAR DEVELOPMENT IMPACTS 18

6.1 INTRODUCTION.....18

6.2 FUTURE YEAR JUNCTION CAPACITY ANALYSES 19

6.3 SUMMARY 1

7 SUMMARY AND CONCLUSIONS 2

FIGURES

FIGURE 1 SITE LOCATION PLAN
FIGURE 2 2015 BASE TRAFFIC FLOWS
FIGURE 3 PEDESTRIAN ACCESSIBILITY PLAN
FIGURE 4 CYCLE ACCESSIBILITY PLAN
FIGURE 5 CYCLE ROUTE PLAN
FIGURE 6 BUS STOP LOCATION PLAN
FIGURE 7 2020 BASE TRAFFIC FLOWS
FIGURE 8 COMMITTED DEVELOPMENT TRAFFIC FLOWS
FIGURE 9 2020 BASE + COMMITTED DEVELOPMENT FLOWS
FIGURE 10 DEVELOPMENT TRAFFIC PERCENTAGE DISTRIBUTION
FIGURE 11 DEVELOPMENT TRAFFIC FLOWS
FIGURE 12 2020 PREDICTED FLOWS

APPENDICES

APPENDIX A PROPOSED SITE LAYOUT
APPENDIX B SITE ACCESS PLAN
APPENDIX C COUNT DATA
APPENDIX D JUNCTION MODEL OUTPUTS
APPENDIX E ACCIDENT DATA
APPENDIX F TRICS OUTPUT
APPENDIX G MODE SPLIT CENSUS DATA
APPENDIX H 2011 JOURNEY TO WORK CENSUS DATA & MSOA MAP

1 INTRODUCTION

1.1 OVERVIEW

1.1.1 WSP UK Limited has been commissioned by Bellway Homes to prepare a Transport Assessment (TA) in support of a full planning application for residential development on land located off Cross Street in the Monk Bretton area of Barnsley. The local planning and highways authority is Barnsley Metropolitan Borough Council (BMBC).

1.1.2 The site is located to the north eastern extent of the Barnsley urban area, c.1.8 miles from Barnsley town centre. The site is bounded on its northern side by a cricket ground, public footpath and a covered reservoir, to the east by Cross Street, to the south by a cemetery and to the west by residential streets accessed from Rotherham Road. The location of the site is illustrated in Figure 1.

1.1.3 A site layout has been developed for the site comprising 95 dwellings and It is proposed that the development will be accessed via a purpose built priority controlled T-junction provided on Cross Street, c.45m north of its junction with Hall Place.

1.1.4 An Interim Travel Plan has been developed for the site and will also be submitted in support of the planning application. The Travel Plan sets out a range of measures to encourage the use of sustainable travel patterns and reduce the reliance on private cars.

1.1.5 This TA demonstrates that the site is well served by existing transport provision and is accessible to a range of key services and facilities. The report demonstrates that the site can be safely and appropriately accessed from Cross Street and that the traffic generated by the proposals will not have a significant adverse impact upon the surrounding transport networks.

1.1.6 It is therefore concluded that there are no highways or transport reasons why planning permission for the residential proposals should not be granted.

1.2 POLICY BACKGROUND

1.2.1 The preparation of this TA is consistent with national transport policy guidance set out in the National Planning Policy Framework (NPPF) which advocates the submission of such documents to support applications for new developments, which generate significant amounts of movement.

1.2.2 The NPPF also notes that:

> “In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.” (paragraph 30)
>
> “Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised.” (paragraph 34)

1.2.3 Section 4 of this report highlights the existing sustainable transport provision within the vicinity of the site and demonstrates that the proposed residential development will be well located in terms of its proximity to key services and to offer the opportunity to use sustainable travel modes.

1.2.4 The Third Local Transport Plan for South Yorkshire became active from 1st April 2011. It sets out a transport vision, goals, challenges to be tackled and a strategy covering the period to 2026. South Yorkshire's Third Local Transport Plan (LTP3) has three component parts: the Strategy the Implementation Plan and the Annual Delivery Programme.

1.2.5 The Vision is to offer people a great place in which to live, work, invest and visit. The vision has a primary focus on the area's prosperity and growth, aspiring to make a greater contribution to the UK economy by having a local economy less dependent on the public sector, providing conditions for businesses to grow and becoming the prime national centre for advanced manufacturing and low-carbon industries.

1.2.6 The Transport Strategy has four main goals, set out below:

- To support economic growth
- To enhance social inclusion and health
- To reduce emissions
- To maximise safety

1.2.7 In translating the Transport Strategy into action, the following four cross cutting principles will be followed:

- Squeeze more from existing assets
- Make growth sustainable
- Give people choice
- Encourage a change in travel culture

1.2.8 An Interim Travel Plan has been developed for the proposed residential site and includes measures to promote the use of sustainable travel modes as well as reducing the need to travel.

1.2.9 The proposed development site lies within easy reach of Barnsley town centre and is also close to a range of local facilities as set out in Section 4 of this report.

1.2.10 This TA includes a detailed appraisal of the impacts of the development proposals upon the surrounding highway network and demonstrates that the proposals will not have a significant detrimental impact.

1.2.11 It is therefore considered that the application proposals are acceptable and consistent with current national and local transport policies. Further details of the relevant planning policy background are set out in the planning statement which also accompanies the application.

1.3 STRUCTURE OF REPORT

1.3.1 As well as traffic impact issues, this TA also considers the sustainability and accessibility of the site. The report therefore covers the following:

- Section 2 describes the site location and development proposals with regard to the proposed quantum of development and broad layout of the site, the proposed means of access to the site and also the proposed parking provision and servicing requirements.

- Section 3 provides a description of the highway network surrounding the site, details of the existing traffic flows, parking provision, review of the personal injury accident records and the results of the baseline capacity assessments within the study area.
- Section 4 examines the accessibility of the site by a number of travel modes and also considers the accessibility of a range of key services and facilities.
- Section 5 summarises the assessment parameters that have been adopted within this Transport Assessment.
- Section 6 examines the impact of development traffic on the local highway network and presents the results of the future year junction assessments to determine the potential impact of the proposals.
- The report summary and conclusions are drawn together in Section 7.

2 DEVELOPMENT PROPOSALS

2.1 SITE LAYOUT PROPOSALS

2.1.1 As outlined in the Introduction, a site layout has been developed for the site comprising 95 residential dwellings, comprising a mixture of house types and sizes including 2-bed, 3-bed and 4-bed properties. A copy of the Site Layout is contained within Appendix A.

2.1.2 The site is located to the north eastern extent of the Barnsley urban area, c.1.8 miles from Barnsley town centre. The site is bounded on its northern side by a cricket ground, public footpath and a covered reservoir, to the east by Cross Street, to the south by a cemetery and to the west by residential streets accessed from Rotherham Road. The location of the site is illustrated in Figure 1.

2.1.3 It is proposed that the development will be accessed via a purpose built priority controlled T-junction provided on Cross Street, c.45m north of its junction with Hall Place.

2.1.4 The planning layout shows a hierarchy of access roads throughout the site serving the residential units. The internal layout has been designed with a principal spine road running into the site from Cross Street, with a hierarchy of roads branching off the main spine road, providing access to properties across the site.

2.1.5 Beyond this principal network of roads there are a number of private drives providing access to individual properties.

2.1.6 The internal access roads have been designed to achieve low vehicle speeds within the site, incorporating appropriate changes in the road alignment which assist in providing a safe environment for pedestrians and cyclists within the site. The site layout proposals include a network of footways and footpaths across the site.

2.1.7 Parking for the residential units has been provided in line with BMBC's Maximum Parking Standards, on the basis of one parking space for dwellings with one or two bedrooms and two parking spaces for dwellings with three or more bedrooms. Parking within free-standing garages is included in the parking spaces allocated to each dwelling, all free-standing garages are a minimum of 6.0m x 3.0m.

2.1.8 It is considered that the proposed level of parking provides an appropriate balance between the need to promote sustainable modes of transport, meeting residents' demands and minimising on-street parking.

2.2 PROPOSED ACCESS AND SERVICING ARRANGEMENTS

2.2.1 It is intended to serve the development from its eastern boundary, via a newly constructed junction accessing onto Cross Street. The proposed site access is illustrated on the plan attached at Appendix B.

2.2.2 This shows that the junction will be a priority-controlled T-junction located c. 45m north of the existing junction of Cross Street with Hall Place. The proposed accesses into the site will be 5.5 metres wide with 2.0m wide footways located on both sides of the carriageway. The proposals have also taken into account the needs of refuse vehicles.

2.2.3 The speed restriction in force on Cross Street is 30 mph, and therefore in accordance with guidance provided with the Manual for Streets, visibility splays of 2.4 m by 47m are required at the site access junction. The actual visibility splays achievable at the access are slightly greater than these requirements as shown on the drawing contained at Appendix B.

3 EXISTING CONDITIONS

3.1 SURROUNDING HIGHWAY NETWORK

3.1.1 As described above, the site is located off Cross Street in Monk Bretton, situated to the north eastern extent of the Barnsley urban area, c.1.8 miles from Barnsley town centre. The site is bounded on its northern side by a cricket ground, public footpath and a covered reservoir, to the east by Cross Street, to the south by a cemetery and to the west by residential streets accessed from Rotherham Road. The location of the site is illustrated in Figure 1.

3.1.2 Cross Street, from which vehicular and pedestrian/ cycle access into and out of the site will be taken is a c.7.8m wide single carriageway two-way road with 2.0m wide footways on both sides of the carriageway. It is subject to a 30mph speed restriction, is a bus route and is lit. Cross Street runs from its junction with Lamb Lane and Westgate to the north to its junction with Burton Road to the south and provides frontage access to residential properties and access onto other residential streets.

3.1.3 Westgate is a c6.3m wide single carriageway two-way way road with footways on both sides of the carriageway. It is subject to a 30mph speed restriction, is lit and provides frontage access to residential properties as well as access onto other residential streets. Westgate provides a link between Cross Street, north of the proposed site access, and Rotherham Road.

3.1.4 Burton Road is a c7.8m wide single carriageway two-way way road with footways on both sides of the carriageway. It is subject to a 30mph speed restriction, is lit and provides frontage access to residential properties as well as access onto other residential streets. Cross Street forms a signal controlled junction with Burton Road, south of the propose site access and provides a link onto Rotherham Road. Burton Road acts as a local distributor type road and runs from its roundabout junction with the A628 Pontefract Road to the east to its signal controlled junction with the A61 Wakefield Road to the west, also providing access to settlements including Carlton, Lundwood and Cudworth.

3.1.5 Rotherham Road, classified A61, is a single carriageway two-way way distributor road with footways on both sides of the carriageway. It is subject to a 30mph speed restriction, is a bus route, is lit and provides frontage access to residential properties as well as access onto other residential streets. The A61, accessed via Westgate or Burton Road, provides a direct route into Wakefield city centre and onto the M1 and M62 Motorways to the north, and a direct route into Barnsley town centre to the south. It also provides access into local settlements including Athersley North and Staincross.

3.1.6 The A628, accessed via Burton Road, provides a direct route into Pontefract town centre and onto the M62 an A1 Motorways to the north-east, and a direct route into Barnsley town centre and onto the M1 Motorway to the south-west. It also provides access into local settlements including Lundwood, Cudworth, Shafton, Brierley and Hemsworth.

3.1.7 The development site is well located in terms of its access onto the local and strategic highways networks.

3.2 EXISTING TRAFFIC FLOWS

3.2.1 Details of the existing traffic flows on the surrounding highway network have been derived from traffic count surveys undertaken in March 2015. A copy of the count data is included within Appendix C.

3.2.2 The traffic count surveys were undertaken between 08:00 – 09:30 and 16:00 – 18:00 at the following locations:

- Cross Street/Burton Road - Priority Junction
- High Street/ Burton Road/ St Helens Way/ Fish Damn Lane – Roundabout
- Burton Road/ Rotherham Road – Signal Controlled Junction

3.2.3 The AM and PM peak hours were derived from the traffic count data and are 08:00 – 09:00 for the AM peak and 17:00 – 18:00 for the PM peak. The 2015 base traffic flows are shown on Figure 2.

3.3 EXISTING JUNCTION CAPACITY ANALYSES

3.3.1 A series of junction models have been set up, to test the impact of the development proposals. The 2015 base surveyed traffic flows shown in Figure 2 have therefore been input into the junction capacity models to determine the existing capacity of the surrounding highway network.

3.3.2 The JUNCTIONS8 software, which incorporates PICADY and ARCADY has been used to assess the capacity of the priority and roundabout junctions and the LINSIG software has been used to assess the signal controlled junction. The full JUNCTIONS8 and LINSIG model outputs are included within Appendix D and a summary of the results are provided in Tables 3.1 to 3.3.

Table 3.1 – Summary of PICADY Results – 2015 AM & PM Peak Hours

		2015 Base AM Peak		2015 Base PM Peak	
Junction	**Arm/ Movement**	**Max RFC***	**Max Queue**	**Max RFC**	**Max Queue**
Cross Street/ Burton Road	Norman Close	0.000	0	0.000	0
	Burton Road (east)	0.10	0	0.18	1
	Cross Street left	0.02	0	0.05	0
	Cross Street right/ ahead	0.18	0	0.18	0
	Burton Road (west)	0.00	0	0.00	0

3.3.3 The results in Table 3.1 show that the Cross Street/ Burton Road priority junction is currently operating well within capacity during the AM and PM peak hours. This is confirmed by on-site observations.

Table 3.2 – Summary of ARCADY Results – 2015 AM & PM Peak Hours

Junction	Arm/ Movement	2015 Base AM Peak		2015 Base PM Peak	
		Max RFC*	Max Queue	Max RFC	Max Queue
High Street/ Burton Road/ St Helens Way/ Fish Damn Lane	Fish Damn Lane	0.28	0	0.36	1
	Burton Road (east)	0.32	0	0.29	0
	Burton Road (west)	0.37	1	0.51	1
	High Street	0.23	0	0.35	1
	St Helens Way	0.16	0	0.20	0

3.3.4 The results in Table 3.2 show that the High Street/ Burton Road/ St Helens Way/ Fish Damn Lane roundabout is currently operating well within capacity during the AM and PM peak hours. This is confirmed by on-site observations.

Table 3.3 – Summary of LINSIG Results – 2015 AM & PM Peak Hours

Junction	Arm/ Movement	2015 Base AM Peak		2015 Base PM Peak	
		DoS	Max Queue	DoS	Max Queue
Burton Road/ Rotherham Road	Rotherham Road (south)	83.5%	14	87.3%	19
	Rotherham Road (north)	73.9%	14	53.0%	10
	Burton Road (east)	84.6%	21	86.6%	18
	Burton Road (west)	85.0%	16	87.7%	24

3.3.5 This junction operates on MOVA, therefore the MAX times in the controller will rarely be used, as such to best reflect MOVA operation control saturation flows for each link have been increased by 10% and the model has been optimised for PRC.

3.3.6 The results in Table 3.3 shown that the Burton Road/ Rotherham Road signal controlled junction is currently operating within capacity during the AM and PM peak hours and queues are forming. This is confirmed by on-site observations.

3.4 PERSONAL INJURY ACCIDENT RECORDS

3.4.1 Personal injury accident (PIA) records have been obtained from BMBC for the period from January 2010 to present, which represents the most recent five year period available. The study area includes Cross Street from its junction with High Street, to the north, to its junction with Burton Road, to the south, and Burton Road from its junction with Fish Damn Lane, to the east, to its junction with Rotherham Road, to the west. The PIA data is included within Appendix E.

3.4.2 Analysis of the accidents showed that in the whole study area there have been a total of 21 accidents, all of which were classified as slight in severity. Of these accidents eight occurred on a highway link and 13 at junctions, eight of which were at junction under detailed consideration within this Transport Assessment. There have been no accidents recorded on Cross Street.

3.4.3 At the Burton Road/ High Street/ St Helens Way/ Fish Damn Lane roundabout junction six accidents have been recorded, all of which were slight in nature. None of these accidents involved a pedestrian but one involved a cyclist. Given the scale of the junction and the existing traffic flows, this is not considered to represent a significant number of accidents.

3.4.4 At the Cross Street/ Burton Road priority junction one accident has been recorded, which was classified as slight in severity. This accident did not involve a pedestrian or cyclist. Again, this is considered to be a low number of accidents over a five-year period.

3.4.5 At the Burton Road/ Rotherham Road signal controlled junction one accident has been recorded, which was classified as slight in severity. This accident did not involve a pedestrian or cyclist. Again, this is considered to be a low number of accidents over a five-year period.

3.4.6 It is therefore considered that there is no existing safety problems associated with the road network surrounding the development site. It is not anticipated that the traffic associated with the proposed development would result in any significant safety implications on the adjacent highway network.

4 EXISTING SUSTAINABLE TRANSPORT PROVISION

4.1.1 As identified in Section 1.2 above, the Government's objectives set out in the NPPF are to ensure that new developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised.

4.1.2 The site has a good level of accessibility by sustainable modes of transport and as outlined in the Introduction, a Travel Plan has been developed for the site which will encourage the use of alternative modes of travel. This is anticipated to reduce the overall travel demands of the site, particularly trips by single occupancy vehicles.

4.1.3 Travel by non-car modes will be encouraged at the site and as outlined in Section 2, the proposals include pedestrian and cycle connections across the site, linking into the surrounding facilities.

4.1.4 This section outlines the existing walking, cycling and public transport facilities within the vicinity of the development site and describes the accessibility of the site in terms of its proximity to key services and destinations.

4.2 WALKING AND CYCLING

4.2.1 Whilst superseded by the NPPF, the transport policies set out in the former PPG13 set out specific guidance related to walking and cycling:

> **"Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres"** (Para 74)
>
> and
>
> **"Cycling also has potential to substitute for short car trips, particularly those under 5 kilometres, and to form part of a longer journey by public transport"** (Para 77)

4.2.2 These potential walking and cycling catchments have been used in the consideration of the accessibility of the site set out below.

4.2.3 Walking is recognised as the most important mode of travel at a local level and it offers the greatest potential to replace short car trips, particularly under two kilometres. Figure 3 shows the 2.0 kilometre walking catchment area from the centre of the site, including the key facilities in the locality such as schools, healthcare facilities and food stores. The 2.0 kilometre walking catchment includes Monk Bretton and Lundwood in their entirety and the north eastern extent of Barnsley town centre.

4.2.4 The footways proposed along both sides of the internal spine road will connect into the existing pedestrian network in the surrounding area. Footways in the surrounding area meet standards, and generous along certain roads, with dropped/low kerbs at appropriate junctions.

4.2.5 Cycling has the potential to substitute for short car trips, particularly less than five kilometres. As such, all areas and facilities within a reasonable walking distance can also be considered to be within a reasonable cycling distance. Figure 4 shows a 5.0 kilometre cycling catchment area from the centre of the site. It can be seen that, in addition to the employment, shopping and leisure facilities that are accessible on foot, the five kilometre cycle catchment area also includes Barrnsley town centre in its entirety, within which are a host of facilities, and settlements including Worsbrough, Staincross, Dodworth, Carlton and Royston.

4.2.6 Both local and national cycle routes are present in the vicinity of the site, as shown on Figure 5, cycle route map. Route 67 of the National Cycle Network runs along Fish Damn Lane and Burton Road, to the east of the site, before becoming an off road route running from north to south into Stairfoot. From Stairfoot local routes provide traffic free routes into Barnsley town centre.

4.3 PUBLIC TRANSPORT

4.3.1 The proposed development site is well located in terms of its proximity to public transport services, including the railway station which is located within the town centre and to existing bus services which run adjacent to the site. Details of the existing provision are set out below.

4.3.2 There are existing buses which pass along Cross Lane, the locations of the existing bus stops are shown on Figure 6. The nearest bus stops are located to the south of the proposed site access c.250m from the centre of the site. These existing bus stops are served by the following bus number 3 the details of which are summarised in Table 4.1.

Table 4.1 – Local Bus Services

		Daytime		Evening	
Service	**Route**	**Mon - Sat**	**Sun**	**Mon - Sat**	**Sun**
31	Barnsley – Honeywell - Monk Bretton - Cudworth	Every 60 minutes	-	-	-
57	Barnsley – Honeywell - Monk Bretton – Carlton – Royston –	Every 15 minutes	-	-	-
59	Barnsley – Honeywell - Monk Bretton – Carlton – Royston – Notton – Newmillerdam – Sandal - Wakefield	Every 60 minutes	Every 30 minutes	-	-
59A	Barnsley – Honeywell – Monk Bretton – Carlton – Royston	Every 60 minutes	Every 30 minutes	Every 60 minutes	Every 60 minutes

4.3.3 Table 4.1 shows that bus number 31, 57, 59 and 59A all provide a direct connection from the site to the surrounding towns and villages including Barnsley town centre. Theses buses have a

combined service frequency of seven buses per hour Monday to Saturday during the daytime, four in the evenings and one on Sundays. Further bus and rail services are available from Barnsley Interchange which is located within Barnsley town centre. Bus number 59 also provides a direct route into Wakefield city centre.

4.3.4 Barnsley Interchange is a combined bus and railway station located on Schwabisch Gmund Way in Barnsley town centre, c.1.8km from the centre of the site, within the recommended 2.0km walking distance and is also accessible via cycle and bus. The station has a car park with 76 parking spaces, 24 sheltered cycle storage spaces and a taxi rank. Services run between Sheffield and Leeds, Leeds and Nottingham and Sheffield and Huddersfield, each of which run every 30 minutes during the day.

4.4 TRAVEL PATTERNS AND KEY DESTINATIONS

4.4.1 The surrounding area has a wide range of services and facilities which can be accessed by future residents of the site. These are summarised below and highlighted on Figure 3:

- Barnsley town centre – has a bus and rail interchange and a large range of employment facilities including offices, retail, and leisure, a range of shops, banks, a post office, a library, pubs, restaurants/cafes, leisure facilities, medical facilities and regular markets, some of which are within reasonable walking distance of the site and all of which are within a reasonable cycling distance are accessible via public transport;
- Monk Bretton - has a small range of facilities including Sainsbury's supermarket, Rhythm & Booze, Primary Schools, a medical centre, a pharmacy and sports and fitness facilities. All of these facilities are within a reasonable walking distance of the site and are accessible via cycle and public transport;
- Employment – there are a number of large employment areas/ industrial estates in the vicinity of the site, including Carlton Industrial Estate which is within reasonable walking distance of the site and is accessible via cycle and public transport;
- Education provision - there are a number of primary schools in the local area including St Helens Primary School, Holy Cross Deanery Primary School and Burton Road Primary School in Monk Bretton, all of which are within a reasonable walking distance of the site. The closest Secondary School to the site is St Michael's Roman Catholic and Church of England High School which is located off Carlton Road in Carlton and is within reasonable walking distance of the site and is accessible via cycle and public transport. Barnsley College is located in Barnsley town centre and is accessible via cycle and public transport;
- Health facilities - include Rotherham Road Medical Centre in Monk Bretton, which is within a reasonable walking distance of the site. Lundwood Dental Practice and Cudworth Dental Practice are within a reasonable cycling distance of the site and are accessible via public transport. Barnsley Hospital is located to the north west of Barnsley town centre within a reasonable cycling distance of the site and is accessible via public transport;
- Food shopping – food retail units within Monk Bretton and the surrounding areas include Sainsbury's in Monk Bretton and ASDA on the north eastern extent of Barnsley town centre, which are both within a reasonable walking distance of the site. In addition, a Tesco Express is located in Carlton and a Coop in Cudworth, which are within reasonable cycling distance of the site and accessible via public transport;
- Recreation – there are a large range of recreation facilities in the vicinity of the site including Valley Bowl in Carlton, Valley Community Centre and Dorothy Hyman Sports Centre in Cudworth, DW Sports and Fitness Club and the Metrodome Leisure Complex located on the north eastern extent of Barnsley town centre, some

of which are within reasonable walking distance of the site and all of which are accessible via cycle and public transport.

4.5 SUMMARY

4.5.1 The development site is within a reasonable walking and cycling distance of Barnsley Interchange and is accessible via the buses which serve the bus stops on Cross Street. Cycle parking is provided at Barnsley Interchange in the form of 24 sheltered cycle stands.

4.5.2 The site is situated in an accessible location with health care facilities, schools, convenience stores and recreation facilities located within a reasonable walking distance of the site.

4.5.3 The north eastern extent of Barnsley Town Centre, including the Interchange, is within reasonable walking distance of the site and all of it is within a reasonable cycling distance is accessible via public transport. Therefore, employment areas, further education, health care facilities, and recreation facilities are all accessible to the site via frequent and sustainable modes of transport.

4.5.4 Overall, it is concluded that a range of key facilities and services, including employment, retail, health and education uses are readily accessible from the site. It is therefore considered that the location of the site is consistent with national and local policy objectives.

5 ASSESSMENT PARAMETERS

5.1 ASSESSMENT YEARS

5.1.1 Given the fact that the development will be built and occupied over a number of years an assessment year of 2020 has been adopted for the analysis presented later in this report, five years post planning permission.

5.2 GROWTH AND COMMITTED DEVELOPMENT

5.2.1 The National Traffic Model (NTM) within the TEMPRO software has been interrogated to provide growth factors for Royston, which is considered to be the most appropriate location available within Tempro. The resultant growth factors are set out in Table 5.1.

Table 5.1 – Royston – Traffic Growth Factors

PERIOD	AM PEAK	PM PEAK
2015 - 2020	1.0720	1.0735

Source : NTM (Tempro)

5.2.2 The growth factors have been applied to the 2015 base flows and the resultant 2020 base flows are illustrated on Figure 7.

5.2.3 Whilst these growth factors make allowance for planned development growth within an area, as agreed within the scoping process, in order to provide a robust assessment, the traffic associated with the nearby committed development, summarised below, has also been included within the analysis.

- Lundwood – Gleeson Developments (97 residential dwellings)

5.2.4 The vehicular flows set out within the Transport Assessment for this development have been assigned to the network as set out within the Transport Assessment. The forecast committed development flows are summarised on Figure 8.

5.2.5 The resultant total 2020 base traffic flows (base + committed) are illustrated in Figure 9. The 2020 base + committed traffic flows have been used as the future year baseline traffic flows against which the potential development impacts have been assessed.

5.3 DEVELOPMENT TRAFFIC GENERATION

5.3.1 In accordance with the government's Guidance on Transport Assessment, the trip generation of the proposed residential development has been assessed in order to consider access to the site by a range of modes.

5.3.2 Consideration has been given to appropriate trip generation rates for residential houses privately owned in order to assess the multi-model trip generation of the site. Average total person trips rates have been obtained from the TRICS database for a range of similar sites. Sites have been selected based on the following parameters:

- Greater London, South East and Ireland sites excluded;
- Town centre and edge of town centre locations excluded;
- Site selected between 40 and 140 units; and

- Weekdays only.

5.3.3 These selected parameters provide a representative sample of sites in order to determine the potential trip generation of the proposed development (based on 95 residential dwellings). The total person trip rates derived from the TRICS database are summarised in Table 5.2. A copy of the TRICS output is contained in Appendix F.

Table 5.2 - TRICS Average Total Person Trip Rates and Generation

	Daytime		Evening	
95 Units	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Trip Rates	0.240	0.798	0.617	0.304
Trip Generation	23	76	59	29

Source : NTM (Tempro)

5.3.4 In order to derive the trip generation by mode, local mode split data for the Monk Bretton Ward, in which the development site is situated has been obtained from the National Statistics website. Journey to work mode split data (2011) has been obtained in order to identify the likely mode split for development generated during the AM and PM peak periods. The national statistics mode split data is summarised in Table 5.3. A copy of the census data output is contained in Appendix G.

Table 5.3 – National Statistics Mode Split Data for Monk Bretton Ward (2011 Census)

MODE	PERCENTAGE
Pedestrian	11.2%
Bicycle	0.9%
Motorcycle	1.1%
Car Driver*	68.2%
Car Passenger	8.5%
Bus	8.8%
Train	1.3%
Total Person Trips	100%

Source : Car driver includes taxis, as these are additional car trip on the road network

5.3.5 Based on the total person trip generation from TRICS shown in Table 5.2 and the local mode split data shown in Table 5.3 the trip generation by mode for the site has been derived and is summarised in Table 5.4.

Table 5.4 – Trip Generation by Mode

	AM Peak		PM Peak	
Mode	**Arrivals**	**Departures**	**Arrivals**	**Departures**
Pedestrian	3	9	7	3
Bicycle	0	1	1	0
Motorcycle	0	1	1	0
Car Driver*	16	52	40	20
Car Passenger	2	6	5	2
Bus	2	7	5	3
Train	0	1	1	1
Total Person Trips	23	76	59	29

Source : Car driver includes taxis, as these are additional car trip on the road network

5.4 DEVELOPMENT TRAFFIC DISTRIBUTION AND ASSIGNMENT

5.4.1 Development traffic distribution has been undertaken based upon existing (2011) travel to work data for the 014-Barnsley 009 Middle Layer Super Output Area (MSOA), previously referred to as the Monk Bretton ward, in which the site is situated. This method uses Office of National Statistics data and can be considered a robust approach.

5.4.2 The traffic distribution has been applied to the forecast trip generations to estimate the change in traffic flows on the highway network as a result of the development at the site. Consideration of the traffic distribution exercise shows the total change in traffic flows that is forecast on the road network as a result of the development proposals.

5.4.3 The 2011 MSOA census data is summarised in Table 5.5 and from this data it can be seen that 76% of people living within the 014-Barnsley 009 MSOA work in MOSA's within Barnsley. A copy of the 2011 journey to work census data and a plan detailing the location of each MSOA is attached at Appendix H.

Table 5.5 – 2011 Census Data – Travel to Work – 014-Barnsley 009 MSOA

DESTINATION	PROPORTION	ROUTE
018-Barnsley 013	14%	50% Cross Street south/ Burton Road west/ Harborough Hill Road 50% Cross Street south/ Burton Road west/ Rotherham Road south/ Pontefract Road west
017-Barnsley 012	8%	50% Cross Street south/ Burton Road west/ Wakefield Road south/ Old Mill Lane/ A635 50% Cross Street north/ Westgate west/ Rotherham Road north
007-Barnsley 002	7%	Cross Street south/ Burton Road east/ Fish Damn Lane
020-Barnsley 015	6%	Cross Street south/ Burton Road west/ Rotherham Road south
015-Barnsley 010	5%	50% Cross Street south/ Burton Road west/ Wakefield Road south/ Old Mill Lane/ A635 50% Cross Street north/ Westgate west/ Rotherham Road north
012-Barnsley 007	5%	Cross Street north/ Westgate west/ Rotherham Road north
014-Barnsley 009	4%	Cross Street south/ Burton Road east/ Fish Damn Lane
016-Barnsley 011	4%	Cross Street south/ Burton Road west/ Rotherham Road south
022-Barnsley 017	2%	Cross Street south/ Burton Road west/ Rotherham Road south/ Pontefract Road west
024-Barnsley 019	2%	Cross Street south/ Burton Road west/ Wakefield Road south/ Old Mill Lane/ A635
028-Barnsley 023	2%	Cross Street south/ Burton Road west/ Rotherham Road south
033-Barnsley 028	2%	Cross Street south/ Burton Road west/ Rotherham Road south
013-Barnsley 008	2%	Cross Street south/ Burton Road east/ Burton Road east
011-Barnsley 006	2%	Cross Street south/ Burton Road east/ Burton Road east
026-Barnsley 021	2%	Cross Street south/ Burton Road west/ Rotherham Road south

009-Barnsley 004	1%	Cross Street north/ Westgate west/ Rotherham Road north
010-Barnsley 005	1%	Cross Street north/ Westgate west/ Rotherham Road north
027-Barnsley 022	1%	Cross Street south/ Burton Road west/ Rotherham Road south
006-Barnsley 001	1%	Cross Street south/ Burton Road east/ Fish Damn Lane
031-Barnsley 026	1%	Cross Street south/ Burton Road west/ Rotherham Road south
035-Barnsley 030	1%	Cross Street south/ Burton Road west/ Rotherham Road south
032-Barnsley 027	1%	Cross Street south/ Burton Road west/ Wakefield Road south/ A628/ M1 south
023-Barnsley 018	1%	Cross Street south/ Burton Road west/ Rotherham Road south
021-Barnsley 016	1%	Cross Street north/ Westgate west/ Rotherham Road north
Sub Total Barnsley MSOA's	**79%**	
075-Rotherham 002	2%	50% Cross Street south/ Burton Road west/ Harborough Hill/ A628/ M1 south 50% Cross Street south/ Burton Road west/ Rotherham Road south/ Pontefract Road west/ A628/ M1 south
074-Rotherham 001	1%	
081-Rotherham 017	1%	
095-Sheffield 018	1%	
097-Sheffield 027	1%	
106-Sheffield 073	1%	
109-Sheffield(part)	1%	
096-Sheffield 022	1%	
108-Sheffield 075	1%	
135-East Midlands	1%	
146-Yorkshire and the Humber	1%	
004-Shropshire 034	1%	
073-Leeds(part)	2%	Cross Street north/ Westgate west/ Rotherham Road north/ M1 north
071-Leeds 111	1%	
139-North West	1%	
134-Wakefield(part)	1%	Cross Street north/ Westgate west/ Rotherham Road north
117-Wakefield 014	1%	
119-Wakefield 017	1%	
131-Wakefield 042	1%	
123-Wakefield 028	1%	
133-Wakefield 044	1%	
124-Wakefield 030	1%	
058-Kirklees(part)	1%	
047-Doncaster(part)	1%	Cross Street south/ Burton Road east/ Burton Road east
Total	**100%**	

5.4.4 The resultant arrival and distribution traffic distribution patterns are shown on Figure 10. These proportions have been applied to the total development traffic generation and the resultant development traffic assignment is shown on Figure 11.

5.5 ASSESSMENT TRAFFIC FLOWS

5.5.1 The development generated traffic flows shown on Figure 11 have been added to the 2020 base + committed traffic flows, shown in Figure 9, to produce the 2020 predicted scenario (base + committed + development traffic flows) shown in Figure 12. These traffic flows have been used to assess the potential impact of the development proposals upon the surrounding highway network, as set out in Section 6.

6 FUTURE YEAR DEVELOPMENT IMPACTS

6.1 INTRODUCTION

6.1.1 The impacts of the development proposals have been based upon a comparison of the future year baseline conditions on the network (assessed using the 2020 base traffic flows – including committed development) against the future year with development conditions on the network – assessed using the 2020 predicted traffic flows.

6.1.2 Comparing the 2020 base traffic flows (including committed development) with the 2020 predicted flows, it can be seen that the following two way link increases will occur as a result of the development on the local highway network.

Table 6.1 – Two-way Link Changes

	Link	2020 Base (+Com) AM Peak	Dev AM Peak	% Impact	2020 Base (+Com) PM Peak	Dev PM peak	% Impact
Cross Street/ Burton Road	Cross Street	165	50	30.3%	202	44	21.8%
	Burton Road (east)	1164	12	1.0%	1230	10	0.8%
	Norman Close	3	0	0%	2	0	0%
	Burton Road (west)	1251	38	3.0%	1273	34	2.7%
	Junction Total	1292	50	3.9%	1354	44	3.2%
Rotherham Road/ Burton Road	Rotherham Road (north)	808	0	0%	787	0	0%
	Burton Road (east)	979	37	3.8%	995	34	3.4%
	Rotherham Road (south)	833	10	1.2%	822	17	2.1%
	Burton Road (west)	1188	19	1.6%	1172	17	1.5%
	Junction Total	1904	37	1.9%	1888	34	1.8%
Burton Road/ Fish Damn Lane/ High Street/ St Helens Way	Burton Road (west)	1252	12	1.0%	1309	10	0.8%
	High Street	272	0	0%	376	0	0%
	St Helens Way	321	0	0%	376	0	0%
	Fish Damn Lane	642	9	1.4%	699	7	1.0%
	Burton Road (east)	819	4	0.5%	988	4	0.4%
	Junction Total	1653	12	0.7%	1873	10	0.5%

6.1.3 IHT Guidelines set out that impact on two-way link flows of 5% or less is considered to be negligible impact. On this basis it can be seen from the data presented in table 6.1 that the forecast development flows have a negligible impact on all links of the three junctions within our study area during the AM and PM peak hours. With the exception of the Cross Street link of the Cross Street/ Burton Road junction during both the AM and PM peak hours.

6.1.4 However, in order to provide BMBC with a comprehensive package the impacts have been tested at all the junctions within the study area, as set out earlier in this report.

6.2 FUTURE YEAR JUNCTION CAPACITY ANALYSES

6.2.1 Future year junction capacity assessments have been undertaken at the following locations for the 2020 base (including committed development) and the 2020 predicted traffic flow scenarios, for both the AM and PM peak hours, using the validated base models outlined in Section 3:

- Cross Street/Burton Road - Priority Junction
- High Street/ Burton Road/ St Helens Way/ Fish Damn Lane – Roundabout
- Burton Road/ Rotherham Road – Signal Controlled Junction

6.2.2 Full details of the assessment results for all junctions assessed are set out within Appendix D and the results are summarised in Tables 6.2 to 6.7.

Table 6.2 – Summary of PICADY Results – 2020 Base (including committed development) and 2020 Predicted AM Peak

		2020 Base AM Peak		2020 Predicted AM Peak	
Junction	**Arm/ Movement**	**Max RFC***	**Max Queue**	**Max RFC**	**Max Queue**
Cross Street/ Burton Road	Norman Close	0.00	0	0.00	0
	Burton Road (east)	0.11	0	0.12	0
	Cross Street left	0.03	0	0.05	0
	Cross Street right/ ahead	0.20	0	0.29	0
	Burton Road (west)	0.00	0	0.00	0

Table 6.3 – Summary of PICADY Results – 2020 Base (including committed development) and 2020 Predicted PM Peak

		2020 Base PM Peak		2020 Predicted PM Peak	
Junction	**Arm/ Movement**	**Max RFC***	**Max Queue**	**Max RFC**	**Max Queue**
Cross Street/ Burton Road	Norman Close	0.00	0	0.00	0
	Burton Road (east)	0.21	0	0.24	1
	Cross Street left	0.05	0	0.06	0
	Cross Street right/ ahead	0.21	0	0.26	0
	Burton Road (west)	0.00	0	0.01	0

6.2.3 The results shown in Tables 6.2 and 6.3 demonstrate that the Cross Street/ Burton Road priority junction is expected to operate with substantial spare capacity under the future year traffic flow scenarios, both with and without development. Impacts of the development proposals would be negligible, with minimal increase in queuing expected at the junction as a result of the additional traffic.

Table 6.4 – Summary of ARCADY Results – 2020 Base (including committed development) and 2020 Predicted AM Peak

		2020 Base AM Peak		2020 Predicted AM Peak	
Junction	**Arm/ Movement**	**Max RFC***	**Max Queue**	**Max RFC**	**Max Queue**
High Street/ Burton Road/ St Helens Way/ Fish Damn Lane	Fish Damn Lane	0.31	0	0.31	0
	Burton Road (east)	0.35	1	0.35	1
	Burton Road (west)	0.40	1	0.41	1
	High Street	0.26	0	0.35	0
	St Helens Way	0.18	0	0.18	0

Table 6.5 – Summary of ARCADY Results – 2020 Base (including committed development) and 2020 Predicted PM Peak

		2020 Base PM Peak		2020 Predicted PM Peak	
Junction	**Arm/ Movement**	**Max RFC***	**Max Queue**	**Max RFC**	**Max Queue**
High Street/ Burton Road/ St Helens Way/ Fish Damn Lane	Fish Damn Lane	0.37	1	0.40	1
	Burton Road (east)	0.31	0	0.31	0
	Burton Road (west)	0.44	1	0.55	1
	High Street	0.35	1	0.39	1
	St Helens Way	0.20	0	0.22	0

6.2.4 The results shown in Tables 6.4 and 6.5 demonstrate that all approaches to the High Street/ Burton Road/ St Helens Way/ Fish Damn Lane roundabout junction is expected to operate with substantial spare capacity under the future year traffic flow scenarios, both with and without development. Impacts of the development proposals would be negligible, with minimal increase in queuing expected at the junction as a result of the additional traffic.

Table 6.6 – Summary of LINSIG Results – 2020 Base (including committed development) and 2020 Predicted AM Peak

		2020 Base AM Peak		2020 Predicted AM Peak	
Junction	**Arm/ Movement**	**DoS**	**Max Queue**	**DoS**	**Max Queue**
Rotherham Road/ Burton Road	Rotherham Road (south)	89.7%	17	92.3%	18
	Rotherham Road (north)	79.2%	15	80.4%	15
	Burton Road (east)	91.0%	25	92.5%	27
	Burton Road (west)	91.1%	19	93.6%	21

Table 6.7 – Summary of LINSIG Results – 2020 Base (including committed development) and 2020 Predicted PM Peak

Junction	Arm/ Movement	2020 Base PM Peak		2020 Predicted PM Peak	
		DoS	Max Queue	DoS	Max Queue
Rotherham Road/ Burton Road	Rotherham Road (south)	93.4%	23	94.3%	25
	Rotherham Road (north)	57.0%	12	57.0%	12
	Burton Road (east)	92.9%	20	95.6%	22
	Burton Road (west)	94.0%	29	95.6%	31

6.2.5 This junction operates on MOVA, therefore the MAX times in the controller will rarely be used, as such to best reflect MOVA operation control saturation flows for each link have been increased by 10% and the model has been optimised for PRC.

6.2.6 The results shown in Tables 6.6 and 6.7 demonstrate that the Burton Road/ Rotherham Road is expected to be approaching capacity during the AM and PM peak hours under the future year traffic flow scenarios, both with and without the development. However, the impacts of the development proposals would be negligible with a minimal increase in queuing expected at the junction as a result of the additional traffic.

6.3 SUMMARY

6.3.1 The purpose built site access junction would have sufficient capacity to accommodate the forecast development traffic levels.

6.3.2 The impact of the development-generated traffic on the surrounding area has been shown to be minimal and it is therefore concluded that the residential proposals could be accommodated without resulting in a significant detrimental impact upon the network.

6.3.3 As set out in Section 6.1, IHT Guidelines set out that impact on two-way link flows of 5% or less is considered to be negligible impact. On this basis it can be seen from the data presented in table 6.1 that the forecast development flows have a negligible impact on all links of the three junctions within our study area during the AM and PM peak hours, with the exception of the Cross Street link of the Cross Street/ Burton Road junction.

6.3.4 The results summarised in Tables 6.2 and 6.3 above demonstrate the Cross Street link of the Cross Street/ Burton Road junction is forecast to operate with substantial spare capacity during the 2020 base scenarios, with and without development and the increase in RFC and queueing is shown to be minimal.

7 SUMMARY AND CONCLUSIONS

7.1.1 WSP UK Limited has been commissioned by Bellway Homes to prepare a Transport Assessment (TA) in support of a full planning application for residential development on land located off Cross Street in the Monk Bretton area of Barnsley. The local planning and highways authority is Barnsley Metropolitan Borough Council (BMBC).

7.1.2 A site layout has been developed for the site comprising 95 dwellings and It is proposed that the development will be accessed via a purpose built priority controlled T-junction provided on Cross Street, c.45m north of its junction with Hall Place.

7.1.3 This Transport Assessment has been prepared to support a detailed planning application for the proposals. A Travel Plan has also been prepared which sets out measures to encourage sustainable travel patterns and reduce the reliance on private car use.

7.1.4 The site is located to the north eastern extent of the Barnsley urban area, c.1.8 miles from Barnsley town centre. The site is bounded on its northern side by a cricket ground, public footpath and a covered reservoir, to the east by Cross Street, to the south by a cemetery and to the west by residential streets accessed from Rotherham Road.

7.1.5 The report has shown that the development proposals will be accessible by a range of travel modes and have been developed to accord with current national and local transport policies, including those set out within the Third Local Transport Plan for South Yorkshire and NPPF.

7.1.6 It is concluded that a range of key facilities and services, including employment, retail, health and education uses will be accessible from the site. All of these can be accessed locally or within Barnsley town centre.

7.1.7 Based on average trip rates, the development proposals are forecast to generate some 99 and 88 two-way vehicle trips during the AM and PM peak hours, respectively. These trips have been assigned to the surrounding highway network based on 2011 journey to work census data.

7.1.8 The purpose built site access junction will have sufficient capacity to accommodate the forecast development traffic levels.

7.1.9 As set out in Section 6.1, IHT Guidelines set out that impact on two-way link flows of 5% or less is considered to be negligible impact. On this basis it can be seen from the data presented in table 6.1 that the forecast development flows have a negligible impact on all links of the three junctions within our study area during the AM and PM peak hours, with the exception of the Cross Street link of the Cross Street/ Burton Road junction.

7.1.10 However, in order to provide BMBC with a comprehensive package the impacts have been tested at all the junctions within the study area, as set out earlier in this report.

7.1.11 All junctions within the study area are shown to be operating within capacity under the future year traffic flow scenarios, both with and without the development, impacts of the development proposals would be negligible, with minimal increase in queuing expected at the junctions as a result of the additional traffic.

7.1.12 The Street link of the Cross Street/ Burton Road junction is forecast to operate with substantial spare capacity during the 2020 base scenarios, with and without development and the increase in RFC and queueing is shown to be minimal. It is therefore concluded that the residential proposals could be accommodated without resulting in a significant detrimental impact upon the network.

7.1.13 Overall it is considered that the site is a suitable location for the proposed development and there are no highways or transport reasons that should prevent the granting of planning consent for the proposals.

FIGURES

Drawn By: UKCTB001 Date Modified: 19/03/2015 08:15



WSP

TITLE:

Site Location Plan

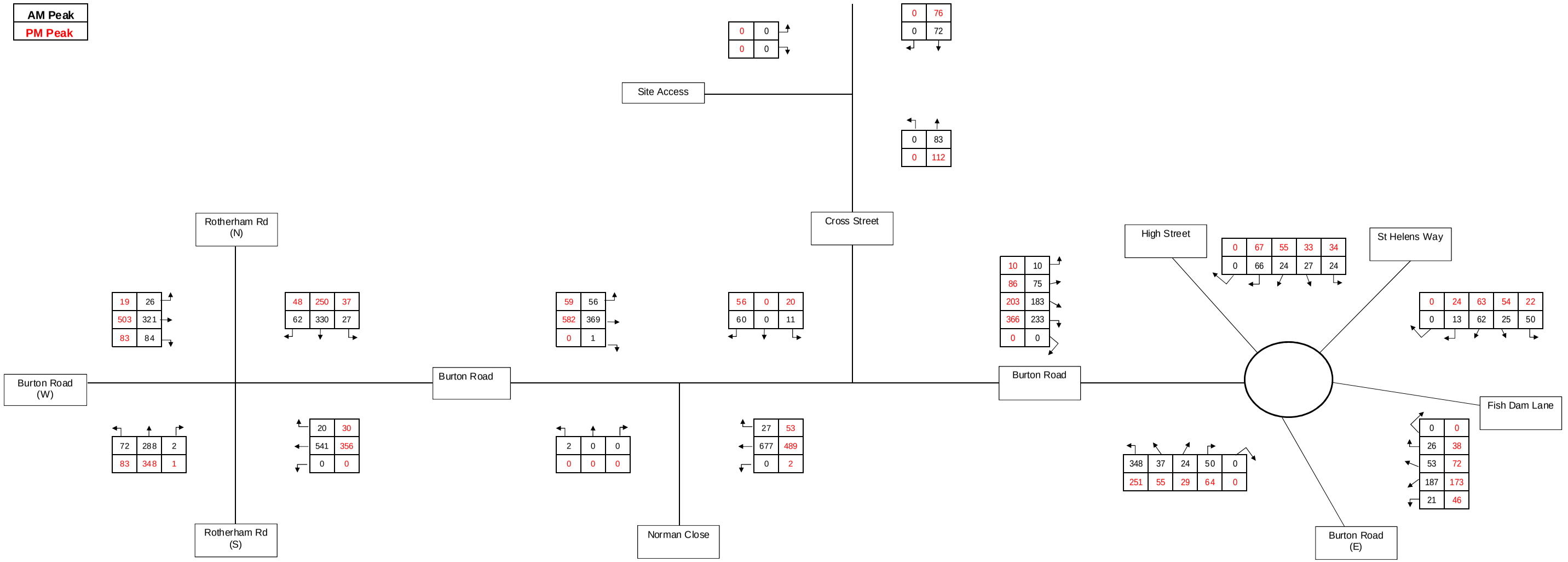
FIGURE No:

Figure 1

File: Created using iGIS, WSP's Online Mapping System

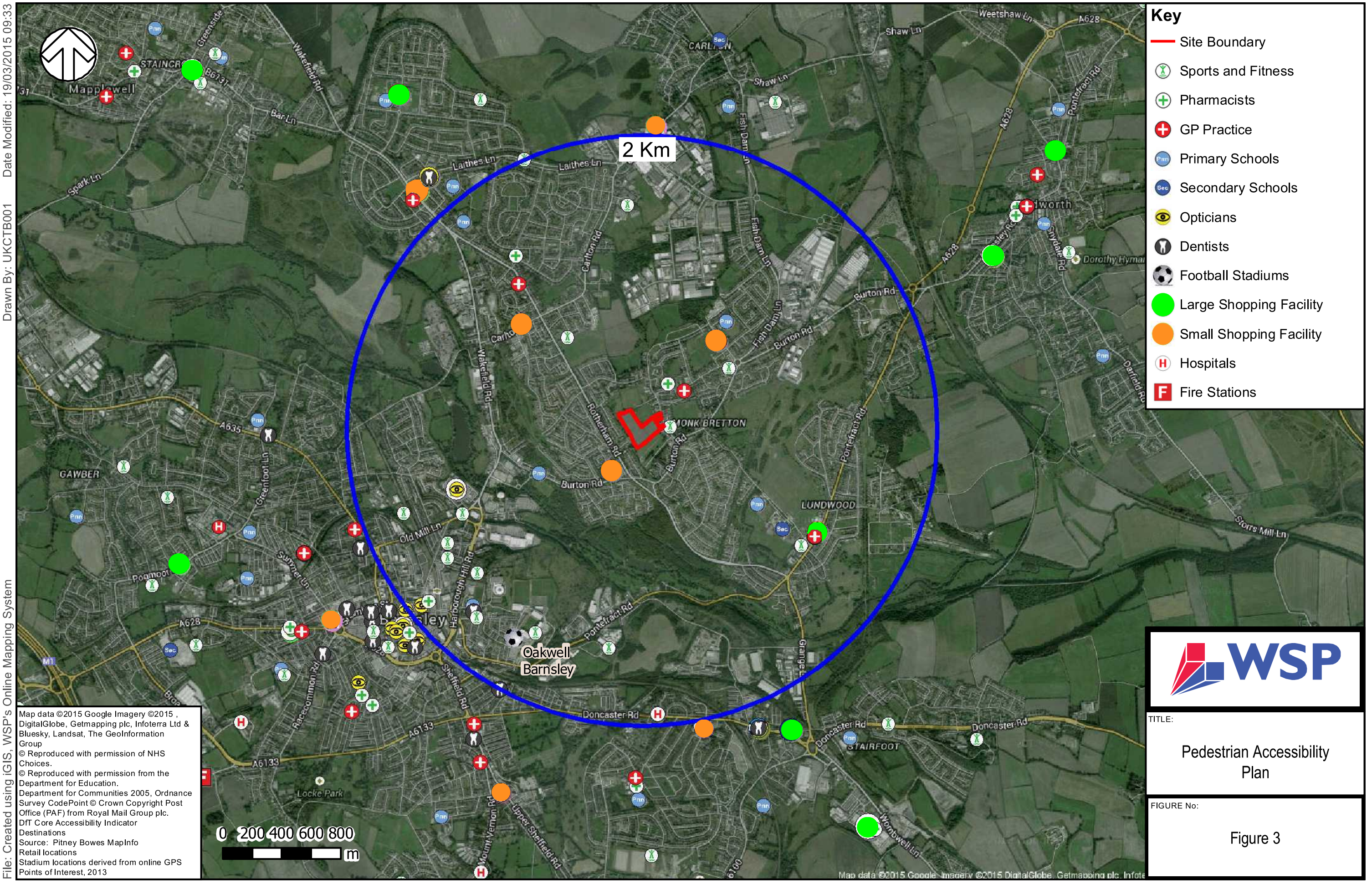
2015 Base Traffic Flows

Figure 2



Date Modified: 19/03/2015 09:33

Drawn By: UKCTB001



Map data ©2015 Google Imagery ©2015 , DigitalGlobe, Getmapping plc, Infoterra Ltd & Bluesky, Landsat, The GeoInformation Group
© Reproduced with permission of NHS Choices.
© Reproduced with permission from the Department for Education.
Department for Communities 2005, Ordnance Survey CodePoint © Crown Copyright Post Office (PAF) from Royal Mail Group plc.
DfT Core Accessibility Indicator Destinations
Source: Pitney Bowes MapInfo
Retail locations
Stadium locations derived from online GPS Points of Interest, 2013

WSP

TITLE:

Pedestrian Accessibility Plan

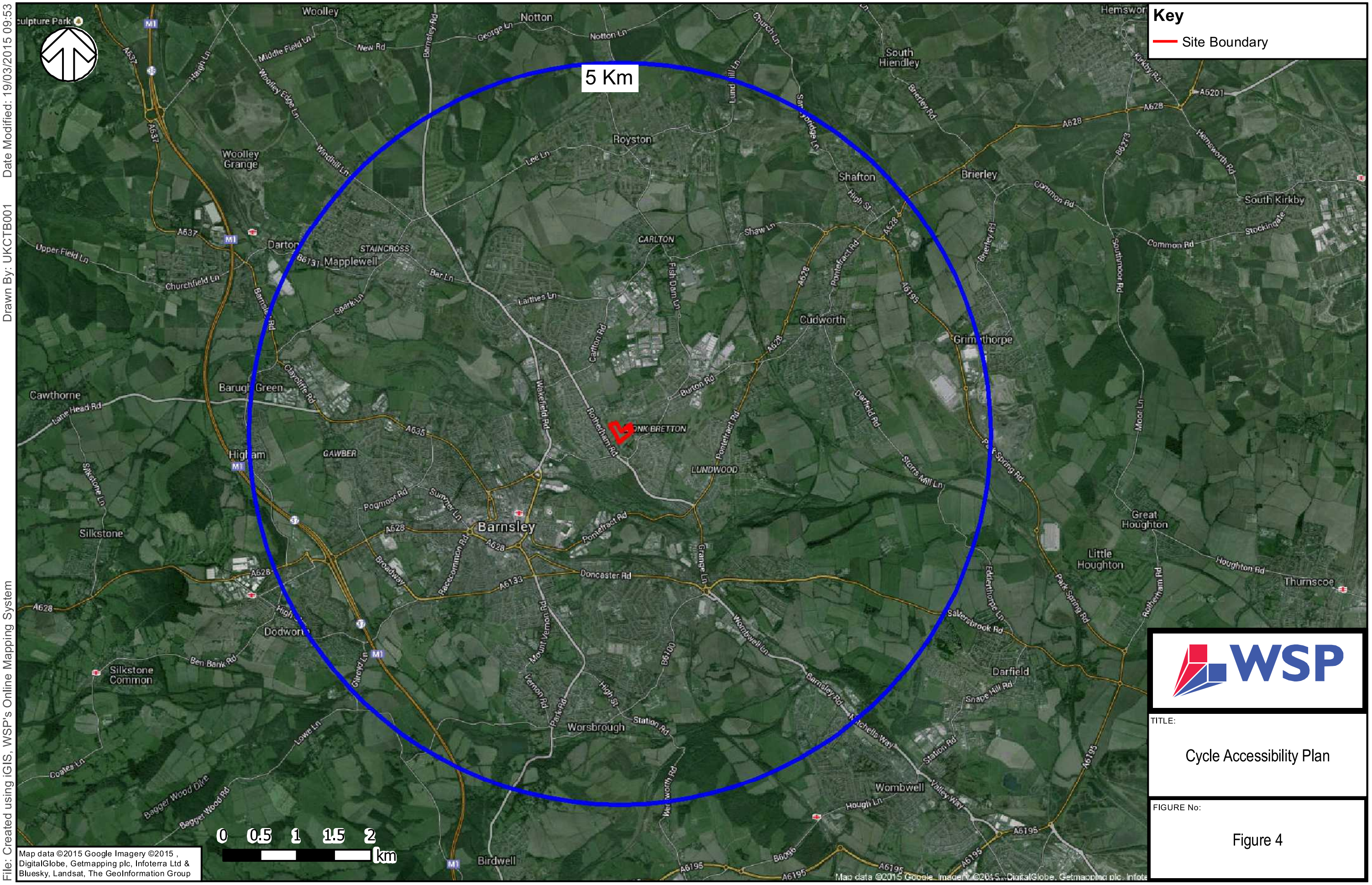
FIGURE No:

Figure 3

File: Created using iGIS, WSP's Online Mapping System

Drawn By: UKCTB001

Date Modified: 19/03/2015 09:53



WSP

TITLE:

Cycle Accessibility Plan

FIGURE No:

Figure 4

File: Created using iGIS, WSP's Online Mapping System

Date Modified: 19/03/2015 09:55

Drawn By: UKCTB001



File: Created using iGIS, WSP's Online Mapping System

WSP

TITLE:

Cycle Route Plan

FIGURE No:

Figure 5

Drawn By: UKCTB001

Date Modified: 19/03/2015 10:08



WSP

TITLE:

Bus Stop Location Plan

FIGURE No:

Figure 6

File: Created using iGIS, WSP's Online Mapping System

2020 Base Traffic Flows

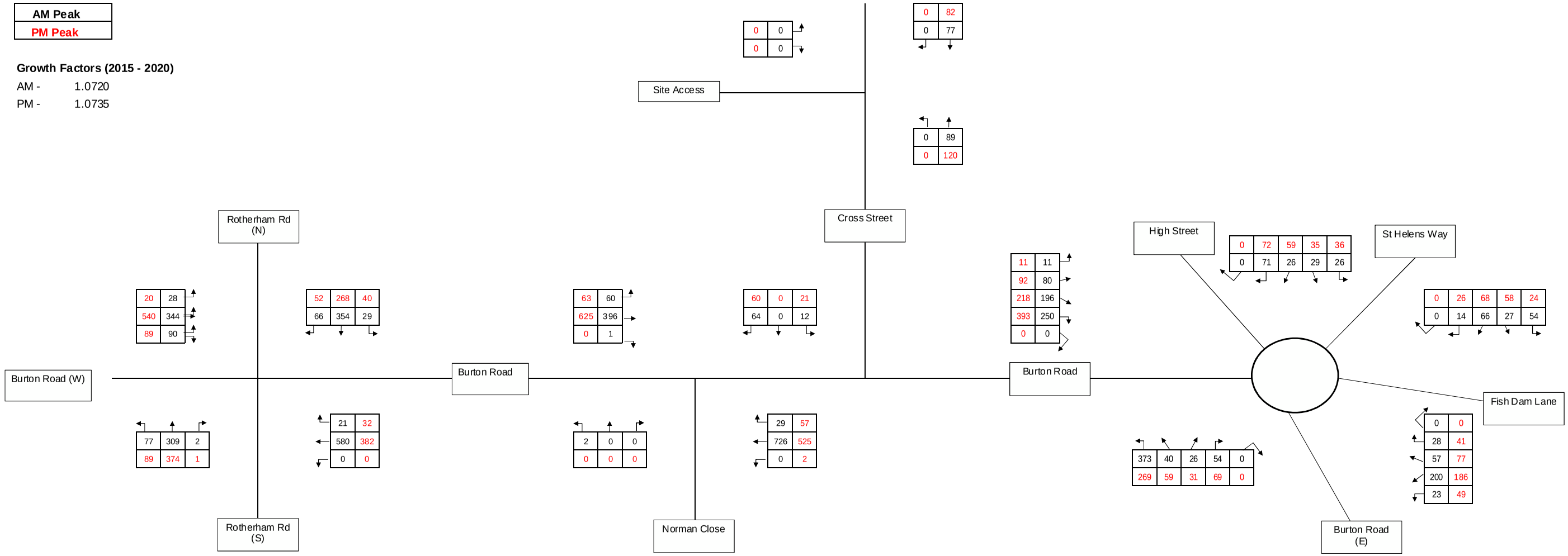
Figure 7

AM Peak
PM Peak

Growth Factors (2015 - 2020)

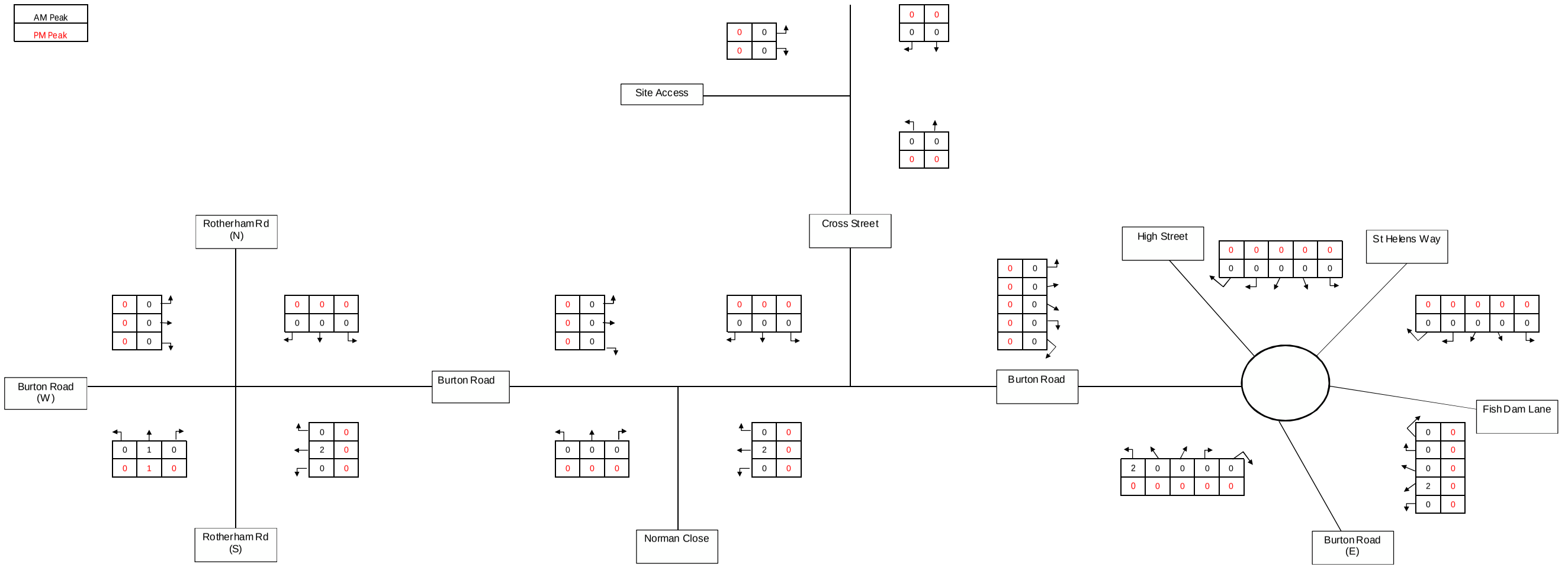
AM - 1.0720

PM - 1.0735



Committed Development Traffic Flows Land at Ellwood, 97 dwellings

Figure 8



2020 Base + Committed Development Traffic Flows

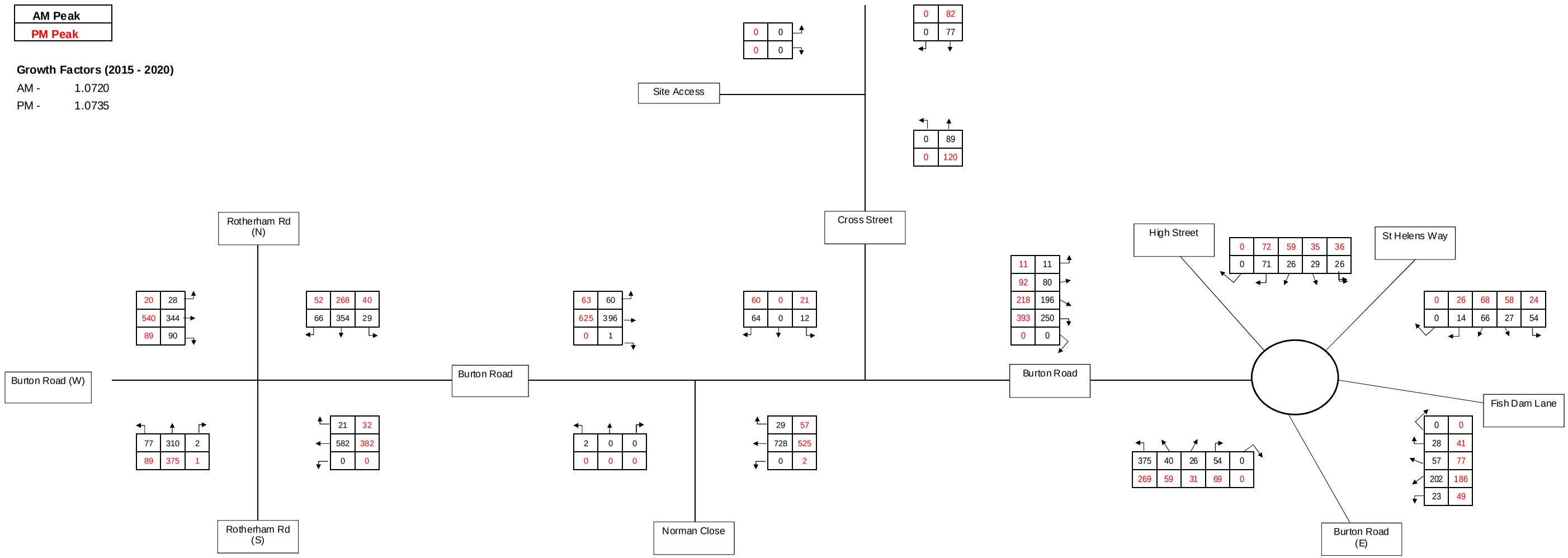
Figure 9

AM Peak
PM Peak

Growth Factors (2015 - 2020)

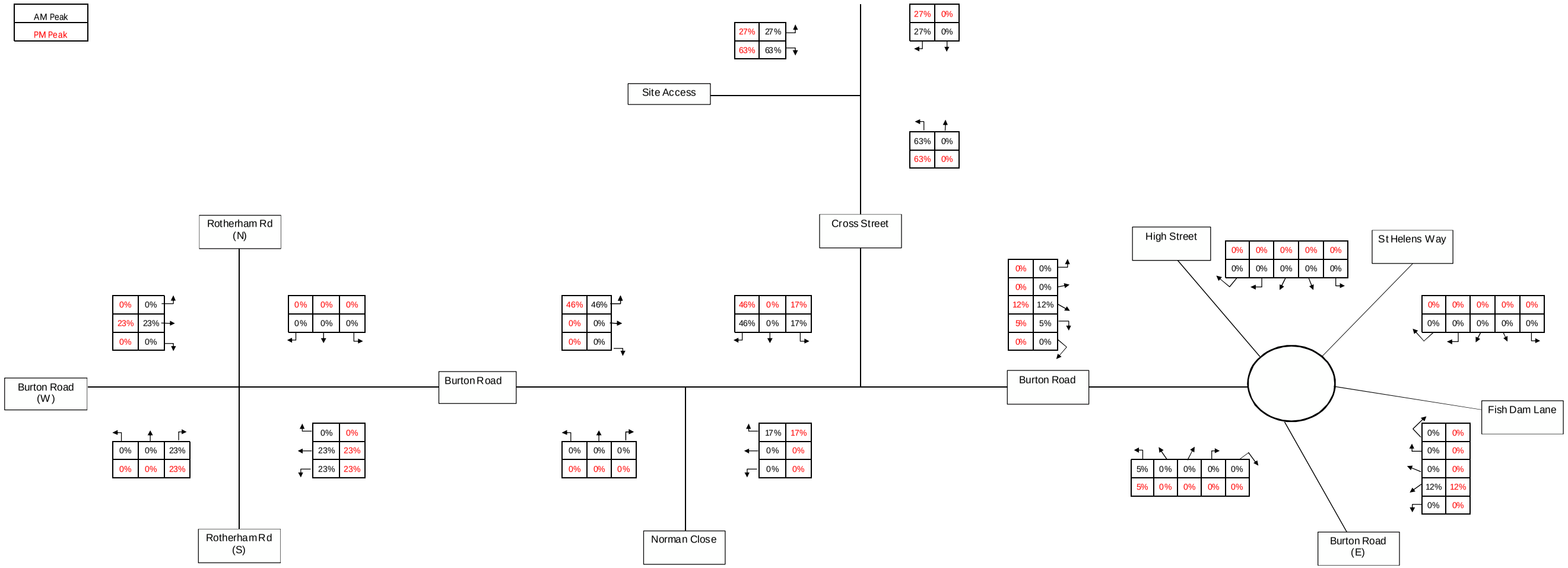
AM - 1.0720

PM - 1.0735



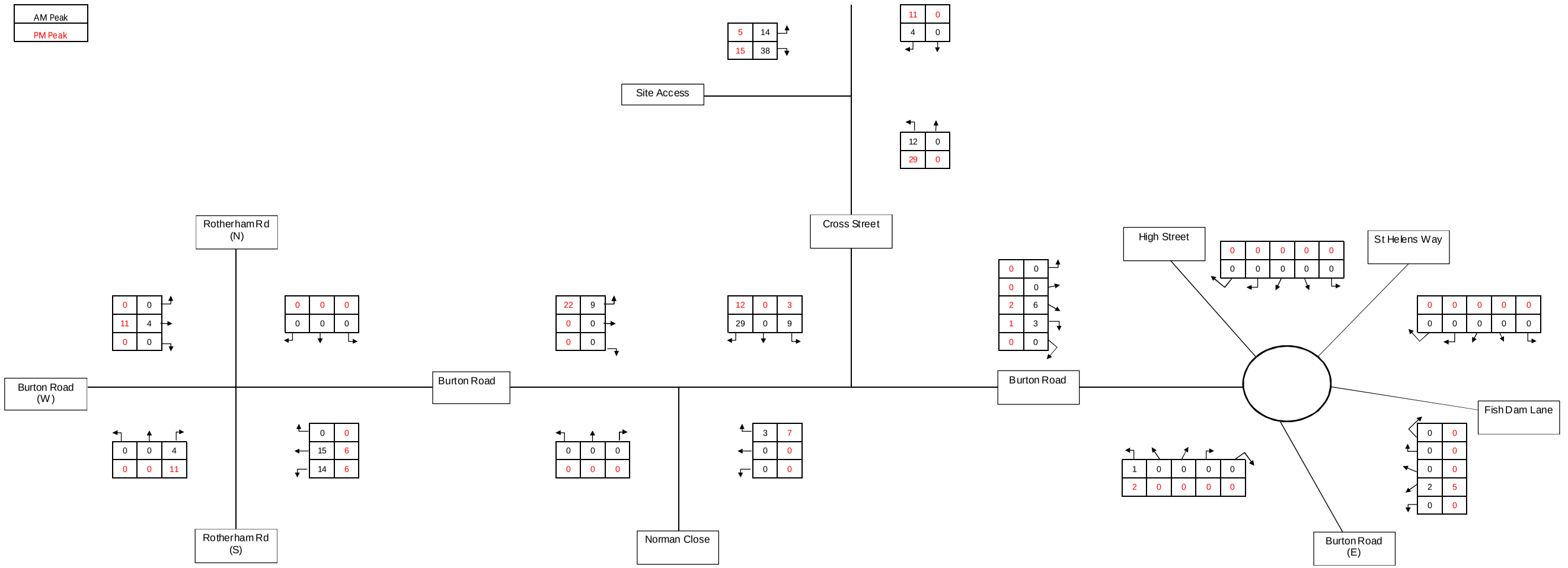
Development Traffic Distribution Diagram

Figure 10



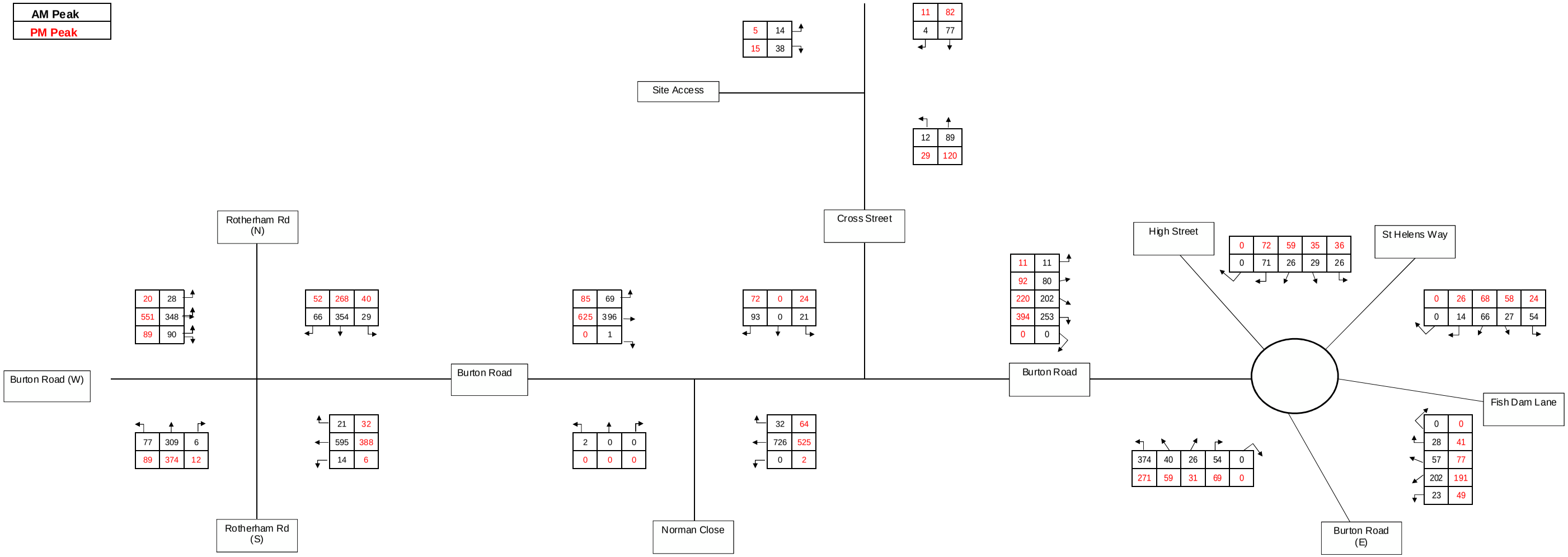
Development Traffic Flows

Figure 11



2020 Predicted Traffic Flows

Figure 12



Appendix A

PROPOSED SITE LAYOUT



Name	Floor area Sq Ft		Total Units	Total
Tweedale	871		16	13936
[illegible]	[illegible]		[illegible]	[illegible]
Saltaire	1009		4	4036
Addingham	1027		19	19513
Ilkley	1215		31	37665
Settle	1007		17	17119
Ribblesdale	1145		11	12595
Total			98	105849
62	871		16	13937
Penthouse	1716		2	3432
Total			18	17369
Overall Total			95	103849

	Net Area	Area
[illegible]	7148	815
[illegible]	6455	7267
[illegible]	5483	6041
[illegible]	[illegible]	16356

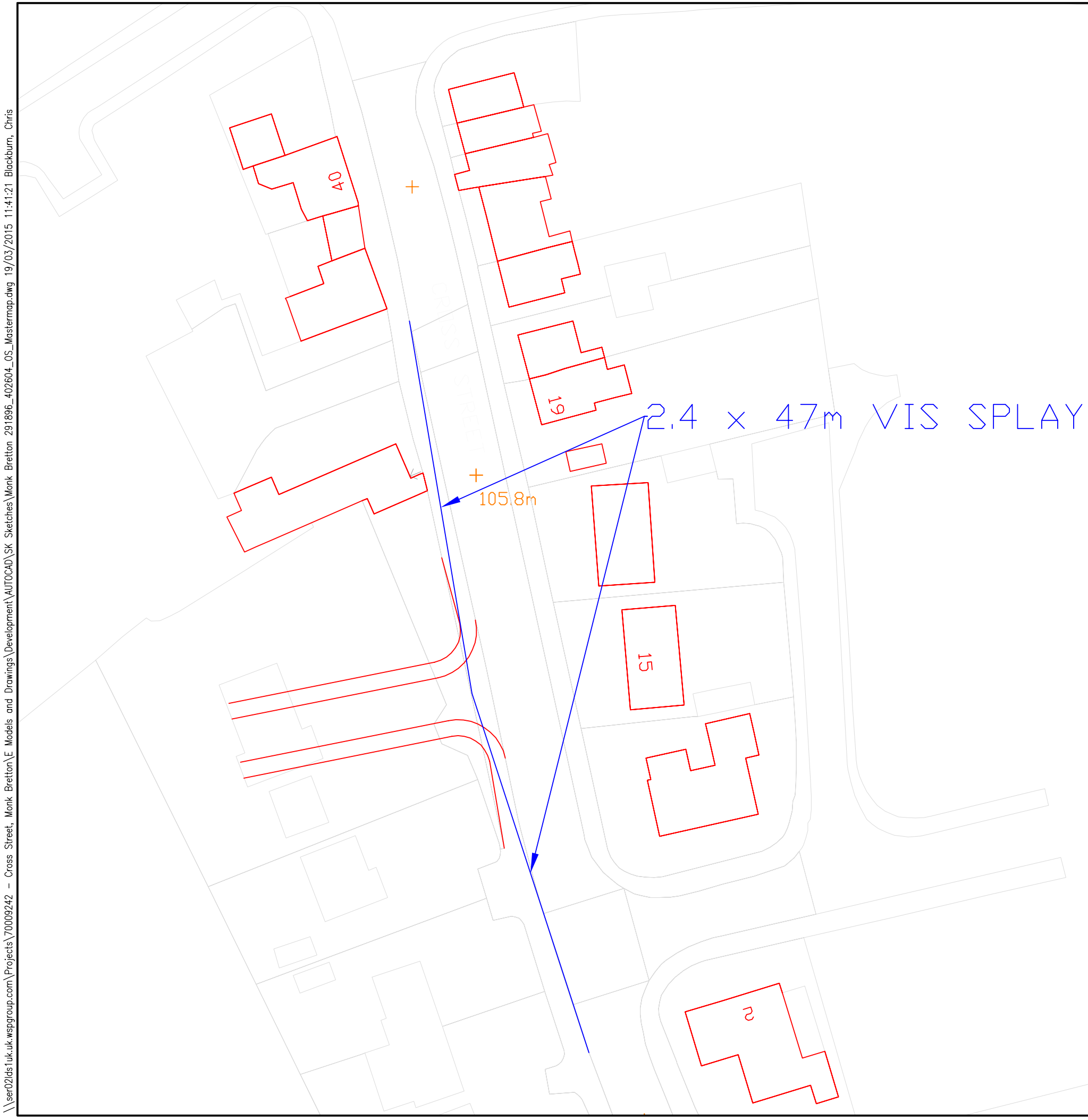
STEN ARCHITECTURE
STEN Architecture Ltd
Suite 10, Unit 3
Benton Office Park
Bennett Avenue
Horbury
WF4 5RA
TEL: 01924 689424

SK10 | 17th March 2015 | 1:500@A0

CROSS STREET | MONK BRETTON

Appendix B

SITE ACCESS PLAN



DO NOT SCALE

REV	DATE	BY	DESCRIPTION	CHK	APD
A	19/03/2015	CB	FIRST ISSUE	AH	AH

DRAWING STATUS:
FOR INFORMATION ONLY

WSP
Three White Rose Office Park, Millshaw Park Lane, Leeds LS11 0DT
Tel: +44 (0)113 395 6200 Fax: +44 (0)113 395 6201
http://www.wspgroup.com

CLIENT:
BELLWAY HOMES

ARCHITECT:

PROJECT:
CROSS STREET
MONK BRETTON

TITLE:
SITE ACCESS
VISIBILITY SPLAYS

SCALE @ A3:	CHECKED:	APPROVED:
1:500 @ A3	AH	AH
CAD FILE:	DESIGN-DRAWN:	DATE:
9242-SK-001	CB	March 2015

PROJECT No:	DRAWING No:	REV:
70009242	9242-SK-001	A

© WSP Group Ltd

\\ser02lds1uk.uk.wspgroup.com\Projects\70009242 – Cross Street, Monk Bretton\E Models and Drawings\Development\AUTOCAD\SK Sketches\Monk Bretton 291896_402604_OS_Mastermap.dwg 19/03/2015 11:41:21 Blackburn, Chris

Appendix C

COUNT DATA

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

DATE: 10/12/2014

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DAY: WEDNESDAY

TIME	MOVEMENT 1 FROM CROSS STREET TO BURTON ROAD (NE)								MOVEMENT 2 FROM CROSS STREET TO NORMAN CLOSE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
07:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
HH/TOT	4	1	0	0	0	1	0	6	0	0	0	0	0	0	0	0
08:00	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0
PCU	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0
09:00	2	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
HH/TOT	3	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0
P/TOT	16	3	0	2	0	1	0	22	0	0	0	0	0	0	0	0

TIME	MOVEMENT 1 FROM CROSS STREET TO BURTON ROAD (NE)								MOVEMENT 2 FROM CROSS STREET TO NORMAN CLOSE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
16:15	4	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0
16:30	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
16:45	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	15	7	0	0	0	0	0	22	0	0	0	0	0	0	0	0
17:00	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:15	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
17:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:45	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
H/TOT	17	3	0	0	0	0	0	20	0	0	0	0	0	0	0	0
PCU	17	3	0	0	0	0	0	20	0	0	0	0	0	0	0	0
P/TOT	32	10	0	0	0	0	0	42	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

DATE: 10/12/2014

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DAY: WEDNESDAY

TIME	MOVEMENT 3 FROM CROSS STREET TO BURTON ROAD (S)								MOVEMENT 4 FROM BURTON ROAD (S) TO CROSS STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	9	2	1	0	1	0	0	13	4	1	0	0	1	0	0	6
07:45	7	3	2	0	1	0	0	13	3	0	0	0	0	0	0	3
HH/TOT	16	5	3	0	2	0	0	26	7	1	0	0	1	0	0	9
08:00	10	3	0	0	1	0	0	14	6	1	1	0	2	0	0	10
08:15	6	3	1	0	2	0	0	12	9	1	0	0	0	0	0	10
08:30	9	1	0	0	1	0	0	11	7	1	1	0	2	0	0	11
08:45	13	1	0	0	2	0	0	16	9	1	1	2	1	0	0	14
H/TOT	38	8	1	0	6	0	0	53	31	4	3	2	5	0	0	45
	38	8	2.2	0	12	0	0	60.2	31	4	6.6	4.4	10	0	0	56
09:00	12	1	0	0	1	0	0	14	11	1	0	0	2	0	0	14
09:15	12	1	0	0	2	0	0	15	11	1	2	0	1	0	0	15
HH/TOT	24	2	0	0	3	0	0	29	22	2	2	0	3	0	0	29
P/TOT	78	15	4	0	11	0	0	108	60	7	5	2	9	0	0	83

TIME	MOVEMENT 3 FROM CROSS STREET TO BURTON ROAD (S)								MOVEMENT 4 FROM BURTON ROAD (S) TO CROSS STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	13	2	1	0	1	0	0	17	8	4	0	0	2	0	0	14
16:15	7	3	0	0	1	0	0	11	7	6	0	0	2	0	0	15
16:30	10	1	1	0	1	0	0	13	17	6	1	0	1	0	0	25
16:45	15	1	0	0	4	0	0	20	11	5	1	0	2	1	0	20
H/TOT	45	7	2	0	7	0	0	61	43	21	2	0	7	1	0	74
17:00	15	4	0	0	1	0	0	20	5	5	1	0	2	0	0	13
17:15	9	1	0	0	1	0	0	11	7	1	2	0	1	0	0	11
17:30	7	2	0	0	1	0	0	10	16	1	0	0	1	0	0	18
17:45	9	1	0	0	1	0	0	11	8	1	0	0	0	0	0	9
H/TOT	40	8	0	0	4	0	0	52	36	8	3	0	4	0	0	51
	40	8	0	0	8	0	0	56	36	8	6.6	0	8	0	0	58.6
P/TOT	85	15	2	0	11	0	0	113	79	29	5	0	11	1	0	125

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

DATE: 10/12/2014

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DAY: WEDNESDAY

TIME	MOVEMENT 5 FROM BURTON ROAD (S) TO BURTON ROAD (NE)								MOVEMENT 6 FROM BURTON ROAD (S) TO NORMAN CLOSE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	68	10	1	1	0	0	0	80	0	0	0	0	0	0	0	0
07:45	65	25	7	0	0	1	0	98	0	0	0	0	0	0	0	0
HH/TOT	133	35	8	1	0	1	0	178	0	0	0	0	0	0	0	0
08:00	77	17	3	2	0	0	0	99	1	0	0	0	0	0	0	1
08:15	68	13	4	1	0	0	0	86	0	0	0	0	0	0	0	0
08:30	64	13	3	1	0	0	0	81	0	0	0	0	0	0	0	0
08:45	74	10	1	0	0	0	0	85	0	0	0	0	0	0	0	0
H/TOT	283	53	11	4	0	0	0	351	1	0	0	0	0	0	0	1
	283	53	24.2	8.8	0	0	0	369	1	0	0	0	0	0	0	1
09:00	55	13	0	0	1	1	0	70	0	0	0	0	0	0	0	0
09:15	67	15	8	0	0	0	0	90	0	0	0	0	0	0	0	0
HH/TOT	122	28	8	0	1	1	0	160	0	0	0	0	0	0	0	0
P/TOT	538	116	27	5	1	2	0	689	1	0	0	0	0	0	0	1

TIME	MOVEMENT 5 FROM BURTON ROAD (S) TO BURTON ROAD (NE)								MOVEMENT 6 FROM BURTON ROAD (S) TO NORMAN CLOSE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	92	13	1	1	0	0	0	107	0	0	0	0	0	0	0	0
16:15	109	11	2	0	1	0	0	123	1	0	0	0	0	0	0	1
16:30	88	15	0	0	0	0	0	103	0	0	0	0	0	0	0	0
16:45	83	16	3	0	1	0	0	103	1	0	0	0	0	0	0	1
H/TOT	372	55	6	1	2	0	0	436	2	0	0	0	0	0	0	2
17:00	132	18	1	0	0	0	0	151	0	0	0	0	0	0	0	0
17:15	116	7	1	0	0	0	0	124	0	0	0	0	0	0	0	0
17:30	129	18	1	0	0	0	0	148	0	0	0	0	0	0	0	0
17:45	138	15	0	1	0	0	0	154	0	0	0	0	0	0	0	0
H/TOT	515	58	3	1	0	0	0	577	0	0	0	0	0	0	0	0
	515	58	6.6	2.2	0	0	0	581.8	0	0	0	0	0	0	0	0
P/TOT	887	113	9	2	2	0	0	1013	2	0	0	0	0	0	0	2

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

DATE: 10/12/2014

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DAY: WEDNESDAY

TIME	MOVEMENT 7 FROM NORMAN CLOSE TO BURTON ROAD (S)								MOVEMENT 8 FROM NORMAN CLOSE TO CROSS STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
07:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
HH/TOT	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HH/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0

TIME	MOVEMENT 7 FROM NORMAN CLOSE TO BURTON ROAD (S)								MOVEMENT 8 FROM NORMAN CLOSE TO CROSS STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DATE: 10/12/2014

DAY: WEDNESDAY

AXIOM Traffic Limited

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

LOCATION: CROSS STREET / BURTON ROAD / NORM

TIME	MOVEMENT 9 FROM NORMAN CLOSE TO BURTON ROAD (NE)								MOVEMENT 10 FROM BURTON ROAD (NE) TO NORMAN CLOSE								TIME	MOVEM FROM BURTON ROAD (N			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	07:30	109	23	3	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	07:45	93	19	2	2
HH/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HH/TOT	202	42	5	3
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:00	143	29	2	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:15	138	27	3	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:30	150	17	3	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:45	110	20	7	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	H/TOT	541	93	15	3
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		541	93	33	6.6
09:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	09:00	114	23	11	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	09:15	96	18	3	1
HH/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	HH/TOT	210	41	14	2
P/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	P/TOT	953	176	34	8

TIME	MOVEMENT 9 FROM NORMAN CLOSE TO BURTON ROAD (NE)								MOVEMENT 10 FROM BURTON ROAD (NE) TO NORMAN CLOSE								TIME	MOVEM FROM BURTON ROAD (N			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:00	112	28	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:15	75	23	3	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:30	78	14	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:45	118	23	0	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	H/TOT	383	88	5	3
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:00	126	14	3	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:15	106	12	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	17:30	94	15	1	0
17:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	17:45	100	11	1	0
H/TOT	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	H/TOT	426	52	5	0
	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2		426	52	11	0
P/TOT	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	P/TOT	809	140	10	3

DATE: 10/12/2014

MAN CLOSE

DAY: WEDNESDAY

MENT 11 E) TO BURTON ROAD (S)				MOVEMENT 12 FROM BURTON ROAD (NE) TO CROSS STREET							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
0	0	0	136	3	0	0	0	0	0	0	3
2	1	0	119	0	0	1	0	0	0	0	1
2	1	0	255	3	0	1	0	0	0	0	4
0	0	0	175	7	1	0	0	0	0	0	8
0	1	0	169	6	0	0	0	0	0	0	6
1	1	0	172	3	0	0	0	0	0	0	3
0	1	0	140	4	4	1	0	0	0	0	9
1	3	0	656	20	5	1	0	0	0	0	26
2	1.2	0	676.8	20	5	2.2	0	0	0	0	27.2
0	0	0	149	9	4	0	0	0	0	0	13
0	0	0	118	5	0	0	0	0	0	0	5
0	0	0	267	14	4	0	0	0	0	0	18
3	4	0	1178	37	9	2	0	0	0	0	48

MENT 11 E) TO BURTON ROAD (S)				MOVEMENT 12 FROM BURTON ROAD (NE) TO CROSS STREET							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
0	1	0	142	13	1	0	0	0	0	0	14
0	0	0	102	6	4	1	0	1	0	0	12
0	0	0	94	3	3	0	0	0	1	0	7
0	1	0	143	7	1	1	0	0	0	0	9
0	2	0	481	29	9	2	0	1	1	0	42
0	0	0	143	7	2	0	1	0	0	0	10
0	0	0	118	15	4	0	1	0	1	0	21
0	0	0	110	8	1	0	0	0	0	0	9
0	0	0	112	9	2	0	0	0	0	0	11
0	0	0	483	39	9	0	2	0	1	0	51
0	0	0	489	39	9	0	4.4	0	0.4	0	52.8
0	2	0	964	68	18	2	2	1	2	0	93

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

DATE: 10/12/2014

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DAY: WEDNESDAY

TIME	TO ARM A CROSS STREET								FROM ARM A CROSS STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	7	1	0	0	1	0	0	9	10	2	1	0	1	1	0	15
07:45	3	0	1	0	0	0	0	4	10	4	2	0	1	0	0	17
HH/TOT	10	1	1	0	1	0	0	13	20	6	3	0	2	1	0	32
08:00	13	2	1	0	2	0	0	18	13	4	0	0	1	0	0	18
08:15	15	1	0	0	0	0	0	16	8	3	1	0	2	0	0	14
08:30	10	1	1	0	2	0	0	14	11	1	0	0	1	0	0	13
08:45	13	5	2	2	1	0	0	23	15	2	0	0	2	0	0	19
H/TOT	51	9	4	2	5	0	0	71	47	10	1	0	6	0	0	64
09:00	20	5	0	0	2	0	0	27	14	1	0	2	1	0	0	18
09:15	16	1	2	0	1	0	0	20	13	1	0	0	2	0	0	16
HH/TOT	36	6	2	0	3	0	0	47	27	2	0	2	3	0	0	34
P/TOT	97	16	7	2	9	0	0	131	94	18	4	2	11	1	0	130

TIME	TO ARM A CROSS STREET								FROM ARM A CROSS STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	21	5	0	0	2	0	0	28	18	3	1	0	1	0	0	23
16:15	13	10	1	0	3	0	0	27	11	6	0	0	1	0	0	18
16:30	20	9	1	0	1	1	0	32	13	2	1	0	1	0	0	17
16:45	18	6	2	0	2	1	0	29	18	3	0	0	4	0	0	25
H/TOT	72	30	4	0	8	2	0	116	60	14	2	0	7	0	0	83
17:00	12	7	1	1	2	0	0	23	16	5	0	0	1	0	0	22
17:15	22	5	2	1	1	1	0	32	16	2	0	0	1	0	0	19
17:30	24	2	0	0	1	0	0	27	10	2	0	0	1	0	0	13
17:45	17	3	0	0	0	0	0	20	15	2	0	0	1	0	0	18
H/TOT	75	17	3	2	4	1	0	102	57	11	0	0	4	0	0	72
P/TOT	147	47	7	2	12	3	0	218	117	25	2	0	11	0	0	155

TO ARM A IS TOTAL OF MOVEMENTS 4, 8, 12

FROM ARM A IS TOTAL OF MOVEMENTS 1, 2, 3

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

DATE: 10/12/2014

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DAY: WEDNESDAY

TIME	TO ARM B BURTON ROAD (S)								FROM ARM B BURTON ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	123	25	4	1	1	0	0	154	72	11	1	1	1	0	0	86
07:45	101	23	4	2	3	1	0	134	68	25	7	0	0	1	0	101
HH/TOT	224	48	8	3	4	1	0	288	140	36	8	1	1	1	0	187
08:00	153	32	2	1	1	0	0	189	84	18	4	2	2	0	0	110
08:15	145	30	4	0	2	1	0	182	77	14	4	1	0	0	0	96
08:30	159	18	3	0	2	1	0	183	71	14	4	1	2	0	0	92
08:45	124	21	7	2	2	1	0	157	83	11	2	2	1	0	0	99
H/TOT	581	101	16	3	7	3	0	711	315	57	14	6	5	0	0	397
09:00	126	24	11	1	1	0	0	163	66	14	0	0	3	1	0	84
09:15	108	19	3	1	2	0	0	133	78	16	10	0	1	0	0	105
HH/TOT	234	43	14	2	3	0	0	296	144	30	10	0	4	1	0	189
P/TOT	1039	192	38	8	14	4	0	1295	599	123	32	7	10	2	0	773

TIME	TO ARM B BURTON ROAD (S)								FROM ARM B BURTON ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	125	30	2	0	1	1	0	159	100	17	1	1	2	0	0	121
16:15	82	26	3	1	1	0	0	113	117	17	2	0	3	0	0	139
16:30	88	15	2	1	1	0	0	107	105	21	1	0	1	0	0	128
16:45	134	24	0	1	4	1	0	164	95	21	4	0	3	1	0	124
H/TOT	429	95	7	3	7	2	0	543	417	76	8	1	9	1	0	512
17:00	141	18	3	0	1	0	0	163	137	23	2	0	2	0	0	164
17:15	115	13	0	0	1	0	0	129	123	8	3	0	1	0	0	135
17:30	101	17	1	0	1	0	0	120	145	19	1	0	1	0	0	166
17:45	109	12	1	0	1	0	0	123	146	16	0	1	0	0	0	163
H/TOT	466	60	5	0	4	0	0	535	551	66	6	1	4	0	0	628
P/TOT	895	155	12	3	11	2	0	1078	968	142	14	2	13	1	0	1140

TO ARM B IS TOTAL OF MOVEMENTS 3, 7, 11

FROM ARM B IS TOTAL OF MOVEMENTS 4, 5, 6

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

LOCATION: CROSS STREET / BURTON ROAD / NORMAN CLOSE

DATE: 10/12/2014

DAY: WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 1

LOCATION: CROSS STREET / BURTON ROAD / NORM

TIME	TO ARM C NORMAN CLOSE								FROM ARM C NORMAN CLOSE								TIME	TO A BURTON F			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
07:30	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	07:30	69	10	1	1
07:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	07:45	68	26	7	0
HH/TOT	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	HH/TOT	137	36	8	1
08:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	08:00	80	18	3	2
08:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	08:15	70	13	4	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:30	66	13	3	1
08:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	08:45	76	11	1	0
H/TOT	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	H/TOT	292	55	11	4
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	09:00	57	13	0	2
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	09:15	68	15	8	0
HH/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	HH/TOT	125	28	8	2
P/TOT	2	0	0	0	0	0	0	2	8	1	0	0	0	0	0	9	P/TOT	554	119	27	7

TIME	TO ARM C NORMAN CLOSE								FROM ARM C NORMAN CLOSE								TIME	TO A BURTON F			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:00	97	14	1	1
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	16:15	113	14	2	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:30	91	16	0	0
16:45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	16:45	86	18	3	0
H/TOT	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	H/TOT	387	62	6	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:00	133	19	1	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:15	123	8	1	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	17:30	132	18	1	0
17:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	17:45	144	16	0	1
H/TOT	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	H/TOT	532	61	3	1
P/TOT	4	0	0	0	0	0	0	4	1	0	0	0	0	0	0	1	P/TOT	919	123	9	2

TO ARM C IS TOTAL OF MOVEMENTS 2, 6, 10

FROM ARM C IS TOTAL OF MOVEMENTS 7, 8, 9

TO ARM D IS TOTAL OF MOVEMENTS 1, 5, 9

FROM ARM D IS TOTAL OF MOVEMENTS 10, 11, 12

DATE: 10/12/2014

MAN CLOSE

DAY: WEDNESDAY

RM D OAD (NE)				FROM ARM D BURTON ROAD (NE)							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
0	1	0	82	112	23	3	1	0	0	0	139
0	1	0	102	93	19	3	2	2	1	0	120
0	2	0	184	205	42	6	3	2	1	0	259
0	0	0	103	150	30	2	1	0	0	0	183
0	0	0	88	144	27	3	0	0	1	0	175
0	0	0	83	153	17	3	0	1	1	0	175
0	0	0	88	114	24	8	2	0	1	0	149
0	0	0	362	561	98	16	3	1	3	0	682
1	1	0	74	124	27	11	1	0	0	0	163
0	0	0	91	101	18	3	1	0	0	0	123
1	1	0	165	225	45	14	2	0	0	0	286
1	3	0	711	991	185	36	8	3	4	0	1227

RM D OAD (NE)				FROM ARM D BURTON ROAD (NE)							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
0	0	0	113	125	29	1	0	0	1	0	156
1	0	0	130	81	27	4	1	1	0	0	114
0	0	0	107	81	17	1	1	0	1	0	101
1	0	0	108	125	24	1	1	0	1	0	152
2	0	0	458	412	97	7	3	1	3	0	523
0	0	0	153	133	16	3	1	0	0	0	153
0	0	0	132	121	16	0	1	0	1	0	139
0	0	0	151	103	16	1	0	0	0	0	120
0	0	0	161	110	13	1	0	0	0	0	124
0	0	0	597	467	61	5	2	0	1	0	536
2	0	0	1055	879	158	12	5	1	4	0	1059

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 1 FROM ST HELENS WAY TO FISH DAM LANE								MOVEMENT 2 FROM ST HELENS WAY TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	7	1	0	0	0	0	0	8
07:45	4	1	0	0	0	0	0	5	7	0	0	0	0	0	0	7
HH/TOT	5	1	0	0	0	0	0	6	14	1	0	0	0	0	0	15
08:00	10	2	0	0	0	0	0	12	6	1	0	0	0	0	0	7
08:15	7	2	0	0	0	0	0	9	4	1	0	0	0	0	0	5
08:30	8	1	1	0	0	0	0	10	5	2	0	0	0	0	0	7
08:45	14	2	1	0	0	0	0	17	4	2	0	0	0	0	0	6
H/TOT	39	7	2	0	0	0	0	48	19	6	0	0	0	0	0	25
PCU	39	7	4.4	0	0	0	0	50.4	19	6	0	0	0	0	0	25
09:00	3	2	0	0	0	0	0	5	9	3	0	0	0	0	0	12
09:15	2	1	1	0	0	0	0	4	5	1	0	0	0	0	0	6
HH/TOT	5	3	1	0	0	0	0	9	14	4	0	0	0	0	0	18
P/TOT	49	11	3	0	0	0	0	63	47	11	0	0	0	0	0	58

TIME	MOVEMENT 1 FROM ST HELENS WAY TO FISH DAM LANE								MOVEMENT 2 FROM ST HELENS WAY TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	10	0	0	0	0	0	0	10	9	0	0	0	0	0	0	9
16:15	6	0	0	0	0	0	0	6	4	1	0	0	0	0	0	5
16:30	2	1	0	0	0	0	0	3	7	0	0	0	0	0	0	7
16:45	5	1	0	0	0	0	0	6	7	1	0	0	0	0	0	8
H/TOT	23	2	0	0	0	0	0	25	27	2	0	0	0	0	0	29
17:00	3	0	0	0	0	0	0	3	17	0	0	0	0	0	0	17
17:15	5	0	0	0	0	0	0	5	13	0	1	0	0	0	0	14
17:30	7	1	0	0	0	0	0	8	8	0	0	0	0	0	0	8
17:45	6	0	0	0	0	0	0	6	13	1	0	0	0	0	0	14
H/TOT	21	1	0	0	0	0	0	22	51	1	1	0	0	0	0	53
PCU	21	1	0	0	0	0	0	22	51	1	2.2	0	0	0	0	54.2
P/TOT	44	3	0	0	0	0	0	47	78	3	1	0	0	0	0	82

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 3 FROM ST HELENS WAY TO BURTON ROAD (S)								MOVEMENT 4 FROM ST HELENS WAY TO HIGH STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	11	1	0	0	0	0	0	12	2	1	0	0	0	0	0	3
07:45	8	0	0	0	0	0	0	8	2	0	0	0	0	0	0	2
HH/TOT	19	1	0	0	0	0	0	20	4	1	0	0	0	0	0	5
08:00	13	4	0	0	0	0	0	17	3	1	0	0	0	0	0	4
08:15	11	2	1	0	0	0	0	14	3	1	0	0	0	0	0	4
08:30	11	1	0	0	0	0	0	12	2	0	0	0	0	0	0	2
08:45	16	2	0	0	0	0	0	18	2	1	0	0	0	0	0	3
H/TOT	51	9	1	0	0	0	0	61	10	3	0	0	0	0	0	13
	51	9	2.2	0	0	0	0	62.2	10	3	0	0	0	0	0	13
09:00	15	1	0	0	0	0	0	16	7	0	0	0	0	0	0	7
09:15	9	0	0	0	0	0	0	9	2	0	0	0	0	0	0	2
HH/TOT	24	1	0	0	0	0	0	25	9	0	0	0	0	0	0	9
P/TOT	94	11	1	0	0	0	0	106	23	4	0	0	0	0	0	27

TIME	MOVEMENT 3 FROM ST HELENS WAY TO BURTON ROAD (S)								MOVEMENT 4 FROM ST HELENS WAY TO HIGH STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	14	0	0	0	0	0	0	14	5	0	0	0	0	0	0	5
16:15	8	2	0	0	0	0	0	10	1	1	0	0	0	0	0	2
16:30	7	0	0	0	0	0	0	7	2	0	0	0	0	0	0	2
16:45	7	3	0	0	0	0	0	10	2	1	0	0	0	0	0	3
H/TOT	36	5	0	0	0	0	0	41	10	2	0	0	0	0	0	12
17:00	12	1	0	0	0	0	0	13	6	1	0	0	0	0	0	7
17:15	12	3	0	0	0	0	0	15	6	0	0	0	0	0	0	6
17:30	12	6	0	0	0	0	0	18	3	1	0	0	0	0	0	4
17:45	14	3	0	0	0	0	0	17	6	1	0	0	0	0	0	7
H/TOT	50	13	0	0	0	0	0	63	21	3	0	0	0	0	0	24
	50	13	0	0	0	0	0	63	21	3	0	0	0	0	0	24
P/TOT	86	18	0	0	0	0	0	104	31	5	0	0	0	0	0	36

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 5 FROM ST HELENS WAY TO ST HELENS WAY								MOVEMENT 6 FROM HIGH STREET TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	5	0	1	0	0	0	0	6
07:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
HH/TOT	0	0	0	0	0	0	0	0	8	0	1	0	0	0	0	9
08:00	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6
08:15	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
08:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
08:45	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11
H/TOT	0	0	0	0	0	0	0	0	22	2	0	0	0	0	0	24
	0	0	0	0	0	0	0	0	22	2	0	0	0	0	0	24
09:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
09:15	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9
HH/TOT	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12
P/TOT	0	0	0	0	0	0	0	0	40	4	1	0	0	0	0	45

TIME	MOVEMENT 5 FROM ST HELENS WAY TO ST HELENS WAY								MOVEMENT 6 FROM HIGH STREET TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
16:15	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
16:30	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
16:45	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
H/TOT	0	0	0	0	0	0	0	0	28	3	0	0	0	0	0	31
17:00	0	0	0	0	0	0	0	0	8	0	1	0	0	0	0	9
17:15	0	0	0	0	0	0	0	0	8	0	1	0	0	0	0	9
17:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
17:45	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	8
H/TOT	0	0	0	0	0	0	0	0	28	2	2	0	0	0	0	32
	0	0	0	0	0	0	0	0	28	2	4.4	0	0	0	0	34.4
P/TOT	0	0	0	0	0	0	0	0	56	5	2	0	0	0	0	63

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 7 FROM HIGH STREET TO FISH DAM LANE								MOVEMENT 8 FROM HIGH STREET TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	0	0	0	0	0	0	5	6	1	0	0	0	0	0	7
07:45	6	1	1	0	1	0	0	9	8	0	3	0	0	0	0	11
HH/TOT	11	1	1	0	1	0	0	14	14	1	3	0	0	0	0	18
08:00	5	0	0	0	2	0	0	7	7	0	0	0	0	0	0	7
08:15	3	1	0	0	0	0	0	4	3	1	0	0	0	0	0	4
08:30	7	0	0	0	2	0	0	9	9	1	0	0	0	0	0	10
08:45	2	1	0	0	0	0	0	3	3	0	0	0	0	0	0	3
H/TOT	17	2	0	0	4	0	0	23	22	2	0	0	0	0	0	24
	17	2	0	0	8	0	0	27	22	2	0	0	0	0	0	24
09:00	5	1	0	0	2	0	0	8	8	1	0	0	0	0	0	9
09:15	2	1	0	0	0	0	0	3	6	1	0	0	0	0	0	7
HH/TOT	7	2	0	0	2	0	0	11	14	2	0	0	0	0	0	16
P/TOT	35	5	1	0	7	0	0	48	50	5	3	0	0	0	0	58

TIME	MOVEMENT 7 FROM HIGH STREET TO FISH DAM LANE								MOVEMENT 8 FROM HIGH STREET TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	4	1	0	0	2	0	0	7	8	1	0	0	0	0	0	9
16:15	4	0	2	0	1	0	0	7	9	1	1	0	1	0	0	12
16:30	3	1	0	0	0	0	0	4	8	2	0	0	0	0	0	10
16:45	5	1	0	0	2	0	0	8	12	1	0	0	0	0	0	13
H/TOT	16	3	2	0	5	0	0	26	37	5	1	0	1	0	0	44
17:00	9	0	0	0	0	0	0	9	20	0	0	0	0	0	0	20
17:15	6	1	0	0	2	0	0	9	12	1	0	0	0	0	0	13
17:30	6	0	0	0	0	0	0	6	10	0	0	0	0	1	0	11
17:45	6	1	0	0	0	0	0	7	11	1	0	0	0	0	0	12
H/TOT	27	2	0	0	2	0	0	31	53	2	0	0	0	1	0	56
	27	2	0	0	4	0	0	33	53	2	0	0	0	0.4	0	55.4
P/TOT	43	5	2	0	7	0	0	57	90	7	1	0	1	1	0	100

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 9 FROM HIGH STREET TO BURTON ROAD (S)								MOVEMENT 10 FROM HIGH STREET TO HIGH STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	12	0	1	0	0	0	0	13	0	0	0	0	0	0	0	0
07:45	9	1	1	0	1	0	0	12	0	0	0	0	0	0	0	0
HH/TOT	21	1	2	0	1	0	0	25	0	0	0	0	0	0	0	0
08:00	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0
08:15	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0
08:30	20	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
08:45	11	1	1	0	0	0	0	13	0	0	0	0	0	0	0	0
H/TOT	60	4	1	0	0	0	0	65	0	0	0	0	0	0	0	0
	60	4	2.2	0	0	0	0	66.2	0	0	0	0	0	0	0	0
09:00	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0
09:15	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
HH/TOT	24	1	0	0	0	0	0	25	0	0	0	0	0	0	0	0
P/TOT	105	6	3	0	1	0	0	115	0	0	0	0	0	0	0	0

TIME	MOVEMENT 9 FROM HIGH STREET TO BURTON ROAD (S)								MOVEMENT 10 FROM HIGH STREET TO HIGH STREET							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
16:15	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0
16:30	9	5	0	0	0	0	0	14	0	0	0	0	0	0	0	0
16:45	11	3	0	0	0	1	0	15	0	0	0	0	0	0	0	0
H/TOT	45	10	0	0	0	1	0	56	0	0	0	0	0	0	0	0
17:00	15	4	0	0	0	0	0	19	0	0	0	0	0	0	0	0
17:15	10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0
17:30	13	3	0	0	0	1	0	17	0	0	0	0	0	0	0	0
17:45	12	4	1	0	0	0	0	17	0	0	0	0	0	0	0	0
H/TOT	50	14	1	0	0	1	0	66	0	0	0	0	0	0	0	0
	50	14	2.2	0	0	0.4	0	66.6	0	0	0	0	0	0	0	0
P/TOT	95	24	1	0	0	2	0	122	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 11 FROM BURTON ROAD (S) TO HIGH STREET								MOVEMENT 12 FROM BURTON ROAD (S) TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	9	0	0	0	0	0	0	9
07:45	4	0	0	0	0	0	0	4	10	1	0	0	0	0	0	11
HH/TOT	6	0	0	0	0	0	0	6	19	1	0	0	0	0	0	20
08:00	1	0	0	0	0	0	0	1	21	4	0	0	0	0	0	25
08:15	2	0	0	0	0	0	0	2	13	3	0	0	0	0	0	16
08:30	1	1	0	0	0	0	0	2	13	1	0	0	0	0	0	14
08:45	2	3	0	0	0	0	0	5	18	2	0	0	0	0	0	20
H/TOT	6	4	0	0	0	0	0	10	65	10	0	0	0	0	0	75
	6	4	0	0	0	0	0	10	65	10	0	0	0	0	0	75
09:00	5	0	0	0	0	0	0	5	38	4	0	0	0	0	0	42
09:15	3	1	0	0	0	0	0	4	8	0	0	0	0	0	0	8
HH/TOT	8	1	0	0	0	0	0	9	46	4	0	0	0	0	0	50
P/TOT	20	5	0	0	0	0	0	25	130	15	0	0	0	0	0	145

TIME	MOVEMENT 11 FROM BURTON ROAD (S) TO HIGH STREET								MOVEMENT 12 FROM BURTON ROAD (S) TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	4	0	0	0	0	0	0	4	11	1	0	0	0	0	0	12
16:15	4	0	0	0	0	0	0	4	11	1	0	0	0	0	0	12
16:30	4	1	0	0	0	0	0	5	18	2	0	0	0	0	0	20
16:45	1	2	0	0	0	0	0	3	21	1	0	0	0	0	0	22
H/TOT	13	3	0	0	0	0	0	16	61	5	0	0	0	0	0	66
17:00	0	0	0	0	0	0	0	0	16	3	3	0	0	0	0	22
17:15	3	1	0	0	0	0	0	4	14	1	0	0	0	0	0	15
17:30	1	0	0	0	0	0	0	1	16	5	1	0	0	0	0	22
17:45	5	0	0	0	0	0	0	5	19	3	0	0	0	0	0	22
H/TOT	9	1	0	0	0	0	0	10	65	12	4	0	0	0	0	81
	9	1	0	0	0	0	0	10	65	12	8.8	0	0	0	0	85.8
P/TOT	22	4	0	0	0	0	0	26	126	17	4	0	0	0	0	147

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 13 FROM BURTON ROAD (S) TO FISH DAM LANE								MOVEMENT 14 FROM BURTON ROAD (S) TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	26	4	2	0	0	1	0	33	35	7	1	0	0	0	0	43
07:45	31	10	1	0	0	0	0	42	44	10	4	1	0	0	0	59
HH/TOT	57	14	3	0	0	1	0	75	79	17	5	1	0	0	0	102
08:00	35	12	0	0	0	0	0	47	45	7	4	2	0	0	0	58
08:15	30	10	4	0	0	1	0	45	41	6	3	0	0	0	0	50
08:30	42	8	0	0	0	0	0	50	48	6	0	1	0	0	0	55
08:45	32	3	1	0	0	0	0	36	49	5	2	0	0	0	0	56
H/TOT	139	33	5	0	0	1	0	178	183	24	9	3	0	0	0	219
	139	33	11	0	0	0.4	0	183.4	183	24	19.8	6.6	0	0	0	233.4
09:00	22	7	1	0	0	1	0	31	32	6	2	0	0	0	0	40
09:15	21	8	5	0	3	0	0	37	46	9	3	0	0	0	0	58
HH/TOT	43	15	6	0	3	1	0	68	78	15	5	0	0	0	0	98
P/TOT	239	62	14	0	3	3	0	321	340	56	19	4	0	0	0	419

TIME	MOVEMENT 13 FROM BURTON ROAD (S) TO FISH DAM LANE								MOVEMENT 14 FROM BURTON ROAD (S) TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	32	8	1	0	0	0	0	41	57	8	1	0	0	0	0	66
16:15	28	2	2	0	1	0	0	33	57	10	1	0	0	0	0	68
16:30	29	2	0	0	0	0	0	31	66	13	0	0	0	0	0	79
16:45	29	11	2	0	0	0	0	42	70	8	2	0	0	0	0	80
H/TOT	118	23	5	0	1	0	0	147	250	39	4	0	0	0	0	293
17:00	38	9	1	0	0	1	0	49	79	8	0	0	0	0	0	87
17:15	41	8	0	0	0	0	0	49	72	5	1	0	0	4	0	82
17:30	46	10	1	0	0	0	0	57	78	6	0	0	0	0	0	84
17:45	41	5	0	0	0	0	0	46	81	3	0	0	0	0	0	84
H/TOT	166	32	2	0	0	1	0	201	310	22	1	0	0	4	0	337
	166	32	4.4	0	0	0.4	0	202.8	310	22	2.2	0	0	1.6	0	335.8
P/TOT	284	55	7	0	1	1	0	348	560	61	5	0	0	4	0	630

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2

DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE

DAY: WEDNESDAY

TIME	MOVEMENT 15 FROM BURTON ROAD (S) TO BURTON ROAD (S)								MOVEMENT 16 FROM BURTON ROAD (E) TO BURTON ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	62	16	1	0	0	0	2	81
07:45	0	0	0	0	0	0	0	0	56	6	1	0	0	0	0	63
HH/TOT	0	0	0	0	0	0	0	0	118	22	2	0	0	0	2	144
08:00	0	0	0	0	0	0	0	0	82	13	2	1	0	0	0	98
08:15	0	0	0	0	0	0	0	0	67	9	1	0	0	0	0	77
08:30	0	0	0	0	0	0	0	0	86	8	3	0	0	1	0	98
08:45	0	0	0	0	0	0	0	0	52	8	2	1	0	1	0	64
H/TOT	0	0	0	0	0	0	0	0	287	38	8	2	0	2	0	337
	0	0	0	0	0	0	0	0	287	38	17.6	4.4	0	0.8	0	347.8
09:00	0	0	0	0	0	0	0	0	56	10	4	0	0	0	0	70
09:15	0	0	0	0	0	0	0	0	35	7	3	1	0	0	0	46
HH/TOT	0	0	0	0	0	0	0	0	91	17	7	1	0	0	0	116
P/TOT	0	0	0	0	0	0	0	0	496	77	17	3	0	2	2	597

TIME	MOVEMENT 15 FROM BURTON ROAD (S) TO BURTON ROAD (S)								MOVEMENT 16 FROM BURTON ROAD (E) TO BURTON ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	55	10	1	0	0	1	0	67
16:15	0	0	0	0	0	0	0	0	61	6	2	0	0	0	0	69
16:30	0	0	0	0	0	0	0	0	55	9	1	1	0	1	0	67
16:45	0	0	0	0	0	0	0	0	51	6	0	0	0	0	0	57
H/TOT	0	0	0	0	0	0	0	0	222	31	4	1	0	2	0	260
17:00	0	0	0	0	0	0	0	0	57	3	0	0	0	0	0	60
17:15	0	0	0	0	0	0	0	0	75	8	0	0	0	0	0	83
17:30	0	0	0	0	0	0	0	0	51	4	0	0	0	0	0	55
17:45	0	0	0	0	0	0	0	0	49	4	0	0	0	0	0	53
H/TOT	0	0	0	0	0	0	0	0	232	19	0	0	0	0	0	251
	0	0	0	0	0	0	0	0	232	19	0	0	0	0	0	251
P/TOT	0	0	0	0	0	0	0	0	454	50	4	1	0	2	0	511

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 17 FROM BURTON ROAD (E) TO HIGH STREET								MOVEMENT 18 FROM BURTON ROAD (E) TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	7	2	0	0	0	0	0	9	5	1	0	0	0	0	0	6
07:45	4	0	0	0	0	0	0	4	3	0	0	0	0	0	0	3
HH/TOT	11	2	0	0	0	0	0	13	8	1	0	0	0	0	0	9
08:00	7	1	0	0	0	0	0	8	6	0	0	0	0	0	0	6
08:15	9	1	0	0	0	0	0	10	3	1	0	0	0	0	0	4
08:30	8	0	0	0	0	0	0	8	4	1	0	0	0	0	0	5
08:45	8	1	1	0	0	0	0	10	7	2	0	0	0	0	0	9
H/TOT	32	3	1	0	0	0	0	36	20	4	0	0	0	0	0	24
	32	3	2.2	0	0	0	0	37.2	20	4	0	0	0	0	0	24
09:00	7	0	1	0	0	0	0	8	9	1	0	0	0	0	0	10
09:15	6	1	0	0	0	0	0	7	2	0	0	0	0	0	0	2
HH/TOT	13	1	1	0	0	0	0	15	11	1	0	0	0	0	0	12
P/TOT	56	6	2	0	0	0	0	64	39	6	0	0	0	0	0	45

TIME	MOVEMENT 17 FROM BURTON ROAD (E) TO HIGH STREET								MOVEMENT 18 FROM BURTON ROAD (E) TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	14	1	0	0	0	0	0	15	5	1	0	0	0	0	0	6
16:15	10	1	0	0	0	0	0	11	3	1	0	0	0	0	0	4
16:30	9	2	0	0	0	0	0	11	5	0	1	0	0	0	0	6
16:45	11	3	0	0	0	0	0	14	9	1	0	0	0	0	0	10
H/TOT	44	7	0	0	0	0	0	51	22	3	1	0	0	0	0	26
17:00	14	3	1	0	0	0	0	18	11	0	0	0	0	0	0	11
17:15	12	0	1	0	0	0	0	13	4	1	0	0	0	0	0	5
17:30	8	1	0	0	0	0	0	9	5	1	0	0	0	0	0	6
17:45	9	1	1	0	0	0	0	11	6	1	0	0	0	0	0	7
H/TOT	43	5	3	0	0	0	0	51	26	3	0	0	0	0	0	29
	43	5	6.6	0	0	0	0	54.6	26	3	0	0	0	0	0	29
P/TOT	87	12	3	0	0	0	0	102	48	6	1	0	0	0	0	55

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 19 FROM BURTON ROAD (E) TO FISH DAM LANE								MOVEMENT 20 FROM BURTON ROAD (E) TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	12	2	0	0	0	0	0	14	0	0	0	0	0	0	0	0
07:45	9	0	1	0	0	0	0	10	0	0	0	0	0	0	0	0
HH/TOT	21	2	1	0	0	0	0	24	0	0	0	0	0	0	0	0
08:00	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
08:15	8	2	1	0	0	0	0	11	0	0	0	0	0	0	0	0
08:30	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
08:45	10	2	1	0	0	0	0	13	0	0	0	0	0	0	0	0
H/TOT	40	6	2	0	0	0	0	48	0	0	0	0	0	0	0	0
	40	6	4.4	0	0	0	0	50.4	0	0	0	0	0	0	0	0
09:00	5	1	1	0	0	0	0	7	0	0	0	0	0	0	0	0
09:15	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
HH/TOT	11	3	1	0	0	0	0	15	0	0	0	0	0	0	0	0
P/TOT	72	11	4	0	0	0	0	87	0	0	0	0	0	0	0	0

TIME	MOVEMENT 19 FROM BURTON ROAD (E) TO FISH DAM LANE								MOVEMENT 20 FROM BURTON ROAD (E) TO BURTON ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
16:15	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
16:30	9	1	1	0	0	0	0	11	0	0	0	0	0	0	0	0
16:45	12	3	0	0	0	0	0	15	0	0	0	0	0	0	0	0
H/TOT	43	5	1	0	0	0	0	49	0	0	0	0	0	0	0	0
17:00	20	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0
17:15	14	1	1	0	0	0	0	16	0	0	0	0	0	0	0	0
17:30	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
17:45	11	1	1	0	0	0	0	13	0	0	0	0	0	0	0	0
H/TOT	57	3	2	0	0	0	0	62	0	0	0	0	0	0	0	0
	57	3	4.4	0	0	0	0	64.4	0	0	0	0	0	0	0	0
P/TOT	100	8	3	0	0	0	0	111	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2

DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE

DAY: WEDNESDAY

TIME	MOVEMENT 21 FROM FISH DAM LANE TO BURTON ROAD (E)								MOVEMENT 22 FROM FISH DAM LANE TO BURTON ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	4	2	0	0	0	0	0	6	23	1	0	0	0	0	0	24
07:45	6	2	0	0	0	0	0	8	24	6	2	2	0	0	0	34
HH/TOT	10	4	0	0	0	0	0	14	47	7	2	2	0	0	0	58
08:00	2	0	0	0	0	0	0	2	31	8	2	0	0	0	0	41
08:15	3	2	0	0	0	0	0	5	35	9	3	0	0	0	0	47
08:30	6	3	0	0	0	0	0	9	37	6	0	0	1	0	0	44
08:45	2	1	1	0	0	0	0	4	36	8	2	0	0	0	0	46
H/TOT	13	6	1	0	0	0	0	20	139	31	7	0	1	0	0	178
	13	6	2.2	0	0	0	0	21.2	139	31	15.4	0	2	0	0	187.4
09:00	7	1	1	0	0	0	0	9	38	3	6	1	0	0	0	48
09:15	3	0	2	0	0	0	0	5	39	6	1	0	0	0	0	46
HH/TOT	10	1	3	0	0	0	0	14	77	9	7	1	0	0	0	94
P/TOT	33	11	4	0	0	0	0	48	263	47	16	3	1	0	0	330

TIME	MOVEMENT 21 FROM FISH DAM LANE TO BURTON ROAD (E)								MOVEMENT 22 FROM FISH DAM LANE TO BURTON ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	2	0	0	0	0	0	8	34	9	0	0	0	0	0	43
16:15	8	2	1	1	0	0	0	12	34	11	0	2	0	0	0	47
16:30	11	2	0	0	0	0	0	13	34	5	0	0	0	0	0	39
16:45	13	0	0	0	0	0	0	13	28	10	0	0	0	0	0	38
H/TOT	38	6	1	1	0	0	0	46	130	35	0	2	0	0	0	167
17:00	15	1	0	1	0	0	0	17	45	5	2	0	0	0	0	52
17:15	8	0	0	0	0	0	0	8	31	6	0	0	0	0	0	37
17:30	11	1	0	0	0	0	0	12	40	4	0	0	0	0	0	44
17:45	4	2	1	0	0	0	0	7	30	5	1	0	0	0	0	36
H/TOT	38	4	1	1	0	0	0	44	146	20	3	0	0	0	0	169
	38	4	2.2	2.2	0	0	0	46.4	146	20	6.6	0	0	0	0	172.6
P/TOT	76	10	2	2	0	0	0	90	276	55	3	2	0	0	0	336

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 23 FROM FISH DAM LANE TO HIGH STREET								MOVEMENT 24 FROM FISH DAM LANE TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	2	0	0	0	0	0	7	3	0	0	0	0	0	0	3
07:45	7	2	1	0	0	0	0	10	5	2	0	0	0	0	0	7
HH/TOT	12	4	1	0	0	0	0	17	8	2	0	0	0	0	0	10
08:00	8	1	2	0	0	0	0	11	6	2	0	0	0	0	0	8
08:15	9	3	0	0	2	0	0	14	3	1	0	0	0	0	0	4
08:30	10	0	0	0	3	0	0	13	5	2	0	0	0	0	0	7
08:45	5	1	0	0	1	0	0	7	4	3	0	0	0	0	0	7
H/TOT	32	5	2	0	6	0	0	45	18	8	0	0	0	0	0	26
	32	5	4.4	0	12	0	0	53.4	18	8	0	0	0	0	0	26
09:00	22	0	1	0	0	0	0	23	25	5	0	1	0	0	0	31
09:15	10	4	0	0	2	0	0	16	4	0	0	0	0	0	0	4
HH/TOT	32	4	1	0	2	0	0	39	29	5	0	1	0	0	0	35
P/TOT	76	13	4	0	8	0	0	101	55	15	0	1	0	0	0	71

TIME	MOVEMENT 23 FROM FISH DAM LANE TO HIGH STREET								MOVEMENT 24 FROM FISH DAM LANE TO ST HELENS WAY							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	14	3	0	0	0	0	0	17	5	1	0	0	0	0	0	6
16:15	9	3	0	0	2	0	0	14	3	0	0	0	0	0	0	3
16:30	14	2	0	0	0	0	0	16	8	0	0	0	0	0	0	8
16:45	13	3	0	0	3	0	0	19	8	1	0	0	0	0	0	9
H/TOT	50	11	0	0	5	0	0	66	24	2	0	0	0	0	0	26
17:00	21	1	0	0	1	0	0	23	16	0	0	0	0	0	0	16
17:15	18	0	0	0	2	0	0	20	7	0	0	0	0	0	0	7
17:30	10	0	0	0	0	0	0	10	6	0	0	0	0	0	0	6
17:45	11	3	0	0	1	0	0	15	8	1	0	0	0	0	0	9
H/TOT	60	4	0	0	4	0	0	68	37	1	0	0	0	0	0	38
	60	4	0	0	8	0	0	72	37	1	0	0	0	0	0	38
P/TOT	110	15	0	0	9	0	0	134	61	3	0	0	0	0	0	64

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 2 DATE: Mar-15

LOCATION: ST HELENS WAY / HIGH STREET / BURTON ROAD / FISH DAM LANE DAY: WEDNESDAY

TIME	MOVEMENT 25 FROM FISH DAM LANE TO FISH DAM LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
HH/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
HH/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	MOVEMENT 25 FROM FISH DAM LANE TO FISH DAM LANE							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

DATE: 10/12/2014

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DAY: WEDNESDAY

TIME	MOVEMENT 1 FROM ROTHERHAM ROAD (N) TO BURTON ROAD (E)								MOVEMENT 2 FROM ROTHERHAM ROAD (N) TO ROTHERHAM ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	2	0	0	0	0	0	5	69	10	6	0	0	1	0	86
07:45	1	3	0	1	0	0	0	5	68	17	2	0	0	0	0	87
HH/TOT	4	5	0	1	0	0	0	10	137	27	8	0	0	1	0	173
08:00	4	1	0	1	0	0	0	6	57	10	4	1	1	0	0	73
08:15	4	0	0	0	0	0	0	4	67	7	4	0	0	0	0	78
08:30	2	0	0	0	0	0	0	2	71	10	1	0	1	2	0	85
08:45	8	1	2	0	0	0	0	11	68	6	2	1	0	0	0	77
H/TOT	18	2	2	1	0	0	0	23	263	33	11	2	2	2	0	313
PCU	18	2	4.4	2.2	0	0	0	26.6	263	33	24.2	4.4	4	0.8	0	329.4
09:00	5	1	0	0	0	0	0	6	62	7	2	0	0	1	0	72
09:15	4	0	1	0	0	0	0	5	55	2	4	3	0	0	0	64
HH/TOT	9	1	1	0	0	0	0	11	117	9	6	3	0	1	0	136
P/TOT	31	8	3	2	0	0	0	44	517	69	25	5	2	4	0	622

TIME	MOVEMENT 1 FROM ROTHERHAM ROAD (N) TO BURTON ROAD (E)								MOVEMENT 2 FROM ROTHERHAM ROAD (N) TO ROTHERHAM ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	0	0	0	0	0	0	9	64	10	2	0	1	0	0	77
16:15	6	0	0	0	1	0	0	7	57	8	0	1	0	0	0	66
16:30	10	0	0	0	0	0	0	10	53	12	2	0	0	1	0	68
16:45	6	2	1	0	0	0	0	9	47	10	0	0	0	1	0	58
H/TOT	31	2	1	0	1	0	0	35	221	40	4	1	1	2	0	269
17:00	5	2	0	0	0	0	0	7	61	5	3	0	0	0	0	69
17:15	9	1	1	0	0	0	0	11	70	8	1	0	0	0	0	79
17:30	6	0	0	0	0	0	0	6	32	2	1	0	0	1	0	36
17:45	9	1	0	1	0	0	0	11	55	6	0	0	0	0	0	61
H/TOT	29	4	1	1	0	0	0	35	218	21	5	0	0	1	0	245
PCU	29	4	2.2	2.2	0	0	0	37.4	218	21	11	0	0	0.4	0	250.4
P/TOT	60	6	2	1	1	0	0	70	439	61	9	1	1	3	0	514

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DATE: 10/12/2014

DAY: WEDNESDAY

TIME	MOVEMENT 3 FROM ROTHERHAM ROAD (N) TO BURTON ROAD (W)								MOVEMENT 4 FROM BURTON ROAD (W) TO ROTHERHAM ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	1	0	0	1	0	0	7	4	2	0	0	0	0	0	6
07:45	5	1	0	0	1	0	0	7	3	1	0	0	0	0	0	4
HH/TOT	10	2	0	0	2	0	0	14	7	3	0	0	0	0	0	10
08:00	8	0	0	0	0	0	0	8	5	3	0	0	0	0	0	8
08:15	6	0	1	0	1	0	0	8	3	0	0	0	1	0	0	4
08:30	22	0	0	0	1	1	1	25	5	0	0	0	1	0	0	6
08:45	16	1	0	0	1	0	0	18	6	0	0	0	0	0	0	6
H/TOT	52	1	1	0	3	1	1	59	19	3	0	0	2	0	0	24
	52	1	2.2	0	6	0.4	0.2	61.8	19	3	0	0	4	0	0	26
09:00	21	4	0	0	0	0	0	25	10	0	0	0	0	0	0	10
09:15	12	1	1	0	1	0	0	15	6	1	0	0	1	0	0	8
HH/TOT	33	5	1	0	1	0	0	40	16	1	0	0	1	0	0	18
P/TOT	95	8	2	0	6	1	1	113	42	7	0	0	3	0	0	52

TIME	MOVEMENT 3 FROM ROTHERHAM ROAD (N) TO BURTON ROAD (W)								MOVEMENT 4 FROM BURTON ROAD (W) TO ROTHERHAM ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	5	0	0	0	0	0	0	5	2	1	1	0	0	0	0	4
16:15	5	2	0	0	0	0	0	7	6	1	0	0	1	0	0	8
16:30	7	1	0	0	0	0	0	8	9	0	0	0	2	0	0	11
16:45	5	1	0	0	0	0	0	6	7	0	0	0	0	0	0	7
H/TOT	22	4	0	0	0	0	0	26	24	2	1	0	3	0	0	30
17:00	13	0	0	0	0	0	0	13	2	0	0	0	0	0	0	2
17:15	13	2	0	0	0	0	0	15	6	0	0	0	0	0	0	6
17:30	9	0	0	0	1	0	0	10	6	0	0	0	1	0	0	7
17:45	9	0	0	0	0	0	0	9	3	0	0	0	0	0	0	3
H/TOT	44	2	0	0	1	0	0	47	17	0	0	0	1	0	0	18
	44	2	0	0	2	0	0	48	17	0	0	0	2	0	0	19
P/TOT	66	6	0	0	1	0	0	73	41	2	1	0	4	0	0	48

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

DATE: 10/12/2014

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DAY: WEDNESDAY

TIME	MOVEMENT 5 FROM BURTON ROAD (W) TO BURTON ROAD (E)								MOVEMENT 6 FROM BURTON ROAD (W) TO ROTHERHAM ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	56	7	1	0	1	0	0	65	15	4	3	0	0	0	0	22
07:45	53	9	3	1	1	1	0	68	11	7	4	0	0	0	0	22
HH/TOT	109	16	4	1	2	1	0	133	26	11	7	0	0	0	0	44
08:00	58	11	5	1	2	0	0	77	8	1	0	0	1	0	0	10
08:15	67	10	3	1	0	0	0	81	15	7	0	1	0	0	0	23
08:30	48	12	3	0	3	0	0	66	12	5	2	0	0	0	0	19
08:45	61	9	2	0	1	0	0	73	21	4	0	0	1	0	0	26
H/TOT	234	42	13	2	6	0	0	297	56	17	2	1	2	0	0	78
	234	42	28.6	4.4	12	0	0	321	56	17	4.4	2.2	4	0	0	83.6
09:00	50	13	0	0	3	1	0	67	18	3	1	1	0	0	0	23
09:15	65	8	7	0	4	0	0	84	17	2	1	0	0	0	0	20
HH/TOT	115	21	7	0	7	1	0	151	35	5	2	1	0	0	0	43
P/TOT	458	79	24	3	15	2	0	581	117	33	11	2	2	0	0	165

TIME	MOVEMENT 5 FROM BURTON ROAD (W) TO BURTON ROAD (E)								MOVEMENT 6 FROM BURTON ROAD (W) TO ROTHERHAM ROAD (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	97	14	1	1	2	0	0	115	20	5	0	0	0	0	0	25
16:15	90	8	1	0	3	0	0	102	31	2	0	0	0	0	0	33
16:30	90	8	1	0	0	1	0	100	23	2	0	0	0	0	0	25
16:45	75	11	1	0	2	0	0	89	22	2	1	1	0	0	0	26
H/TOT	352	41	4	1	7	1	0	406	96	11	1	1	0	0	0	109
17:00	107	15	1	0	2	2	0	127	18	1	1	0	1	1	0	22
17:15	92	5	2	0	1	0	0	100	11	2	1	0	0	0	0	14
17:30	123	8	1	0	1	0	0	133	19	2	1	0	1	0	0	23
17:45	124	7	0	0	2	1	0	134	19	0	0	0	0	0	0	19
H/TOT	446	35	4	0	6	3	0	494	67	5	3	0	2	1	0	78
	446	35	8.8	0	12	1.2	0	503	67	5	6.6	0	4	0.4	0	83
P/TOT	798	76	8	1	13	4	0	900	163	16	4	1	2	1	0	187

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

DATE: 10/12/2014

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DAY: WEDNESDAY

TIME	MOVEMENT 7 FROM ROTHERHAM ROAD (S) TO BURTON ROAD (W)								MOVEMENT 8 FROM ROTHERHAM ROAD (S) TO ROTHERHAM ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	10	1	1	0	0	0	0	12	62	12	2	0	0	0	0	76
07:45	15	6	1	1	1	0	0	24	49	20	4	1	0	1	0	75
HH/TOT	25	7	2	1	1	0	0	36	111	32	6	1	0	1	0	151
08:00	17	1	0	0	0	0	0	18	59	5	2	1	0	0	0	67
08:15	10	3	0	0	0	0	0	13	65	7	4	1	0	0	0	77
08:30	16	0	2	0	0	0	0	18	58	14	4	0	0	1	0	77
08:45	16	2	1	0	0	0	0	19	38	11	2	0	0	0	0	51
H/TOT	59	6	3	0	0	0	0	68	220	37	12	2	0	1	0	272
	59	6	6.6	0	0	0	0	71.6	220	37	26.4	4.4	0	0.4	0	288.2
09:00	12	0	0	0	1	0	0	13	34	11	4	3	1	0	0	53
09:15	20	1	1	1	0	0	0	23	38	15	4	0	0	0	0	57
HH/TOT	32	1	1	1	1	0	0	36	72	26	8	3	1	0	0	110
P/TOT	116	14	6	2	2	0	0	140	403	95	26	6	1	2	0	533

TIME	MOVEMENT 7 FROM ROTHERHAM ROAD (S) TO BURTON ROAD (W)								MOVEMENT 8 FROM ROTHERHAM ROAD (S) TO ROTHERHAM ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	18	7	0	1	1	0	0	27	77	12	3	1	2	0	0	95
16:15	23	7	1	0	1	0	0	32	71	18	6	0	1	1	0	97
16:30	16	3	0	0	0	0	0	19	73	7	1	0	1	1	0	83
16:45	21	3	0	0	0	1	0	25	97	12	0	0	0	0	0	109
H/TOT	78	20	1	1	2	1	0	103	318	49	10	1	4	2	0	384
17:00	16	1	0	0	0	0	0	17	71	8	0	0	1	2	0	82
17:15	26	2	0	0	1	0	0	29	81	12	1	0	2	1	0	97
17:30	20	1	0	0	0	0	0	21	55	11	3	0	0	0	0	69
17:45	13	2	0	0	0	0	0	15	82	12	0	0	0	0	0	94
H/TOT	75	6	0	0	1	0	0	82	289	43	4	0	3	3	0	342
	75	6	0	0	2	0	0	83	289	43	8.8	0	6	1.2	0	348
P/TOT	153	26	1	1	3	1	0	185	607	92	14	1	7	5	0	726

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DATE: 10/12/2014

DAY: WEDNESDAY

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

LOCATION: ROTHERHAM ROAD / BURTON ROAD

TIME	MOVEMENT 9 FROM ROTHERHAM ROAD (S) TO BURTON ROAD (E)								MOVEMENT 10 FROM BURTON ROAD (E) TO ROTHERHAM ROAD (S)								TIME	MOVEM FROM BURTON ROAD (E			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	07:30	92	7	4	0
07:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	07:45	83	15	3	2
HH/TOT	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	HH/TOT	175	22	7	2
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:00	120	17	1	1
08:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	08:15	116	15	2	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:30	115	9	2	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:45	93	10	6	1
H/TOT	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	H/TOT	444	51	11	2
	0	0	2.2	0	0	0	0	2.2	0	0	0	0	0	0	0	0		444	51	24.2	4.4
09:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	09:00	82	11	2	1
09:15	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	09:15	86	10	2	1
HH/TOT	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3	HH/TOT	168	21	4	2
P/TOT	1	0	1	0	0	0	0	2	4	1	0	0	0	0	0	5	P/TOT	787	94	22	6

TIME	MOVEMENT 9 FROM ROTHERHAM ROAD (S) TO BURTON ROAD (E)								MOVEMENT 10 FROM BURTON ROAD (E) TO ROTHERHAM ROAD (S)								TIME	MOVEM FROM BURTON ROAD (E			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
16:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	16:00	74	13	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:15	89	9	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16:30	87	9	2	2
16:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	16:45	74	9	0	1
H/TOT	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	H/TOT	324	40	2	3
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:00	94	8	1	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	17:15	93	11	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:30	72	13	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:45	85	9	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	H/TOT	344	41	1	0
	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		344	41	2.2	0
P/TOT	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	P/TOT	668	81	3	3

DATE: 10/12/2014

DAY: WEDNESDAY

MENT 11 TO BURTON ROAD (W)				MOVEMENT 12 FROM BURTON ROAD (E) TO ROTHERHAM ROAD (N)							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
1	0	2	106	6	1	1	0	0	0	0	8
2	1	0	106	4	2	0	0	0	0	0	6
3	1	2	212	10	3	1	0	0	0	0	14
2	0	0	141	4	0	0	0	0	0	0	4
2	0	1	136	5	1	0	0	0	0	0	6
2	1	0	129	4	0	0	0	0	0	0	4
2	1	0	113	4	0	1	0	0	0	0	5
8	2	1	519	17	1	1	0	0	0	0	19
16	0.8	0.2	540.6	17	1	2.2	0	0	0	0	20.2
0	0	0	96	1	0	0	0	0	0	0	1
3	0	0	102	2	2	0	0	0	0	0	4
3	0	0	198	3	2	0	0	0	0	0	5
14	3	3	929	30	6	2	0	0	0	0	38

MENT 11 TO BURTON ROAD (W)				MOVEMENT 12 FROM BURTON ROAD (E) TO ROTHERHAM ROAD (N)							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
2	1	0	90	5	1	1	0	0	0	0	7
1	0	0	99	5	1	1	0	0	0	0	7
1	0	0	101	7	0	0	0	0	0	0	7
4	0	0	88	3	1	0	0	0	0	0	4
8	1	0	378	20	3	2	0	0	0	0	25
1	0	0	104	5	1	1	0	0	0	0	7
1	0	0	105	3	2	0	0	0	0	0	5
1	1	0	87	8	0	0	0	0	0	0	8
1	0	0	95	8	1	0	0	0	0	0	9
4	1	0	391	24	4	1	0	0	0	0	29
8	0.4	0	395.6	24	4	2.2	0	0	0	0	30.2
12	2	0	769	44	7	3	0	0	0	0	54

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

DATE: 10/12/2014

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DAY: WEDNESDAY

TIME	TO ARM A ROTHERHAM ROAD (N)								FROM ARM A ROTHERHAM ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	72	15	3	0	0	0	0	90	77	13	6	0	1	1	0	98
07:45	56	23	4	1	0	1	0	85	74	21	2	1	1	0	0	99
HH/TOT	128	38	7	1	0	1	0	175	151	34	8	1	2	1	0	197
08:00	68	8	2	1	0	0	0	79	69	11	4	2	1	0	0	87
08:15	73	8	4	1	1	0	0	87	77	7	5	0	1	0	0	90
08:30	67	14	4	0	1	1	0	87	95	10	1	0	2	3	1	112
08:45	48	11	3	0	0	0	0	62	92	8	4	1	1	0	0	106
H/TOT	256	41	13	2	2	1	0	315	333	36	14	3	5	3	1	395
09:00	45	11	4	3	1	0	0	64	88	12	2	0	0	1	0	103
09:15	46	18	4	0	1	0	0	69	71	3	6	3	1	0	0	84
HH/TOT	91	29	8	3	2	0	0	133	159	15	8	3	1	1	0	187
P/TOT	475	108	28	6	4	2	0	623	643	85	30	7	8	5	1	779

TIME	TO ARM A ROTHERHAM ROAD (N)								FROM ARM A ROTHERHAM ROAD (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	84	14	5	1	2	0	0	106	78	10	2	0	1	0	0	91
16:15	82	20	7	0	2	1	0	112	68	10	0	1	1	0	0	80
16:30	89	7	1	0	3	1	0	101	70	13	2	0	0	1	0	86
16:45	107	13	0	0	0	0	0	120	58	13	1	0	0	1	0	73
H/TOT	362	54	13	1	7	2	0	439	274	46	5	1	2	2	0	330
17:00	78	9	1	0	1	2	0	91	79	7	3	0	0	0	0	89
17:15	90	14	1	0	2	1	0	108	92	11	2	0	0	0	0	105
17:30	69	11	3	0	1	0	0	84	47	2	1	0	1	1	0	52
17:45	93	13	0	0	0	0	0	106	73	7	0	1	0	0	0	81
H/TOT	330	47	5	0	4	3	0	389	291	27	6	1	1	1	0	327
P/TOT	692	101	18	1	11	5	0	828	565	73	11	2	3	3	0	657

TO ARM A IS TOTAL OF MOVEMENTS 4, 8, 12

FROM ARM A IS TOTAL OF MOVEMENTS 1, 2, 3

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

DATE: 10/12/2014

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DAY: WEDNESDAY

TIME	TO ARM B BURTON ROAD (W)								FROM ARM B BURTON ROAD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	107	9	5	0	2	0	2	125	75	13	4	0	1	0	0	93
07:45	103	22	4	3	4	1	0	137	67	17	7	1	1	1	0	94
HH/TOT	210	31	9	3	6	1	2	262	142	30	11	1	2	1	0	187
08:00	145	18	1	1	2	0	0	167	71	15	5	1	3	0	0	95
08:15	132	18	3	0	3	0	1	157	85	17	3	2	1	0	0	108
08:30	153	9	4	0	3	2	1	172	65	17	5	0	4	0	0	91
08:45	125	13	7	1	3	1	0	150	88	13	2	0	2	0	0	105
H/TOT	555	58	15	2	11	3	2	646	309	62	15	3	10	0	0	399
09:00	115	15	2	1	1	0	0	134	78	16	1	1	3	1	0	100
09:15	118	12	4	2	4	0	0	140	88	11	8	0	5	0	0	112
HH/TOT	233	27	6	3	5	0	0	274	166	27	9	1	8	1	0	212
P/TOT	998	116	30	8	22	4	4	1182	617	119	35	5	20	2	0	798

TIME	TO ARM B BURTON ROAD (W)								FROM ARM B BURTON ROAD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	97	20	0	1	3	1	0	122	119	20	2	1	2	0	0	144
16:15	117	18	1	0	2	0	0	138	127	11	1	0	4	0	0	143
16:30	110	13	2	2	1	0	0	128	122	10	1	0	2	1	0	136
16:45	100	13	0	1	4	1	0	119	104	13	2	1	2	0	0	122
H/TOT	424	64	3	4	10	2	0	507	472	54	6	2	10	1	0	545
17:00	123	9	1	0	1	0	0	134	127	16	2	0	3	3	0	151
17:15	132	15	0	0	2	0	0	149	109	7	3	0	1	0	0	120
17:30	101	14	0	0	2	1	0	118	148	10	2	0	3	0	0	163
17:45	107	11	0	0	1	0	0	119	146	7	0	0	2	1	0	156
H/TOT	463	49	1	0	6	1	0	520	530	40	7	0	9	4	0	590
P/TOT	887	113	4	4	16	3	0	1027	1002	94	13	2	19	5	0	1135

TO ARM B IS TOTAL OF MOVEMENTS 3, 7, 11

FROM ARM B IS TOTAL OF MOVEMENTS 4, 5, 6

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

LOCATION: ROTHERHAM ROAD / BURTON ROAD

AXIOM Traffic Limited

MANUAL CLASSIFIED COUNTS

JOB REF: 18335

JOB NAME: MONK BRETTON

SITE: 3

LOCATION: ROTHERHAM ROAD / BURTON ROAD

DATE: 10/12/2014

DAY: WEDNESDAY

TIME	TO ARM C ROTHERHAM ROAD (S)								FROM ARM C ROTHERHAM ROAD (S)								TIME	TO AI BURTON			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
07:30	84	14	9	0	0	1	0	108	72	13	3	0	0	0	0	88	07:30	59	9	1	0
07:45	80	25	6	0	0	0	0	111	64	26	5	2	1	1	0	99	07:45	54	12	3	2
HH/TOT	164	39	15	0	0	1	0	219	136	39	8	2	1	1	0	187	HH/TOT	113	21	4	2
08:00	65	11	4	1	2	0	0	83	76	6	2	1	0	0	0	85	08:00	62	12	5	2
08:15	82	14	4	1	0	0	0	101	75	10	5	1	0	0	0	91	08:15	71	10	4	1
08:30	83	15	3	0	1	2	0	104	74	14	6	0	0	1	0	95	08:30	50	12	3	0
08:45	89	10	2	1	1	0	0	103	54	13	3	0	0	0	0	70	08:45	69	10	4	0
H/TOT	319	50	13	3	4	2	0	391	279	43	16	2	0	1	0	341	H/TOT	252	44	16	3
09:00	81	10	3	1	0	1	0	96	46	11	4	3	2	0	0	66	09:00	55	14	0	0
09:15	74	4	5	3	0	0	0	86	59	16	5	1	0	0	0	81	09:15	70	8	8	0
HH/TOT	155	14	8	4	0	1	0	182	105	27	9	4	2	0	0	147	HH/TOT	125	22	8	0
P/TOT	638	103	36	7	4	4	0	792	520	109	33	8	3	2	0	675	P/TOT	490	87	28	5

TIME	TO ARM C ROTHERHAM ROAD (S)								FROM ARM C ROTHERHAM ROAD (S)								TIME	TO AI BURTON			
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		CAR	LGV	OGV1	OGV2
16:00	84	15	2	0	1	0	0	102	96	19	3	2	3	0	0	123	16:00	107	14	1	1
16:15	88	10	0	1	0	0	0	99	94	25	7	0	2	1	0	129	16:15	96	8	1	0
16:30	76	14	2	0	0	1	0	93	89	10	1	0	1	1	0	102	16:30	100	8	1	0
16:45	69	12	1	1	0	1	0	84	119	15	0	0	0	1	0	135	16:45	82	13	2	0
H/TOT	317	51	5	2	1	2	0	378	398	69	11	2	6	3	0	489	H/TOT	385	43	5	1
17:00	79	6	4	0	1	1	0	91	87	9	0	0	1	2	0	99	17:00	112	17	1	0
17:15	81	10	2	0	0	0	0	93	108	14	1	0	3	1	0	127	17:15	102	6	3	0
17:30	51	4	2	0	1	1	0	59	75	12	3	0	0	0	0	90	17:30	129	8	1	0
17:45	74	6	0	0	0	0	0	80	95	14	0	0	0	0	0	109	17:45	133	8	0	1
H/TOT	285	26	8	0	2	2	0	323	365	49	4	0	4	3	0	425	H/TOT	476	39	5	1
P/TOT	602	77	13	2	3	4	0	701	763	118	15	2	10	6	0	914	P/TOT	861	82	10	2

TO ARM C IS TOTAL OF MOVEMENTS 2, 6, 10

FROM ARM C IS TOTAL OF MOVEMENTS 7, 8, 9

TO ARM D IS TOTAL OF MOVEMENTS 1, 5, 9

FROM ARM D IS TOTAL OF MOVEMENTS 10, 11, 12

DATE: 10/12/2014

DAY: WEDNESDAY

RM D ROAD (E)				FROM ARM D BURTON ROAD (E)							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
1	0	0	70	98	8	5	0	1	0	2	114
1	1	0	73	88	18	3	2	2	1	0	114
2	1	0	143	186	26	8	2	3	1	2	228
2	0	0	83	124	17	1	1	2	0	0	145
0	0	0	86	121	16	2	0	2	0	1	142
3	0	0	68	119	9	2	0	2	1	0	133
1	0	0	84	97	10	7	1	2	1	0	118
6	0	0	321	461	52	12	2	8	2	1	538
3	1	0	73	84	11	2	1	0	0	0	98
4	0	0	90	90	12	2	1	3	0	0	108
7	1	0	163	174	23	4	2	3	0	0	206
15	2	0	627	821	101	24	6	14	3	3	972

RM D ROAD (E)				FROM ARM D BURTON ROAD (E)							
PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
2	0	0	125	79	14	1	0	2	1	0	97
4	0	0	109	94	10	1	0	1	0	0	106
0	1	0	110	94	9	2	2	1	0	0	108
2	0	0	99	77	10	0	1	4	0	0	92
8	1	0	443	344	43	4	3	8	1	0	403
2	2	0	134	99	9	2	0	1	0	0	111
1	0	0	112	96	13	0	0	1	0	0	110
1	0	0	139	80	13	0	0	1	1	0	95
2	1	0	145	93	10	0	0	1	0	0	104
6	3	0	530	368	45	2	0	4	1	0	420
14	4	0	973	712	88	6	3	12	2	0	823

Appendix D

MODAL OUTPUTS

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2015

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

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: BurtonRd_NormanClose_CrossStreet FINAL.arc8
Path: T:\70009242 - Cross Street, Monk Bretton\D Design and Analysis\Development\ARCADY
Report generation date: 14/04/2015 14:21:15

» (Default Analysis Set) - 2015 Base, AM
» (Default Analysis Set) - 2015 Base, PM
» (Default Analysis Set) - 2020 Base + CD, AM
» (Default Analysis Set) - 2020 Base + CD, PM
» (Default Analysis Set) - Predicted, AM
» (Default Analysis Set) - Predicted, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2015 Base							
Stream B-ACD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-BCD	0.20	4.26	0.10	A	0.51	5.21	0.18	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-A	0.02	6.97	0.02	A	0.05	7.76	0.05	A
Stream D-BC	0.22	11.85	0.18	B	0.22	13.01	0.18	B
Stream C-ABD	0.00	5.05	0.00	A	0.00	0.00	0.00	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2020 Base + CD							
Stream B-ACD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-BCD	0.24	4.17	0.11	A	0.62	5.20	0.21	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-A	0.03	7.03	0.03	A	0.05	8.07	0.05	A
Stream D-BC	0.24	12.48	0.20	B	0.26	14.40	0.21	B
Stream C-ABD	0.00	5.09	0.00	A	0.00	0.00	0.00	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - Predicted							
Stream B-ACD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-BCD	0.29	4.23	0.12	A	0.71	5.43	0.24	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-A	0.05	7.57	0.05	A	0.06	8.36	0.06	A
Stream D-BC	0.41	14.66	0.29	B	0.34	15.55	0.26	C
Stream C-ABD	0.00	4.99	0.00	A	0.00	0.00	0.00	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-

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

"D1 - 2015 Base, AM " model duration: 07:45 - 09:15
"D2 - 2015 Base, PM" model duration: 16:45 - 18:15
"D5 - 2020 Base + CD, AM" model duration: 07:45 - 09:15
"D6 - 2020 Base + CD, PM" model duration: 16:45 - 18:15
"D7 - Predicted, AM" model duration: 07:45 - 09:15
"D8 - Predicted, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 14/04/2015 14:21:12

File summary

Title	(untitled)
Location	
Site Number	
Date	06/03/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKSXH704
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) - 2015 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2015 Base, AM	2015 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Burton Road (E)		Major
B	B	Norman Close		Minor
C	C	Burton Road (W)		Major
D	D	Cross Street		Minor

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)
A	7.30		0.00		2.20	65.00	✓	0.00
C	7.30		0.00		2.20	65.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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	3.25										25	18
D	One lane plus flare				10.00	4.50	3.50	3.50	3.50		1.00	185	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	611.605	-	-	-	0.224	0.224	0.224	-	0.224	-	-
1	B-AD	506.928	0.087	0.220	-	-	-	0.139	0.315	0.139	0.087	0.220
1	B-C	651.169	0.094	0.238	-	-	-	-	-	-	0.094	0.238
1	C-B	611.605	0.224	0.224	-	-	-	-	-	-	0.224	0.224
1	D-A	660.978	-	-	-	0.242	0.096	0.242	-	0.096	-	-
1	D-BC	626.398	0.171	0.171	0.389	0.272	0.108	0.272	-	0.108	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	704.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	426.00	100.000
D	ONE HOUR	✓	71.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	0.000	677.000	27.000
	B	0.000	0.000	2.000	0.000
	C	369.000	1.000	0.000	56.000
	D	11.000	0.000	60.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.96	0.04
	B	0.00	0.00	1.00	0.00
	C	0.87	0.00	0.00	0.13
	D	0.15	0.00	0.85	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-BCD	0.10	4.26	0.20	A
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.02	6.97	0.02	A
D-BC	0.18	11.85	0.22	B
C-ABD	0.00	5.05	0.00	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	411.03	0.000	0.00	0.000	A
A-BCD	45.72	45.41	0.00	890.99	0.051	0.08	4.257	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	484.29	484.29	0.00	-	-	-	-	-
D-A	8.28	8.22	0.00	574.54	0.014	0.01	6.356	A
D-BC	45.17	44.73	0.00	451.13	0.100	0.11	8.850	A
C-ABD	1.30	1.29	0.00	714.76	0.002	0.00	5.045	A
C-D	42.09	42.09	0.00	-	-	-	-	-
C-A	277.33	277.33	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	379.01	0.000	0.00	0.000	A
A-BCD	63.59	63.45	0.00	945.83	0.067	0.11	4.080	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	569.29	569.29	0.00	-	-	-	-	-
D-A	9.89	9.87	0.00	556.08	0.018	0.02	6.590	A
D-BC	53.94	53.79	0.00	417.03	0.129	0.15	9.906	A
C-ABD	1.74	1.73	0.00	736.90	0.002	0.00	4.896	A
C-D	50.23	50.23	0.00	-	-	-	-	-
C-A	331.00	331.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	334.01	0.000	0.00	0.000	A
A-BCD	100.78	100.44	0.00	1033.28	0.098	0.20	3.860	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	674.34	674.34	0.00	-	-	-	-	-
D-A	12.11	12.09	0.00	528.96	0.023	0.02	6.964	A
D-BC	66.06	65.79	0.00	369.95	0.179	0.21	11.824	B
C-ABD	2.48	2.48	0.00	768.02	0.003	0.00	4.702	A
C-D	61.47	61.47	0.00	-	-	-	-	-
C-A	405.08	405.08	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	333.87	0.000	0.00	0.000	A
A-BCD	100.94	100.93	0.00	1033.47	0.098	0.20	3.863	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	674.18	674.18	0.00	-	-	-	-	-
D-A	12.11	12.11	0.00	528.78	0.023	0.02	6.966	A
D-BC	66.06	66.05	0.00	369.89	0.179	0.22	11.848	B
C-ABD	2.49	2.49	0.00	767.93	0.003	0.00	4.702	A
C-D	61.47	61.47	0.00	-	-	-	-	-
C-A	405.07	405.07	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	378.81	0.000	0.00	0.000	A
A-BCD	63.76	64.10	0.00	946.08	0.067	0.12	4.084	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	569.12	569.12	0.00	-	-	-	-	-
D-A	9.89	9.91	0.00	555.83	0.018	0.02	6.593	A
D-BC	53.94	54.20	0.00	416.95	0.129	0.15	9.931	A
C-ABD	1.74	1.74	0.00	736.76	0.002	0.00	4.897	A
C-D	50.23	50.23	0.00	-	-	-	-	-
C-A	330.99	330.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	410.82	0.000	0.00	0.000	A
A-BCD	45.95	46.09	0.00	891.18	0.052	0.08	4.263	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	484.06	484.06	0.00	-	-	-	-	-
D-A	8.28	8.30	0.00	574.24	0.014	0.01	6.360	A
D-BC	45.17	45.32	0.00	451.03	0.100	0.11	8.878	A
C-ABD	1.30	1.31	0.00	714.60	0.002	0.00	5.046	A
C-D	42.09	42.09	0.00	-	-	-	-	-
C-A	277.32	277.32	0.00	-	-	-	-	-

(Default Analysis Set) - 2015 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2015 Base, PM	2015 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.67	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Burton Road (E)		Major
B	B	Norman Close		Minor
C	C	Burton Road (W)		Major
D	D	Cross Street		Minor

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)
A	7.30		0.00		2.20	65.00	✓	0.00
C	7.30		0.00		2.20	65.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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	3.25										25	18
D	One lane plus flare				10.00	4.50	3.50	3.50	3.50		1.00	185	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	611.605	-	-	-	0.224	0.224	0.224	-	0.224	-	-
1	B-AD	506.928	0.087	0.220	-	-	-	0.139	0.315	0.139	0.087	0.220
1	B-C	651.169	0.094	0.238	-	-	-	-	-	-	0.094	0.238
1	C-B	611.605	0.224	0.224	-	-	-	-	-	-	0.224	0.224
1	D-A	677.340	-	-	-	0.248	0.098	0.248	-	0.098	-	-
1	D-BC	643.565	0.176	0.176	0.399	0.280	0.111	0.280	-	0.111	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	544.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	641.00	100.000
D	ONE HOUR	✓	76.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	2.000	489.000	53.000
	B	0.000	0.000	0.000	0.000
	C	582.000	0.000	0.000	59.000
	D	20.000	0.000	56.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.90	0.10
	B	0.25	0.25	0.25	0.25
	C	0.91	0.00	0.00	0.09
	D	0.26	0.00	0.74	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-BCD	0.18	5.21	0.51	A
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.05	7.76	0.05	A
D-BC	0.18	13.01	0.22	B
C-ABD	0.00	0.00	0.00	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	428.50	0.000	0.00	0.000	A
A-BCD	75.90	75.09	0.00	768.09	0.099	0.20	5.194	A
A-B	1.36	1.36	0.00	-	-	-	-	-
A-C	332.29	332.29	0.00	-	-	-	-	-
D-A	15.06	14.95	0.00	550.39	0.027	0.03	6.721	A
D-BC	42.16	41.74	0.00	435.21	0.097	0.11	9.140	A
C-ABD	0.00	0.00	0.00	519.54	0.000	0.00	0.000	A
C-D	44.42	44.42	0.00	-	-	-	-	-
C-A	438.16	438.16	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	399.38	0.000	0.00	0.000	A
A-BCD	103.86	103.43	0.00	802.45	0.129	0.31	5.157	A
A-B	1.57	1.57	0.00	-	-	-	-	-
A-C	383.62	383.62	0.00	-	-	-	-	-
D-A	17.98	17.95	0.00	524.12	0.034	0.04	7.111	A
D-BC	50.34	50.19	0.00	394.55	0.128	0.14	10.450	B
C-ABD	0.00	0.00	0.00	501.49	0.000	0.00	0.000	A
C-D	53.04	53.04	0.00	-	-	-	-	-
C-A	523.21	523.21	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	358.12	0.000	0.00	0.000	A
A-BCD	157.00	156.22	0.00	856.31	0.183	0.51	5.154	A
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	440.16	440.16	0.00	-	-	-	-	-
D-A	22.02	21.97	0.00	486.04	0.045	0.05	7.756	A
D-BC	61.66	61.36	0.00	338.48	0.182	0.22	12.976	B
C-ABD	0.00	0.00	0.00	476.68	0.000	0.00	0.000	A
C-D	64.96	64.96	0.00	-	-	-	-	-
C-A	640.79	640.79	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	357.90	0.000	0.00	0.000	A
A-BCD	157.34	157.32	0.00	856.74	0.184	0.51	5.163	A
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	439.81	439.81	0.00	-	-	-	-	-
D-A	22.02	22.02	0.00	485.82	0.045	0.05	7.761	A
D-BC	61.66	61.65	0.00	338.33	0.182	0.22	13.010	B
C-ABD	0.00	0.00	0.00	476.48	0.000	0.00	0.000	A
C-D	64.96	64.96	0.00	-	-	-	-	-
C-A	640.79	640.79	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	399.05	0.000	0.00	0.000	A
A-BCD	104.27	105.02	0.00	803.08	0.130	0.32	5.172	A
A-B	1.57	1.57	0.00	-	-	-	-	-
A-C	383.21	383.21	0.00	-	-	-	-	-
D-A	17.98	18.03	0.00	523.81	0.034	0.04	7.117	A
D-BC	50.34	50.63	0.00	394.33	0.128	0.15	10.482	B
C-ABD	0.00	0.00	0.00	501.18	0.000	0.00	0.000	A
C-D	53.04	53.04	0.00	-	-	-	-	-
C-A	523.21	523.21	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	428.19	0.000	0.00	0.000	A
A-BCD	76.45	76.89	0.00	768.58	0.099	0.21	5.215	A
A-B	1.36	1.36	0.00	-	-	-	-	-
A-C	331.74	331.74	0.00	-	-	-	-	-
D-A	15.06	15.09	0.00	550.07	0.027	0.03	6.728	A
D-BC	42.16	42.32	0.00	434.93	0.097	0.11	9.172	A
C-ABD	0.00	0.00	0.00	519.25	0.000	0.00	0.000	A
C-D	44.42	44.42	0.00	-	-	-	-	-
C-A	438.16	438.16	0.00	-	-	-	-	-

(Default Analysis Set) - 2020 Base + CD, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2020 Base + CD, AM	2020 Base + CD	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Burton Road (E)		Major
B	B	Norman Close		Minor
C	C	Burton Road (W)		Major
D	D	Cross Street		Minor

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)
A	7.30		0.00		2.20	65.00	✓	0.00
C	7.30		0.00		2.20	65.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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	3.25										25	18
D	One lane plus flare				10.00	4.50	3.50	3.50	3.50		1.00	185	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	611.605	-	-	-	0.224	0.224	0.224	-	0.224	-	-
1	B-AD	506.928	0.087	0.220	-	-	-	0.139	0.315	0.139	0.087	0.220
1	B-C	651.169	0.094	0.238	-	-	-	-	-	-	0.094	0.238
1	C-B	611.605	0.224	0.224	-	-	-	-	-	-	0.224	0.224
1	D-A	661.426	-	-	-	0.242	0.096	0.242	-	0.096	-	-
1	D-BC	626.244	0.171	0.171	0.389	0.272	0.108	0.272	-	0.108	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	757.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	430.00	100.000
D	ONE HOUR	✓	76.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	0.000	728.000	29.000
	B	0.000	0.000	2.000	0.000
	C	369.000	1.000	0.000	60.000
	D	12.000	0.000	64.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.96	0.04
	B	0.00	0.00	1.00	0.00
	C	0.86	0.00	0.00	0.14
	D	0.16	0.00	0.84	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-BCD	0.11	4.17	0.24	A
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.03	7.03	0.03	A
D-BC	0.20	12.48	0.24	B
C-ABD	0.00	5.09	0.00	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	400.97	0.000	0.00	0.000	A
A-BCD	51.78	51.42	0.00	915.63	0.057	0.09	4.165	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	518.13	518.13	0.00	-	-	-	-	-
D-A	9.03	8.97	0.00	573.25	0.016	0.02	6.379	A
D-BC	48.18	47.70	0.00	443.54	0.109	0.12	9.083	A
C-ABD	1.32	1.31	0.00	709.15	0.002	0.00	5.085	A
C-D	45.09	45.09	0.00	-	-	-	-	-
C-A	277.32	277.32	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	366.87	0.000	0.00	0.000	A
A-BCD	72.60	72.42	0.00	974.52	0.074	0.13	3.991	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	607.93	607.93	0.00	-	-	-	-	-
D-A	10.79	10.77	0.00	554.09	0.019	0.02	6.625	A
D-BC	57.53	57.37	0.00	407.99	0.141	0.16	10.263	B
C-ABD	1.77	1.76	0.00	730.52	0.002	0.00	4.939	A
C-D	53.82	53.82	0.00	-	-	-	-	-
C-A	330.98	330.98	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	318.85	0.000	0.00	0.000	A
A-BCD	117.40	116.97	0.00	1069.65	0.110	0.24	3.782	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	716.07	716.07	0.00	-	-	-	-	-
D-A	13.21	13.19	0.00	525.49	0.025	0.03	7.026	A
D-BC	70.47	70.15	0.00	358.90	0.196	0.24	12.453	B
C-ABD	2.55	2.54	0.00	760.72	0.003	0.00	4.747	A
C-D	65.86	65.86	0.00	-	-	-	-	-
C-A	405.03	405.03	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	318.69	0.000	0.00	0.000	A
A-BCD	117.61	117.61	0.00	1069.89	0.110	0.24	3.786	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	715.86	715.86	0.00	-	-	-	-	-
D-A	13.21	13.21	0.00	525.26	0.025	0.03	7.029	A
D-BC	70.47	70.46	0.00	358.82	0.196	0.24	12.483	B
C-ABD	2.55	2.55	0.00	760.61	0.003	0.00	4.748	A
C-D	65.86	65.86	0.00	-	-	-	-	-
C-A	405.03	405.03	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	366.63	0.000	0.00	0.000	A
A-BCD	72.81	73.24	0.00	974.84	0.075	0.14	3.996	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	607.72	607.72	0.00	-	-	-	-	-
D-A	10.79	10.81	0.00	553.80	0.019	0.02	6.632	A
D-BC	57.53	57.84	0.00	407.88	0.141	0.17	10.295	B
C-ABD	1.77	1.77	0.00	730.34	0.002	0.00	4.940	A
C-D	53.82	53.82	0.00	-	-	-	-	-
C-A	330.97	330.97	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	400.73	0.000	0.00	0.000	A
A-BCD	52.06	52.23	0.00	915.86	0.057	0.09	4.170	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	517.85	517.85	0.00	-	-	-	-	-
D-A	9.03	9.05	0.00	572.91	0.016	0.02	6.386	A
D-BC	48.18	48.35	0.00	443.43	0.109	0.12	9.115	A
C-ABD	1.32	1.32	0.00	708.97	0.002	0.00	5.088	A
C-D	45.09	45.09	0.00	-	-	-	-	-
C-A	277.31	277.31	0.00	-	-	-	-	-

(Default Analysis Set) - 2020 Base + CD, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2020 Base + CD, PM	2020 Base + CD	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.96	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Burton Road (E)		Major
B	B	Norman Close		Minor
C	C	Burton Road (W)		Major
D	D	Cross Street		Minor

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)
A	7.30		0.00		2.20	65.00	✓	0.00
C	7.30		0.00		2.20	65.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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	3.25										25	18
D	One lane plus flare				10.00	4.50	3.50	3.50	3.50		1.00	185	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	611.605	-	-	-	0.224	0.224	0.224	-	0.224	-	-
1	B-AD	506.928	0.087	0.220	-	-	-	0.139	0.315	0.139	0.087	0.220
1	B-C	651.169	0.094	0.238	-	-	-	-	-	-	0.094	0.238
1	C-B	611.605	0.224	0.224	-	-	-	-	-	-	0.224	0.224
1	D-A	676.751	-	-	-	0.247	0.098	0.247	-	0.098	-	-
1	D-BC	644.072	0.176	0.176	0.400	0.280	0.111	0.280	-	0.111	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	584.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	688.00	100.000
D	ONE HOUR	✓	81.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	2.000	525.000	57.000
	B	0.000	0.000	0.000	0.000
	C	625.000	0.000	0.000	63.000
	D	21.000	0.000	60.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.90	0.10
	B	0.25	0.25	0.25	0.25
	C	0.91	0.00	0.00	0.09
	D	0.26	0.00	0.74	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-BCD	0.21	5.20	0.62	A
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.05	8.07	0.05	A
D-BC	0.21	14.40	0.26	B
C-ABD	0.00	0.00	0.00	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	417.65	0.000	0.00	0.000	A
A-BCD	85.77	84.80	0.00	780.87	0.110	0.24	5.172	A
A-B	1.34	1.34	0.00	-	-	-	-	-
A-C	352.56	352.56	0.00	-	-	-	-	-
D-A	15.81	15.69	0.00	540.18	0.029	0.03	6.861	A
D-BC	45.17	44.70	0.00	420.19	0.108	0.12	9.576	A
C-ABD	0.00	0.00	0.00	512.81	0.000	0.00	0.000	A
C-D	47.43	47.43	0.00	-	-	-	-	-
C-A	470.53	470.53	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	386.08	0.000	0.00	0.000	A
A-BCD	118.61	118.12	0.00	818.14	0.145	0.36	5.152	A
A-B	1.54	1.54	0.00	-	-	-	-	-
A-C	404.85	404.85	0.00	-	-	-	-	-
D-A	18.88	18.85	0.00	511.57	0.037	0.04	7.305	A
D-BC	53.94	53.76	0.00	376.47	0.143	0.16	11.151	B
C-ABD	0.00	0.00	0.00	493.42	0.000	0.00	0.000	A
C-D	56.64	56.64	0.00	-	-	-	-	-
C-A	561.86	561.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	341.18	0.000	0.00	0.000	A
A-BCD	182.87	181.88	0.00	877.32	0.208	0.61	5.189	A
A-B	1.75	1.75	0.00	-	-	-	-	-
A-C	458.38	458.38	0.00	-	-	-	-	-
D-A	23.12	23.07	0.00	469.39	0.049	0.05	8.065	A
D-BC	66.06	65.68	0.00	316.20	0.209	0.26	14.348	B
C-ABD	0.00	0.00	0.00	466.78	0.000	0.00	0.000	A
C-D	69.36	69.36	0.00	-	-	-	-	-
C-A	688.14	688.14	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	340.90	0.000	0.00	0.000	A
A-BCD	183.33	183.30	0.00	877.88	0.209	0.62	5.203	A
A-B	1.74	1.74	0.00	-	-	-	-	-
A-C	457.92	457.92	0.00	-	-	-	-	-
D-A	23.12	23.12	0.00	469.08	0.049	0.05	8.072	A
D-BC	66.06	66.05	0.00	316.02	0.209	0.26	14.401	B
C-ABD	0.00	0.00	0.00	466.53	0.000	0.00	0.000	A
C-D	69.36	69.36	0.00	-	-	-	-	-
C-A	688.14	688.14	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	385.67	0.000	0.00	0.000	A
A-BCD	119.13	120.08	0.00	818.94	0.145	0.38	5.171	A
A-B	1.54	1.54	0.00	-	-	-	-	-
A-C	404.34	404.34	0.00	-	-	-	-	-
D-A	18.88	18.93	0.00	511.18	0.037	0.04	7.313	A
D-BC	53.94	54.31	0.00	376.20	0.143	0.17	11.198	B
C-ABD	0.00	0.00	0.00	493.03	0.000	0.00	0.000	A
C-D	56.64	56.64	0.00	-	-	-	-	-
C-A	561.86	561.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	417.28	0.000	0.00	0.000	A
A-BCD	86.44	86.94	0.00	781.48	0.111	0.25	5.196	A
A-B	1.34	1.34	0.00	-	-	-	-	-
A-C	351.89	351.89	0.00	-	-	-	-	-
D-A	15.81	15.84	0.00	539.80	0.029	0.03	6.870	A
D-BC	45.17	45.36	0.00	419.86	0.108	0.12	9.617	A
C-ABD	0.00	0.00	0.00	512.46	0.000	0.00	0.000	A
C-D	47.43	47.43	0.00	-	-	-	-	-
C-A	470.53	470.53	0.00	-	-	-	-	-

(Default Analysis Set) - Predicted, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
Predicted, AM	Predicted	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	9.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Burton Road (E)		Major
B	B	Norman Close		Minor
C	C	Burton Road (W)		Major
D	D	Cross Street		Minor

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)
A	7.30		0.00		2.20	65.00	✓	0.00
C	7.30		0.00		2.20	65.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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	3.25										25	18
D	One lane plus flare				10.00	4.50	3.50	3.50	3.50		1.00	185	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	611.605	-	-	-	0.224	0.224	0.224	-	0.224	-	-
1	B-AD	506.928	0.087	0.220	-	-	-	0.139	0.315	0.139	0.087	0.220
1	B-C	651.169	0.094	0.238	-	-	-	-	-	-	0.094	0.238
1	C-B	611.605	0.224	0.224	-	-	-	-	-	-	0.224	0.224
1	D-A	665.405	-	-	-	0.243	0.096	0.243	-	0.096	-	-
1	D-BC	624.876	0.171	0.171	0.388	0.271	0.107	0.271	-	0.107	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	758.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	466.00	100.000
D	ONE HOUR	✓	114.00	100.000

Turning Proportions

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

		To			
		A	**B**	**C**	**D**
From	**A**	0.000	0.000	726.000	32.000
	B	0.000	0.000	2.000	0.000
	C	396.000	1.000	0.000	69.000
	D	21.000	0.000	93.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.96	0.04
	B	0.00	0.00	1.00	0.00
	C	0.85	0.00	0.00	0.15
	D	0.18	0.00	0.82	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-BCD	0.12	4.23	0.29	A
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.05	7.57	0.05	A
D-BC	0.29	14.66	0.41	B
C-ABD	0.00	4.99	0.00	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	393.40	0.000	0.00	0.000	A
A-BCD	57.40	56.98	0.00	910.40	0.063	0.10	4.218	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	513.26	513.26	0.00	-	-	-	-	-
D-A	15.81	15.70	0.00	562.18	0.028	0.03	6.585	A
D-BC	70.02	69.26	0.00	435.67	0.161	0.19	9.806	A
C-ABD	1.37	1.37	0.00	723.78	0.002	0.00	4.982	A
C-D	51.85	51.85	0.00	-	-	-	-	-
C-A	297.60	297.60	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	357.54	0.000	0.00	0.000	A
A-BCD	80.66	80.45	0.00	968.72	0.083	0.16	4.054	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	600.76	600.76	0.00	-	-	-	-	-
D-A	18.88	18.85	0.00	537.89	0.035	0.04	6.935	A
D-BC	83.61	83.32	0.00	398.82	0.210	0.26	11.400	B
C-ABD	1.86	1.86	0.00	747.87	0.002	0.00	4.825	A
C-D	61.89	61.89	0.00	-	-	-	-	-
C-A	355.18	355.18	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	306.96	0.000	0.00	0.000	A
A-BCD	130.87	130.33	0.00	1063.25	0.123	0.29	3.862	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	703.70	703.70	0.00	-	-	-	-	-
D-A	23.12	23.07	0.00	498.86	0.046	0.05	7.566	A
D-BC	102.39	101.81	0.00	347.91	0.294	0.41	14.593	B
C-ABD	2.71	2.70	0.00	781.70	0.003	0.00	4.620	A
C-D	75.73	75.73	0.00	-	-	-	-	-
C-A	434.64	434.64	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	306.71	0.000	0.00	0.000	A
A-BCD	131.14	131.13	0.00	1063.54	0.123	0.29	3.867	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	703.43	703.43	0.00	-	-	-	-	-
D-A	23.12	23.12	0.00	498.34	0.046	0.05	7.574	A
D-BC	102.39	102.38	0.00	347.81	0.294	0.41	14.665	B
C-ABD	2.71	2.71	0.00	781.54	0.003	0.00	4.623	A
C-D	75.73	75.73	0.00	-	-	-	-	-
C-A	434.64	434.64	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	357.18	0.000	0.00	0.000	A
A-BCD	80.93	81.46	0.00	969.11	0.084	0.16	4.061	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	600.50	600.50	0.00	-	-	-	-	-
D-A	18.88	18.93	0.00	537.29	0.035	0.04	6.944	A
D-BC	83.61	84.18	0.00	398.68	0.210	0.27	11.466	B
C-ABD	1.86	1.87	0.00	747.61	0.002	0.00	4.828	A
C-D	61.89	61.89	0.00	-	-	-	-	-
C-A	355.18	355.18	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	393.05	0.000	0.00	0.000	A
A-BCD	57.73	57.94	0.00	910.67	0.063	0.11	4.225	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	512.94	512.94	0.00	-	-	-	-	-
D-A	15.81	15.84	0.00	561.59	0.028	0.03	6.596	A
D-BC	70.02	70.32	0.00	435.54	0.161	0.19	9.864	A
C-ABD	1.38	1.38	0.00	723.51	0.002	0.00	4.986	A
C-D	51.85	51.85	0.00	-	-	-	-	-
C-A	297.60	297.60	0.00	-	-	-	-	-

(Default Analysis Set) - Predicted, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
Predicted, PM	Predicted	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	8.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Burton Road (E)		Major
B	B	Norman Close		Minor
C	C	Burton Road (W)		Major
D	D	Cross Street		Minor

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)
A	7.30		0.00		2.20	65.00	✓	0.00
C	7.30		0.00		2.20	65.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	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	3.25										25	18
D	One lane plus flare				10.00	4.50	3.50	3.50	3.50		1.00	185	75

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	611.605	-	-	-	0.224	0.224	0.224	-	0.224	-	-
1	B-AD	506.928	0.087	0.220	-	-	-	0.139	0.315	0.139	0.087	0.220
1	B-C	651.169	0.094	0.238	-	-	-	-	-	-	0.094	0.238
1	C-B	611.605	0.224	0.224	-	-	-	-	-	-	0.224	0.224
1	D-A	675.351	-	-	-	0.247	0.098	0.247	-	0.098	-	-
1	D-BC	645.275	0.176	0.176	0.400	0.280	0.111	0.280	-	0.111	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	591.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	710.00	100.000
D	ONE HOUR	✓	96.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	2.000	525.000	64.000
	B	0.000	0.000	0.000	0.000
	C	625.000	0.000	0.000	85.000
	D	24.000	0.000	72.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.89	0.11
	B	0.25	0.25	0.25	0.25
	C	0.88	0.00	0.00	0.12
	D	0.25	0.00	0.75	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-BCD	0.24	5.43	0.71	A
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.06	8.36	0.06	A
D-BC	0.26	15.55	0.34	C
C-ABD	0.00	0.00	0.00	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	413.74	0.000	0.00	0.000	A
A-BCD	96.66	95.55	0.00	777.98	0.124	0.28	5.275	A
A-B	1.32	1.32	0.00	-	-	-	-	-
A-C	346.95	346.95	0.00	-	-	-	-	-
D-A	18.07	17.93	0.00	533.94	0.034	0.03	6.974	A
D-BC	54.21	53.62	0.00	417.01	0.130	0.15	9.891	A
C-ABD	0.00	0.00	0.00	510.79	0.000	0.00	0.000	A
C-D	63.99	63.99	0.00	-	-	-	-	-
C-A	470.53	470.53	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	381.23	0.000	0.00	0.000	A
A-BCD	133.92	133.39	0.00	814.92	0.164	0.41	5.292	A
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	395.86	395.86	0.00	-	-	-	-	-
D-A	21.58	21.54	0.00	503.52	0.043	0.04	7.468	A
D-BC	64.73	64.49	0.00	372.37	0.174	0.21	11.682	B
C-ABD	0.00	0.00	0.00	490.96	0.000	0.00	0.000	A
C-D	76.41	76.41	0.00	-	-	-	-	-
C-A	561.86	561.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	334.94	0.000	0.00	0.000	A
A-BCD	207.02	205.86	0.00	873.72	0.237	0.70	5.405	A
A-B	1.68	1.68	0.00	-	-	-	-	-
A-C	442.00	442.00	0.00	-	-	-	-	-
D-A	26.42	26.36	0.00	457.29	0.058	0.06	8.353	A
D-BC	79.27	78.76	0.00	310.88	0.255	0.33	15.475	C
C-ABD	0.00	0.00	0.00	463.77	0.000	0.00	0.000	A
C-D	93.59	93.59	0.00	-	-	-	-	-
C-A	688.14	688.14	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	334.59	0.000	0.00	0.000	A
A-BCD	207.58	207.55	0.00	874.39	0.237	0.71	5.425	A
A-B	1.68	1.68	0.00	-	-	-	-	-
A-C	441.44	441.44	0.00	-	-	-	-	-
D-A	26.42	26.42	0.00	456.85	0.058	0.06	8.363	A
D-BC	79.27	79.26	0.00	310.66	0.255	0.34	15.555	C
C-ABD	0.00	0.00	0.00	463.45	0.000	0.00	0.000	A
C-D	93.59	93.59	0.00	-	-	-	-	-
C-A	688.14	688.14	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	380.73	0.000	0.00	0.000	A
A-BCD	134.52	135.65	0.00	815.85	0.165	0.43	5.314	A
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	395.27	395.27	0.00	-	-	-	-	-
D-A	21.58	21.64	0.00	503.00	0.043	0.05	7.481	A
D-BC	64.73	65.23	0.00	372.07	0.174	0.21	11.752	B
C-ABD	0.00	0.00	0.00	490.49	0.000	0.00	0.000	A
C-D	76.41	76.41	0.00	-	-	-	-	-
C-A	561.86	561.86	0.00	-	-	-	-	-

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

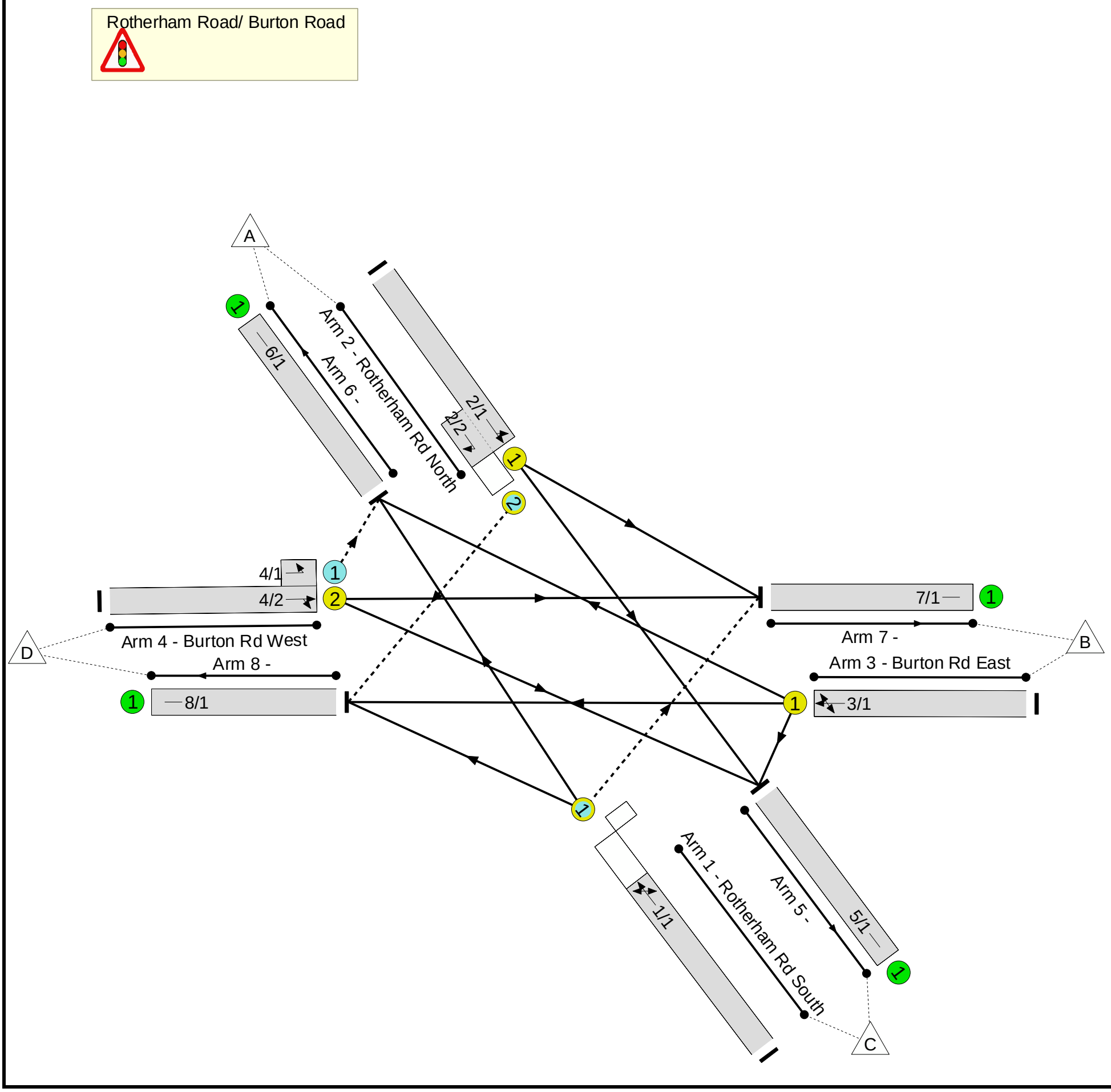
Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	413.31	0.000	0.00	0.000	A
A-BCD	97.43	97.99	0.00	778.67	0.125	0.29	5.303	A
A-B	1.32	1.32	0.00	-	-	-	-	-
A-C	346.19	346.19	0.00	-	-	-	-	-
D-A	18.07	18.11	0.00	533.46	0.034	0.04	6.987	A
D-BC	54.21	54.46	0.00	416.62	0.130	0.15	9.948	A
C-ABD	0.00	0.00	0.00	510.38	0.000	0.00	0.000	A
C-D	63.99	63.99	0.00	-	-	-	-	-
C-A	470.53	470.53	0.00	-	-	-	-	-

Full Input Data And Results

User and Project Details

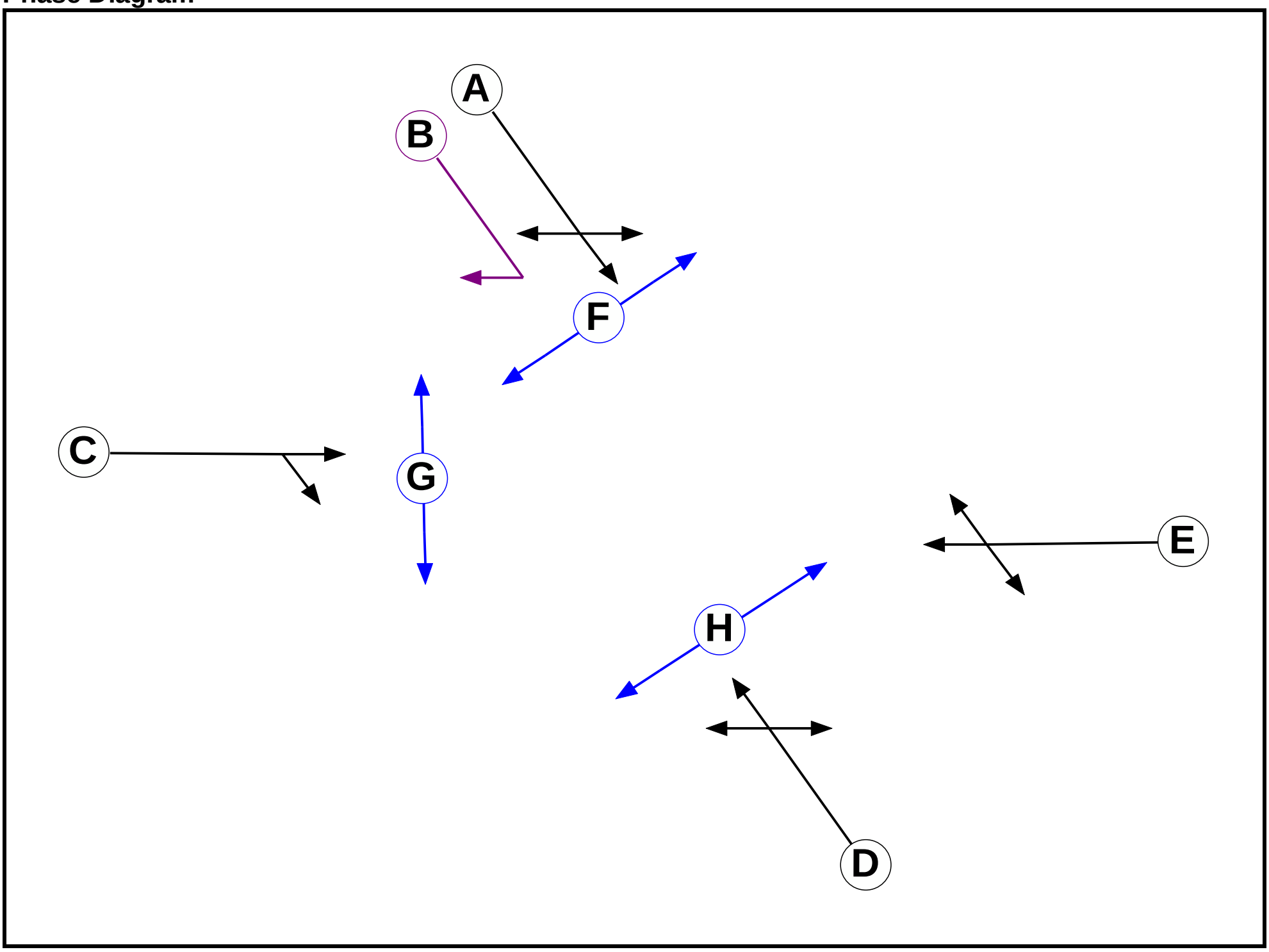
Project:	**Monk Bretton, Barnsley**
Title:	**A633 Rotherham Road / Burton Road**
Location:	Mink Bretton
File name:	Rotherham Road - Burton Rd - MOVA.lsg3x
Author:	Aimee Hanson
Company:	WSP UK Ltd
Address:	Three White Rose Office Park, Millshaw Park Lane, Leeds LS11 0DL
Notes:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

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

Full Input Data And Results

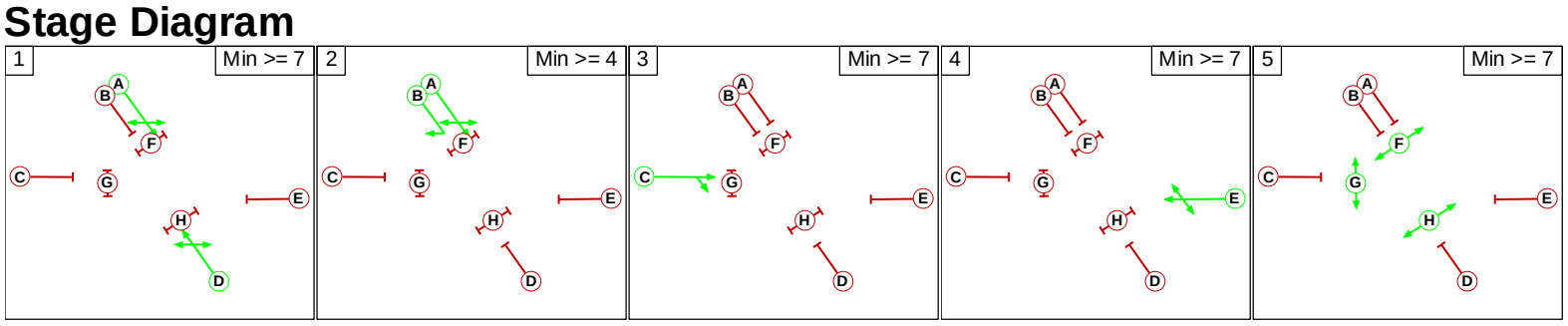
Phase Intergreens Matrix

	Starting Phase								
Terminating Phase		A	B	C	D	E	F	G	H
	A		-	7	-	5	6	6	7
	B	-		5	5	5	6	6	7
	C	5	5		6	6	6	6	7
	D	-	4	6		5	7	7	6
	E	6	6	6	6		7	8	7
	F	5	5	6	5	5		-	-
	G	6	6	5	5	5	-		-
	H	5	5	5	6	5	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

	To Stage					
From Stage		1	2	3	4	5
	1		4	7	5	7
	2	5		7	5	7
	3	6	5		6	7
	4	6	6	6		8
	5	6	6	6	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Rotherham Road/ Burton Road											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
1/1 (Rotherham Rd South)	7/1 (Right)	1439	0	2/1	1.09	All	4.00	1.00	0.50	4	3.00
2/2 (Rotherham Rd North)	8/1 (Right)	1439	0	1/1	1.09	To 6/1 (Ahead) To 8/1 (Left)	2.00	-	0.50	2	2.00
4/1 (Burton Rd West)	6/1 (Left)	715	0	1/1	0.22	To 6/1 (Ahead)	-	-	-	-	-
				3/1	0.22	To 6/1 (Right)					

Full Input Data And Results

Lane Input Data

Junction: Rotherham Road/ Burton Road

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Rotherham Rd South)	O	D	2	3	60.0	User	2159	-	-	-	-	-
2/1 (Rotherham Rd North)	U	A	2	3	60.0	User	2096	-	-	-	-	-
2/2 (Rotherham Rd North)	O	A B	2	3	3.0	User	1773	-	-	-	-	-
3/1 (Burton Rd East)	U	E	2	3	60.0	User	2170	-	-	-	-	-
4/1 (Burton Rd West)	O		2	3	2.0	User	2052	-	-	-	-	-
4/2 (Burton Rd West)	U	C	2	3	60.0	User	2168	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2015 Base AM Peak'	08:00	09:00	01:00	
2: '2015 Base PM Peak'	17:00	18:00	01:00	
3: '2020 Base + Com AM Peak'	08:00	09:00	01:00	
4: '2020 Base + Com PM Peak'	17:00	18:00	01:00	
5: '2020 Predicted AM Peak'	08:00	09:00	01:00	
6: '2020 Predicted PM Peak'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '2015 Base AM Peak' (FG1: '2015 Base AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	27	330	62	419
	B	20	0	0	541	561
	C	288	2	0	72	362
	D	26	321	84	0	431
	Tot.	334	350	414	675	1773

Traffic Lane Flows

Lane	Scenario 1: 2015 Base AM Peak
Junction: Rotherham Road/ Burton Road	
1/1	362
2/1 (with short)	419(In) 357(Out)
2/2 (short)	62
3/1	561
4/1 (short)	26
4/2 (with short)	431(In) 405(Out)
5/1	414
6/1	334
7/1	350
8/1	675

Full Input Data And Results

Lane Saturation Flows

Junction: Rotherham Road/ Burton Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Rotherham Rd South Lane 1)	This lane uses a directly entered Saturation Flow						2159	2159
2/1 (Rotherham Rd North Lane 1)	This lane uses a directly entered Saturation Flow						2096	2096
2/2 (Rotherham Rd North Lane 2)	This lane uses a directly entered Saturation Flow						1773	1773
3/1 (Burton Rd East Lane 1)	This lane uses a directly entered Saturation Flow						2170	2170
4/1 (Burton Rd West Lane 1)	This lane uses a directly entered Saturation Flow						2052	2052
4/2 (Burton Rd West Lane 2)	This lane uses a directly entered Saturation Flow						2168	2168
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2015 Base PM Peak' (FG2: '2015 Base PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	37	250	48	335
	B	30	0	0	356	386
	C	348	1	0	83	432
	D	19	503	83	0	605
	Tot.	397	541	333	487	1758

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2015 Base PM Peak
Junction: Rotherham Road/ Burton Road	
1/1	432
2/1 (with short)	335(In) 287(Out)
2/2 (short)	48
3/1	386
4/1 (short)	19
4/2 (with short)	605(In) 586(Out)
5/1	333
6/1	397
7/1	541
8/1	487

Lane Saturation Flows

Junction: Rotherham Road/ Burton Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Rotherham Rd South Lane 1)	This lane uses a directly entered Saturation Flow						2159	2159
2/1 (Rotherham Rd North Lane 1)	This lane uses a directly entered Saturation Flow						2096	2096
2/2 (Rotherham Rd North Lane 2)	This lane uses a directly entered Saturation Flow						1773	1773
3/1 (Burton Rd East Lane 1)	This lane uses a directly entered Saturation Flow						2170	2170
4/1 (Burton Rd West Lane 1)	This lane uses a directly entered Saturation Flow						2052	2052
4/2 (Burton Rd West Lane 2)	This lane uses a directly entered Saturation Flow						2168	2168
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2020 Base + Com AM Peak' (FG3: '2020 Base + Com AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	D	Tot.
	A	0	29	354	66	449
	B	21	0	0	582	603
	C	310	2	0	77	389
	D	28	344	90	0	462
	Tot.	359	375	444	725	1903

Traffic Lane Flows

Lane	Scenario 3: 2020 Base + Com AM Peak
Junction: Rotherham Road/ Burton Road	
1/1	389
2/1 (with short)	449(In) 383(Out)
2/2 (short)	66
3/1	603
4/1 (short)	28
4/2 (with short)	462(In) 434(Out)
5/1	444
6/1	359
7/1	375
8/1	725

Full Input Data And Results

Lane Saturation Flows

Junction: Rotherham Road/ Burton Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Rotherham Rd South Lane 1)	This lane uses a directly entered Saturation Flow						2159	2159
2/1 (Rotherham Rd North Lane 1)	This lane uses a directly entered Saturation Flow						2096	2096
2/2 (Rotherham Rd North Lane 2)	This lane uses a directly entered Saturation Flow						1773	1773
3/1 (Burton Rd East Lane 1)	This lane uses a directly entered Saturation Flow						2170	2170
4/1 (Burton Rd West Lane 1)	This lane uses a directly entered Saturation Flow						2052	2052
4/2 (Burton Rd West Lane 2)	This lane uses a directly entered Saturation Flow						2168	2168
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2020 Base + Com PM Peak' (FG4: '2020 Base + Com PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	40	268	52	360
	B	32	0	0	382	414
	C	375	1	0	89	465
	D	20	540	89	0	649
	Tot.	427	581	357	523	1888

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2020 Base + Com PM Peak
Junction: Rotherham Road/ Burton Road	
1/1	465
2/1 (with short)	360(In) 308(Out)
2/2 (short)	52
3/1	414
4/1 (short)	20
4/2 (with short)	649(In) 629(Out)
5/1	357
6/1	427
7/1	581
8/1	523

Lane Saturation Flows

Junction: Rotherham Road/ Burton Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Rotherham Rd South Lane 1)	This lane uses a directly entered Saturation Flow						2159	2159
2/1 (Rotherham Rd North Lane 1)	This lane uses a directly entered Saturation Flow						2096	2096
2/2 (Rotherham Rd North Lane 2)	This lane uses a directly entered Saturation Flow						1773	1773
3/1 (Burton Rd East Lane 1)	This lane uses a directly entered Saturation Flow						2170	2170
4/1 (Burton Rd West Lane 1)	This lane uses a directly entered Saturation Flow						2052	2052
4/2 (Burton Rd West Lane 2)	This lane uses a directly entered Saturation Flow						2168	2168
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2020 Predicted AM Peak' (FG5: '2020 Predicted AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	D	Tot.
	A	0	29	354	66	449
	B	21	0	14	595	630
	C	309	6	0	77	392
	D	28	348	90	0	466
	Tot.	358	383	458	738	1937

Traffic Lane Flows

Lane	Scenario 5: 2020 Predicted AM Peak
Junction: Rotherham Road/ Burton Road	
1/1	392
2/1 (with short)	449(In) 383(Out)
2/2 (short)	66
3/1	630
4/1 (short)	28
4/2 (with short)	466(In) 438(Out)
5/1	458
6/1	358
7/1	383
8/1	738

Full Input Data And Results

Lane Saturation Flows

Junction: Rotherham Road/ Burton Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Rotherham Rd South Lane 1)	This lane uses a directly entered Saturation Flow						2159	2159
2/1 (Rotherham Rd North Lane 1)	This lane uses a directly entered Saturation Flow						2096	2096
2/2 (Rotherham Rd North Lane 2)	This lane uses a directly entered Saturation Flow						1773	1773
3/1 (Burton Rd East Lane 1)	This lane uses a directly entered Saturation Flow						2170	2170
4/1 (Burton Rd West Lane 1)	This lane uses a directly entered Saturation Flow						2052	2052
4/2 (Burton Rd West Lane 2)	This lane uses a directly entered Saturation Flow						2168	2168
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2020 Predicted PM Peak' (FG6: '2020 Predicted PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	40	268	52	360
	B	32	0	6	388	426
	C	374	12	0	89	475
	D	20	551	89	0	660
	Tot.	426	603	363	529	1921

Full Input Data And Results

Traffic Lane Flows

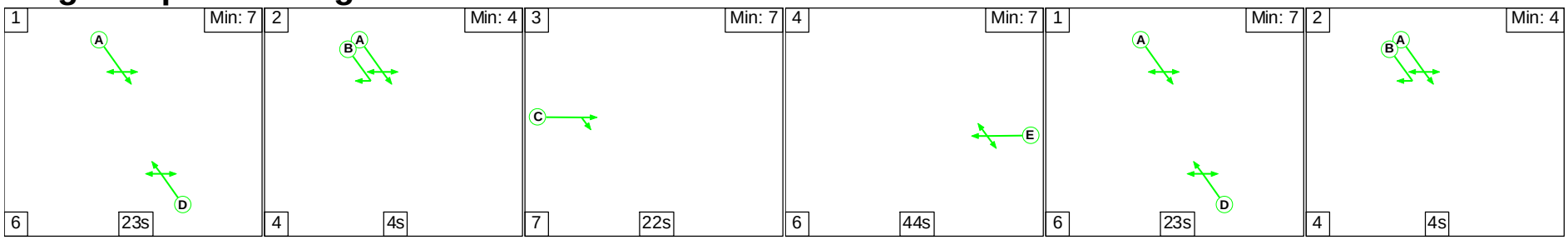
Lane	Scenario 6: 2020 Predicted PM Peak
Junction: Rotherham Road/ Burton Road	
1/1	475
2/1 (with short)	360(In) 308(Out)
2/2 (short)	52
3/1	426
4/1 (short)	20
4/2 (with short)	660(In) 640(Out)
5/1	363
6/1	426
7/1	603
8/1	529

Lane Saturation Flows

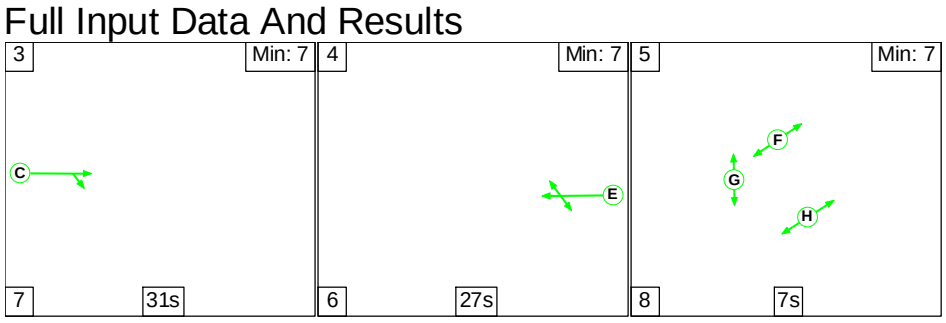
Junction: Rotherham Road/ Burton Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Rotherham Rd South Lane 1)	This lane uses a directly entered Saturation Flow						2159	2159
2/1 (Rotherham Rd North Lane 1)	This lane uses a directly entered Saturation Flow						2096	2096
2/2 (Rotherham Rd North Lane 2)	This lane uses a directly entered Saturation Flow						1773	1773
3/1 (Burton Rd East Lane 1)	This lane uses a directly entered Saturation Flow						2170	2170
4/1 (Burton Rd West Lane 1)	This lane uses a directly entered Saturation Flow						2052	2052
4/2 (Burton Rd West Lane 2)	This lane uses a directly entered Saturation Flow						2168	2168
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2015 Base AM Peak' (FG1: '2015 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



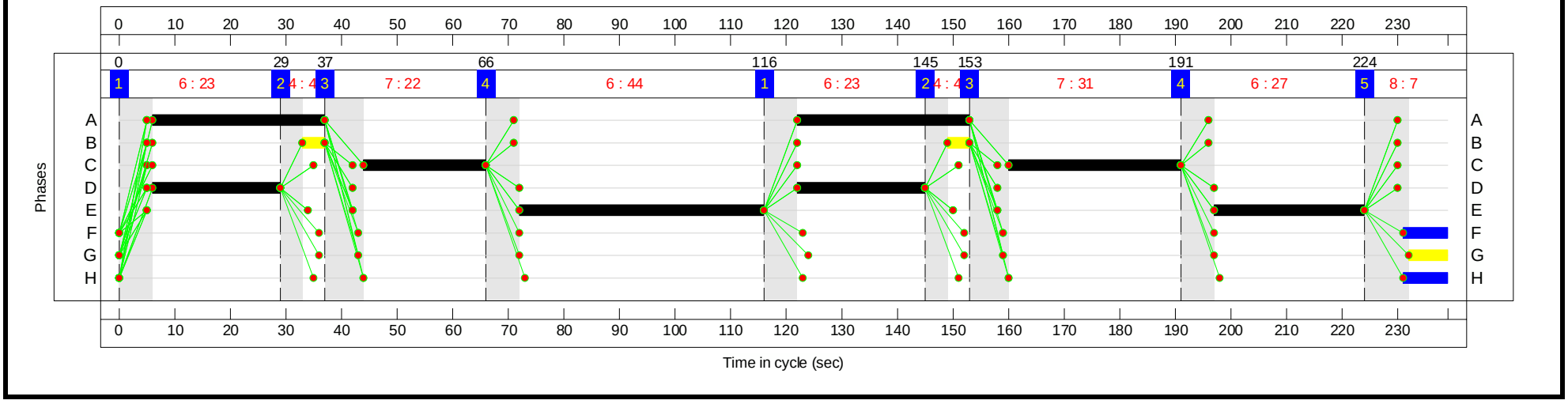
Full Input Data And Results



Stage Timings

Stage	1	2	3	4	1	2	3	4	5
Duration	23	4	22	44	23	4	31	27	7
Change Point	0	29	37	66	116	145	153	191	224

Signal Timings Diagram

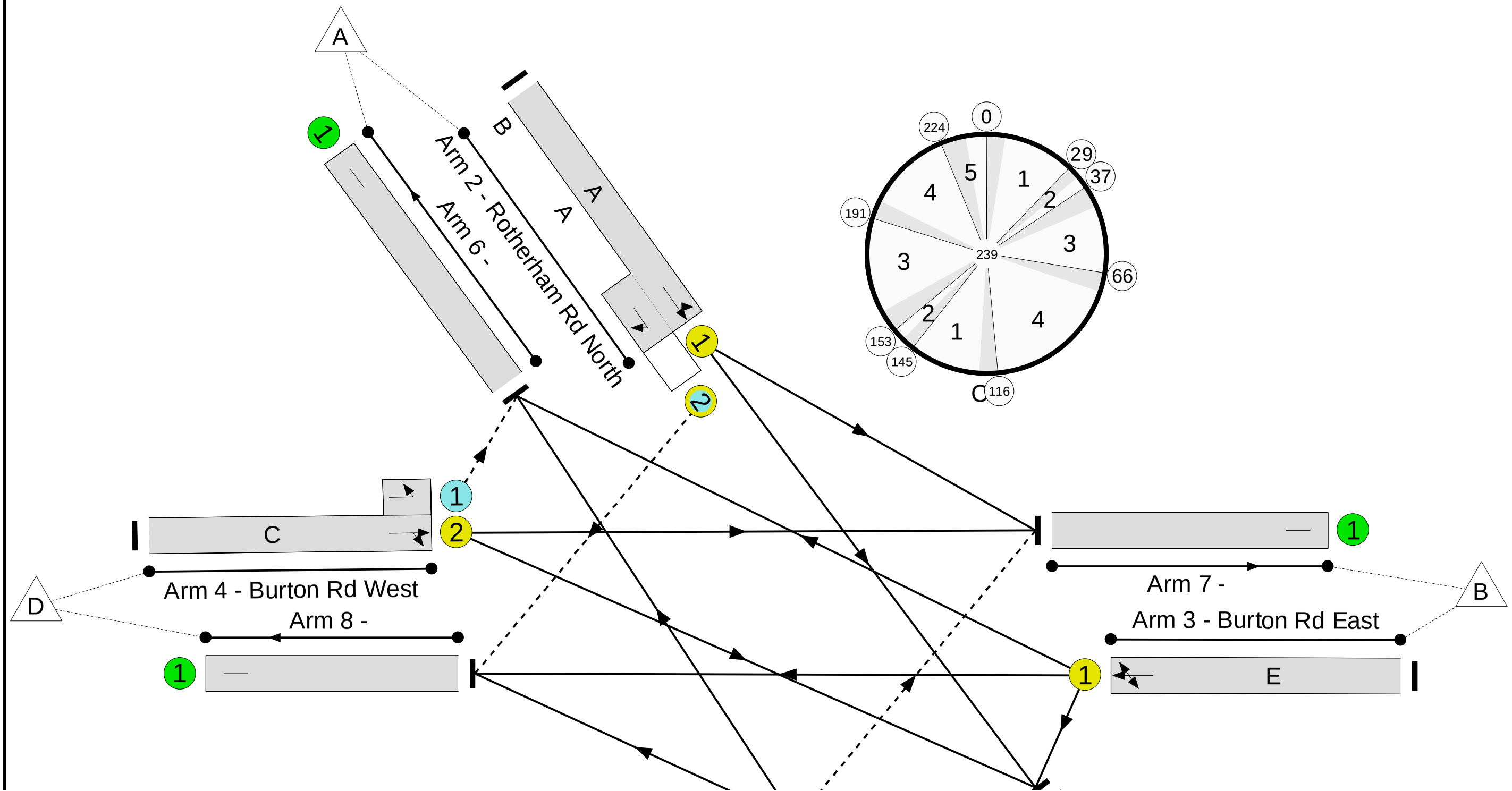


Full Input Data And Results

Rotherham Road/ Burton Road

PRC: 5.9 %

Total Traffic Delay: 29.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.0%**
Rotherham Road/ Burton Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.0%**
1/1	Rotherham Rd South Ahead Right Left	O	N/A	N/A	D		2	46	-	362	2159	434	83.5%
2/1+2/2	Rotherham Rd North Ahead Left Right	U+O	N/A	N/A	A	B	2	62	8	419	2096:1773	483+84	73.9 : 73.9%
3/1	Burton Rd East Left Right Ahead	U	N/A	N/A	E		2	71	-	561	2170	663	84.6%
4/2+4/1	Burton Rd West Right Left Ahead	U+O	N/A	N/A	C -		2	53	-	431	2168:2052	477+31	85.0 : 85.0%
5/1		U	N/A	N/A	-		-	-	-	414	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	350	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	675	Inf	Inf	0.0%

Full Input Data And Results

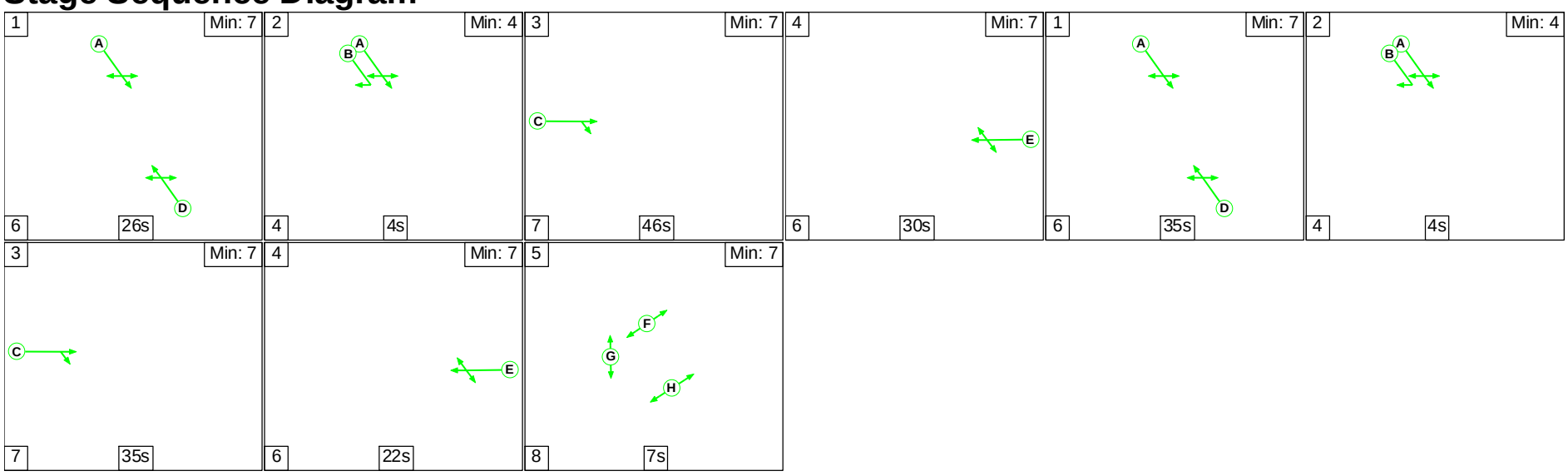
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**30**	**58**	**1**	**20.4**	**9.0**	**0.1**	**29.6**	**-**	**-**	**-**	**-**
Rotherham Road/ Burton Road	**-**	**-**	**30**	**58**	**1**	**20.4**	**9.0**	**0.1**	**29.6**	**-**	**-**	**-**	**-**
1/1	362	362	2	0	0	4.6	2.4	0.0	7.0	69.5	11.9	2.4	14.2
2/1+2/2	419	419	26	35	1	4.6	1.4	0.1	6.1	52.3	12.5	1.4	13.9
3/1	561	561	-	-	-	6.1	2.6	-	8.7	55.7	17.9	2.6	20.5
4/2+4/1	431	431	2	24	0	5.2	2.6	-	7.8	65.2	13.7	2.6	16.4
5/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	675	675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	5.9	Total Delay for Signalled Lanes (pcuHr):	29.57	Cycle Time (s): 239
	PRC Over All Lanes (%):	5.9	Total Delay Over All Lanes(pcuHr):	29.57	

Full Input Data And Results

Scenario 2: '2015 Base PM Peak' (FG2: '2015 Base PM Peak', Plan 1: 'Network Control Plan 1')

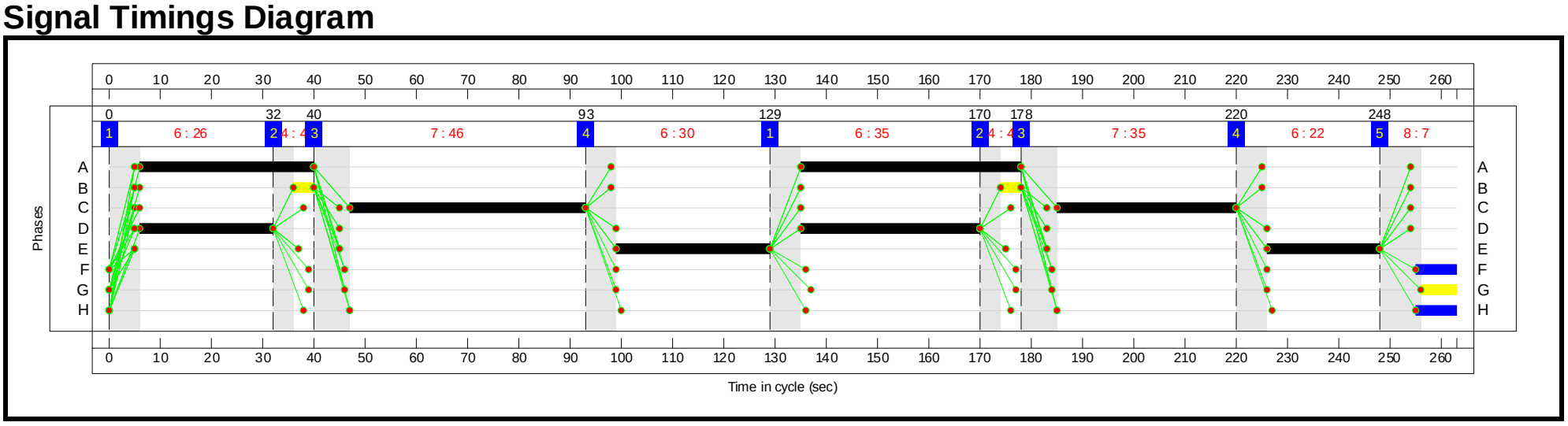
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3	4	5
Duration	26	4	46	30	35	4	35	22	7
Change Point	0	32	40	93	129	170	178	220	248

Signal Timings Diagram

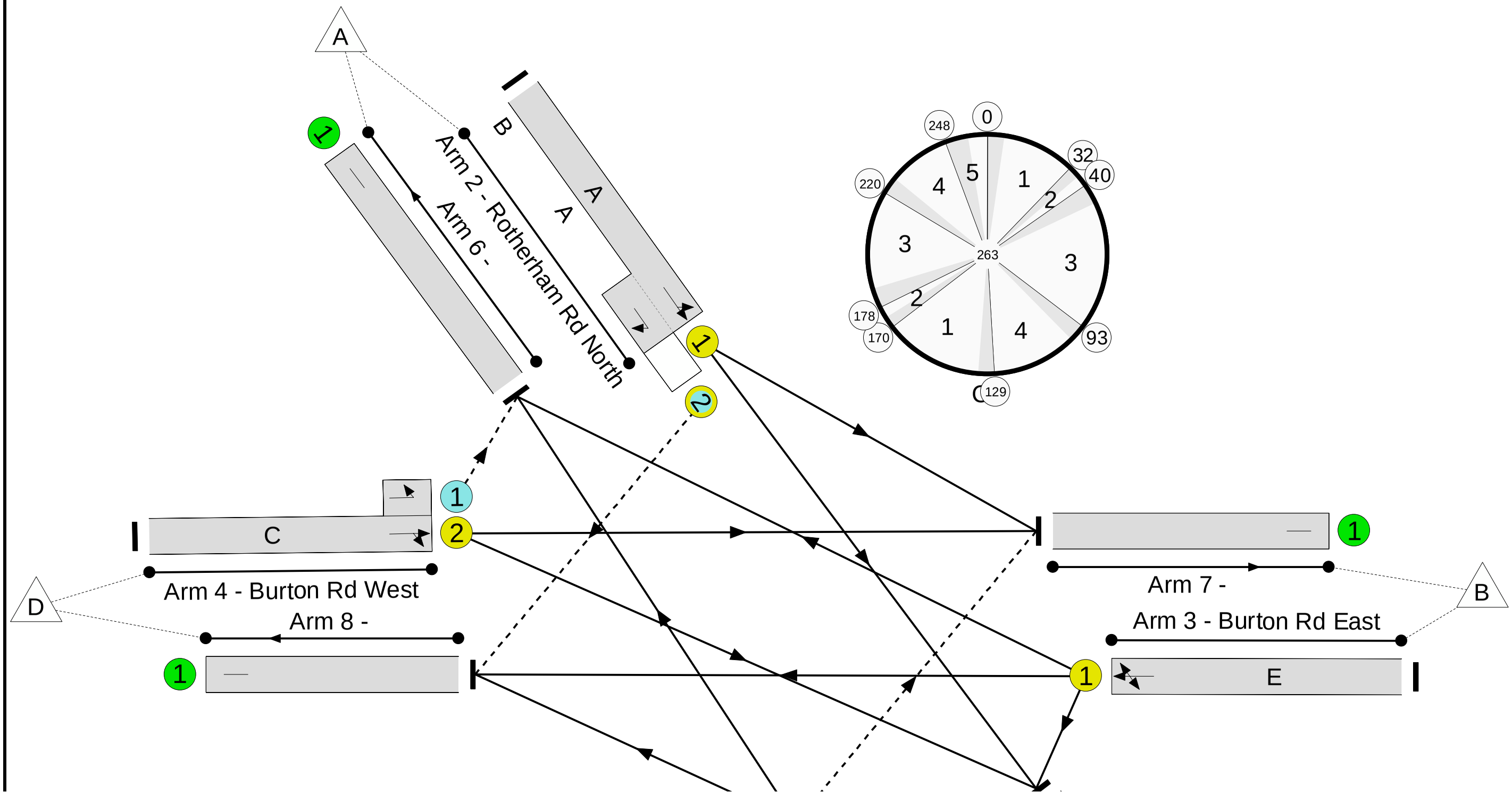


Full Input Data And Results

Rotherham Road/ Burton Road

PRC: 2.7 %

Total Traffic Delay: 31.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A633 Rotherham Road / Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.7%**
Rotherham Road/ Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.7%**
1/1	Rotherham Rd South Ahead Right Left	O	N/A	N/A	D		2	61	-	432	2159	495	87.3%
2/1+2/2	Rotherham Rd North Ahead Left Right	U+O	N/A	N/A	A	B	2	77	8	335	2096:1773	541+91	53.0 : 53.0%
3/1	Burton Rd East Left Right Ahead	U	N/A	N/A	E		2	52	-	386	2170	446	86.6%
4/2+4/1	Burton Rd West Right Left Ahead	U+O	N/A	N/A	C -		2	81	-	605	2168:2052	668+22	87.7 : 87.7%
5/1		U	N/A	N/A	-		-	-	-	333	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	397	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%

Full Input Data And Results

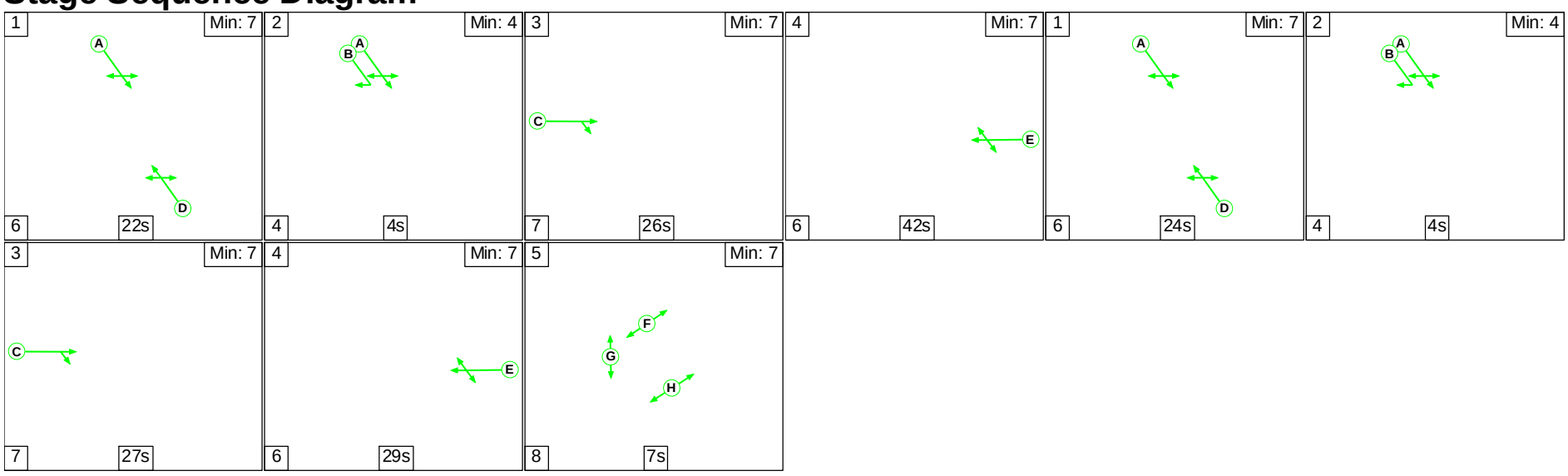
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**34**	**33**	**1**	**21.8**	**9.9**	**0.1**	**31.8**	**-**	**-**	**-**	**-**
Rotherham Road/ Burton Road	**-**	**-**	**34**	**33**	**1**	**21.8**	**9.9**	**0.1**	**31.8**	**-**	**-**	**-**	**-**
1/1	432	432	1	0	0	5.7	3.1	0.0	8.9	73.8	15.5	3.1	18.6
2/1+2/2	335	335	33	15	1	3.5	0.6	0.1	4.2	45.1	9.8	0.6	10.4
3/1	386	386	-	-	-	5.5	2.9	-	8.4	78.3	14.7	2.9	17.6
4/2+4/1	605	605	1	18	0	7.1	3.3	-	10.4	61.8	21.0	3.3	24.3
5/1	333	333	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	397	397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	31.83	Cycle Time (s): 263
	PRC Over All Lanes (%):	2.7	Total Delay Over All Lanes(pcuHr):	31.83	

Full Input Data And Results

Scenario 3: '2020 Base + Com AM Peak' (FG3: '2020 Base + Com AM Peak', Plan 1: 'Network Control Plan 1')

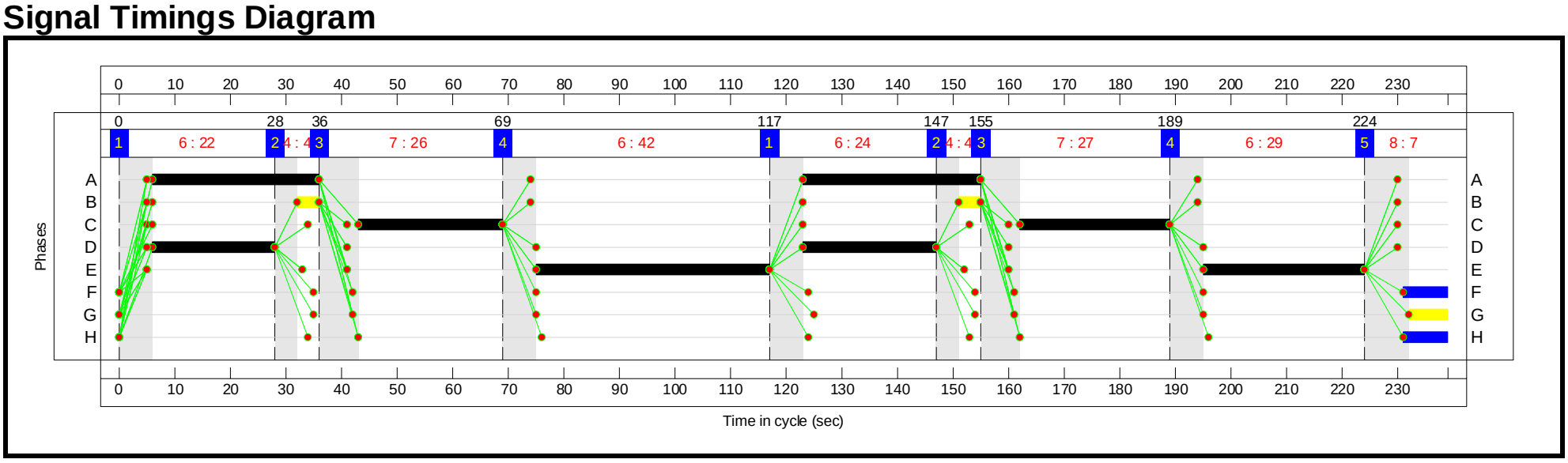
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3	4	5
Duration	22	4	26	42	24	4	27	29	7
Change Point	0	28	36	69	117	147	155	189	224

Signal Timings Diagram

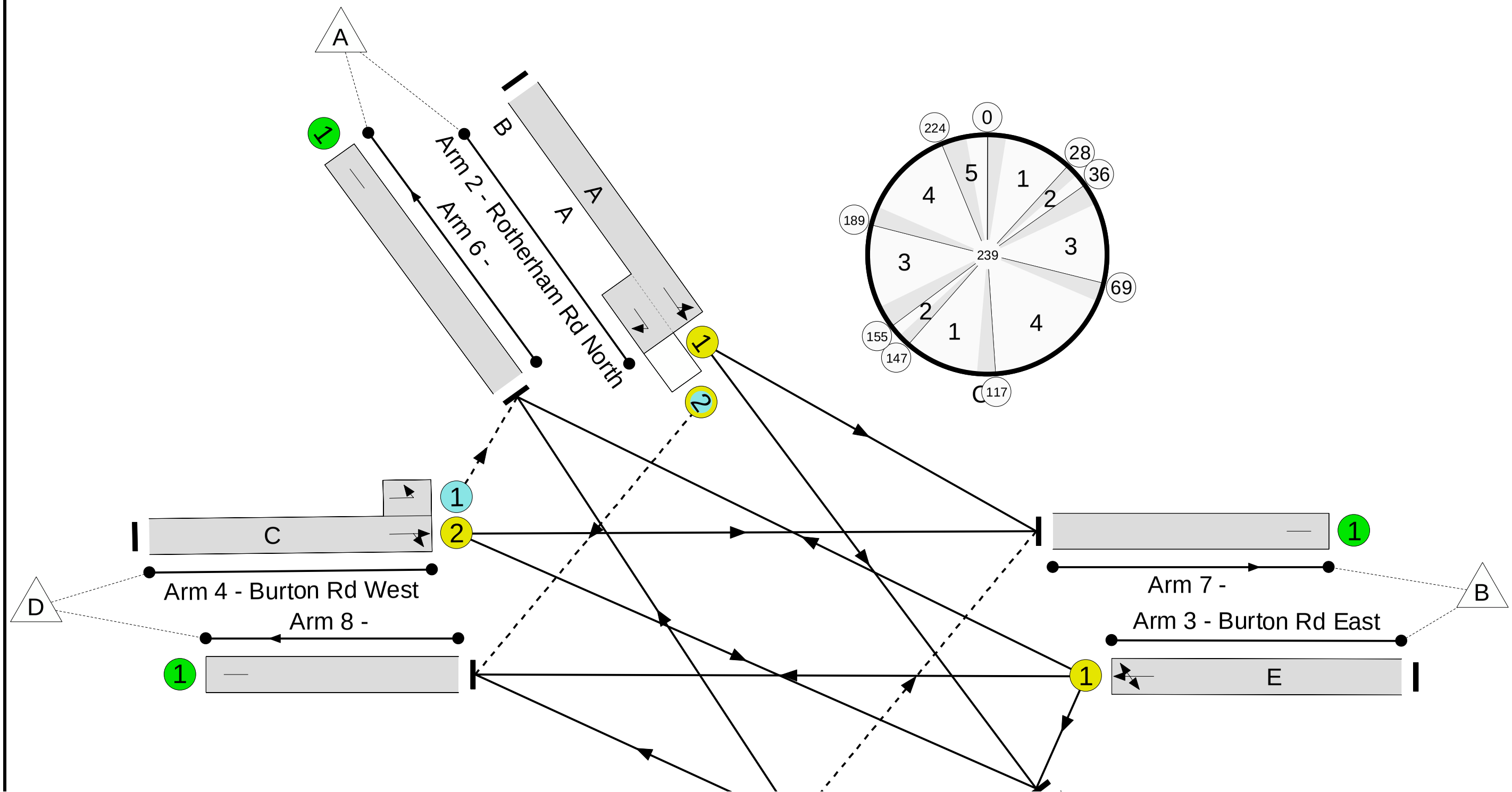


Full Input Data And Results

Rotherham Road/ Burton Road

PRC: -1.2 %

Total Traffic Delay: 36.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A633 Rotherham Road / Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.1%**
Rotherham Road/ Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.1%**
1/1	Rotherham Rd South Ahead Right Left	O	N/A	N/A	D		2	46	-	389	2159	434	89.7%
2/1+2/2	Rotherham Rd North Ahead Left Right	U+O	N/A	N/A	A	B	2	62	8	449	2096:1773	484+83	79.2 : 79.2%
3/1	Burton Rd East Left Right Ahead	U	N/A	N/A	E		2	71	-	603	2170	663	91.0%
4/2+4/1	Burton Rd West Right Left Ahead	U+O	N/A	N/A	C -		2	53	-	462	2168:2052	476+31	91.1 : 91.1%
5/1		U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%

Full Input Data And Results

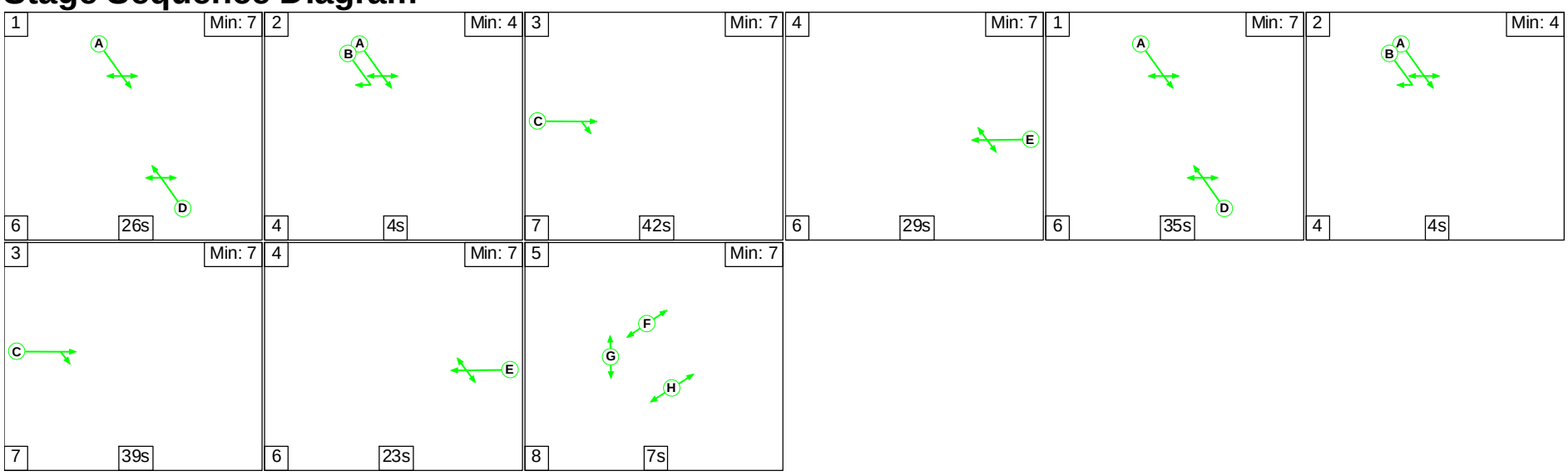
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**26**	**69**	**1**	**22.4**	**14.3**	**0.1**	**36.8**	**-**	**-**	**-**	**-**
Rotherham Road/ Burton Road	**-**	**-**	**26**	**69**	**1**	**22.4**	**14.3**	**0.1**	**36.8**	**-**	**-**	**-**	**-**
1/1	389	389	2	0	0	5.0	3.7	0.0	8.8	81.2	12.8	3.7	16.5
2/1+2/2	449	449	22	43	1	5.0	1.8	0.1	7.0	55.9	13.5	1.8	15.3
3/1	603	603	-	-	-	6.7	4.4	-	11.1	66.4	20.6	4.4	25.0
4/2+4/1	462	462	2	26	0	5.6	4.3	-	9.9	77.4	14.8	4.3	19.1
5/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-1.2	Total Delay for Signalled Lanes (pcuHr):	36.79	Cycle Time (s): 239
	PRC Over All Lanes (%):	-1.2	Total Delay Over All Lanes(pcuHr):	36.79	

Full Input Data And Results

Scenario 4: '2020 Base + Com PM Peak' (FG4: '2020 Base + Com PM Peak', Plan 1: 'Network Control Plan 1')

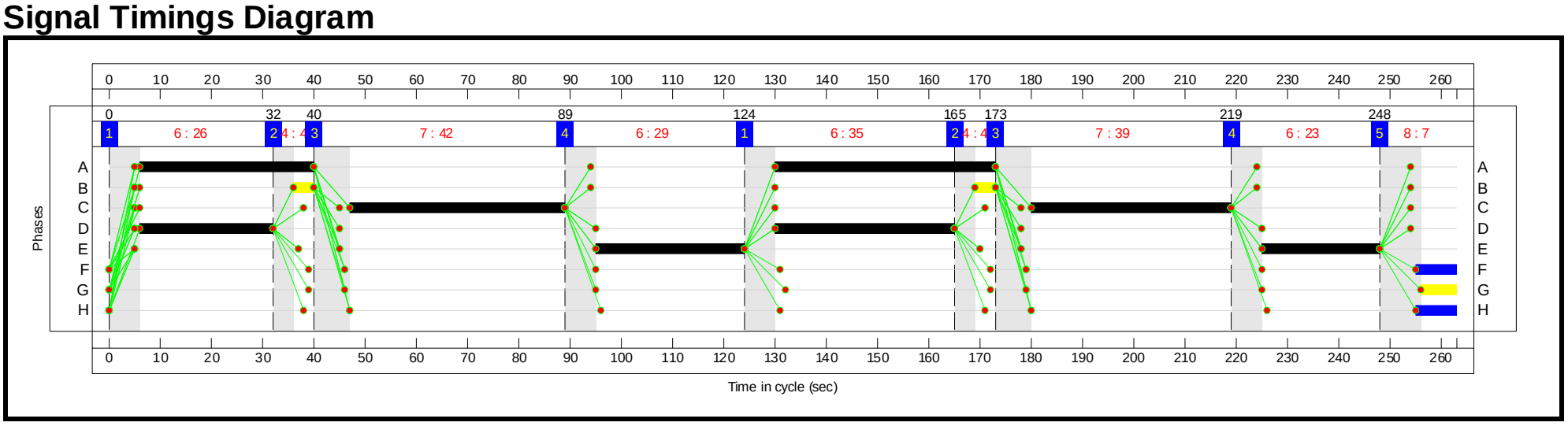
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3	4	5
Duration	26	4	42	29	35	4	39	23	7
Change Point	0	32	40	89	124	165	173	219	248

Signal Timings Diagram

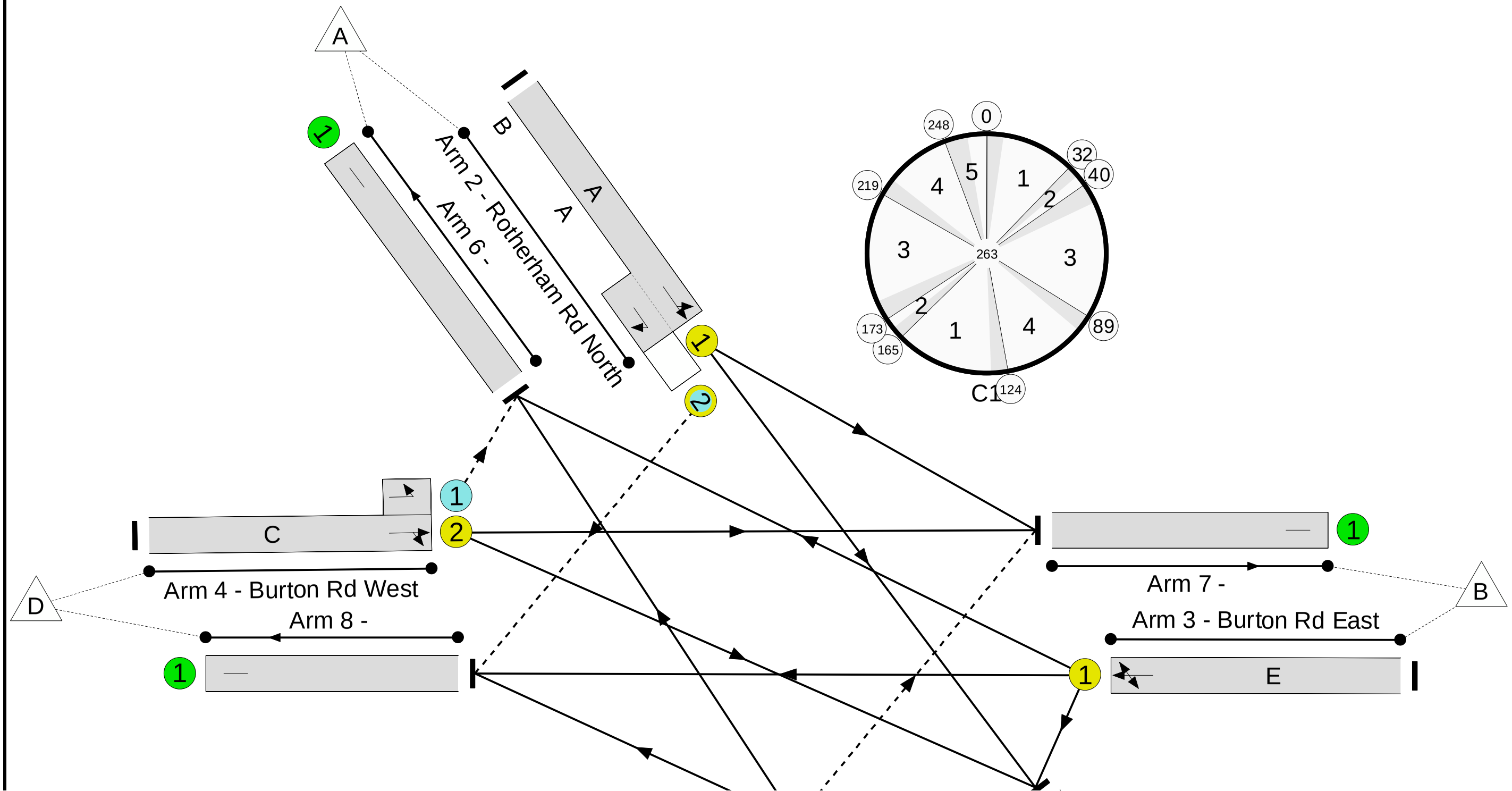


Full Input Data And Results

Rotherham Road/ Burton Road

PRC: -4.5 %

Total Traffic Delay: 41.7 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A633 Rotherham Road / Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.0%**
Rotherham Road/ Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.0%**
1/1	Rotherham Rd South Ahead Right Left	O	N/A	N/A	D		2	61	-	465	2159	498	93.4%
2/1+2/2	Rotherham Rd North Ahead Left Right	U+O	N/A	N/A	A	B	2	77	8	360	2096:1773	541+91	57.0 : 57.0%
3/1	Burton Rd East Left Right Ahead	U	N/A	N/A	E		2	52	-	414	2170	446	92.9%
4/2+4/1	Burton Rd West Right Left Ahead	U+O	N/A	N/A	C -		2	81	-	649	2168:2052	669+21	94.0 : 94.0%
5/1		U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	523	Inf	Inf	0.0%

Full Input Data And Results

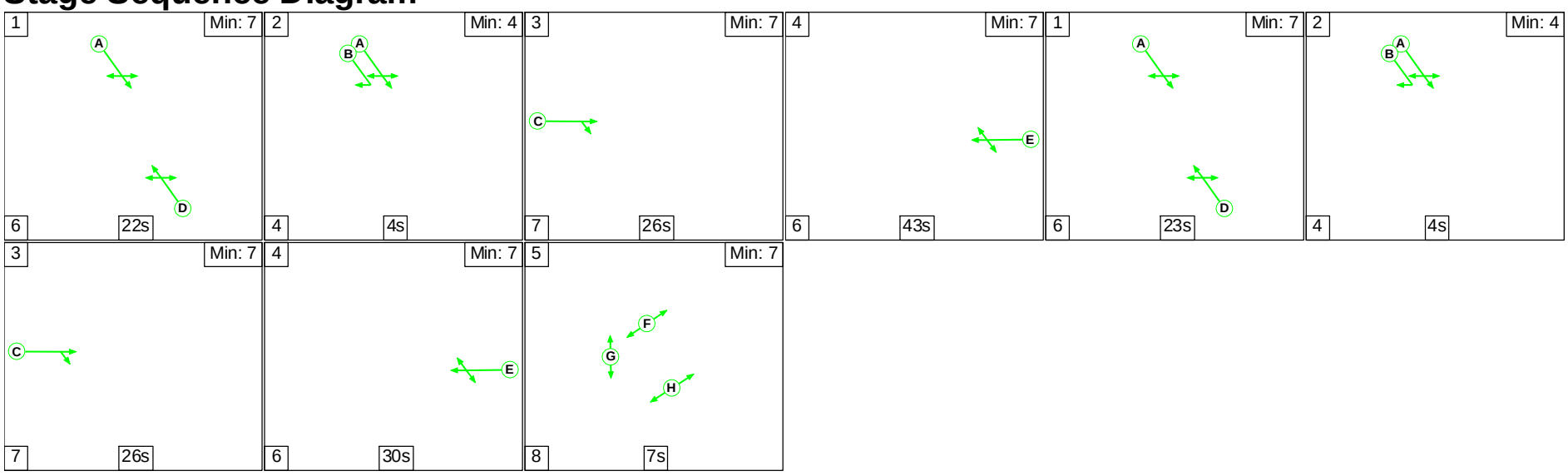
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**26**	**47**	**1**	**24.4**	**17.1**	**0.2**	**41.7**	**-**	**-**	**-**	**-**
Rotherham Road/ Burton Road	**-**	**-**	**26**	**47**	**1**	**24.4**	**17.1**	**0.2**	**41.7**	**-**	**-**	**-**	**-**
1/1	465	465	1	0	0	6.9	5.3	0.0	12.2	94.5	17.6	5.3	22.9
2/1+2/2	360	360	24	27	1	3.8	0.7	0.2	4.6	46.4	10.8	0.7	11.5
3/1	414	414	-	-	-	5.9	5.0	-	10.9	94.8	15.4	5.0	20.4
4/2+4/1	649	649	1	19	0	7.8	6.1	-	13.9	77.2	22.9	6.1	29.0
5/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	523	523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-4.5	Total Delay for Signalled Lanes (pcuHr):	41.66	Cycle Time (s): 263
	PRC Over All Lanes (%):	-4.5	Total Delay Over All Lanes(pcuHr):	41.66	

Full Input Data And Results

Scenario 5: '2020 Predicted AM Peak' (FG5: '2020 Predicted AM Peak', Plan 1: 'Network Control Plan 1')

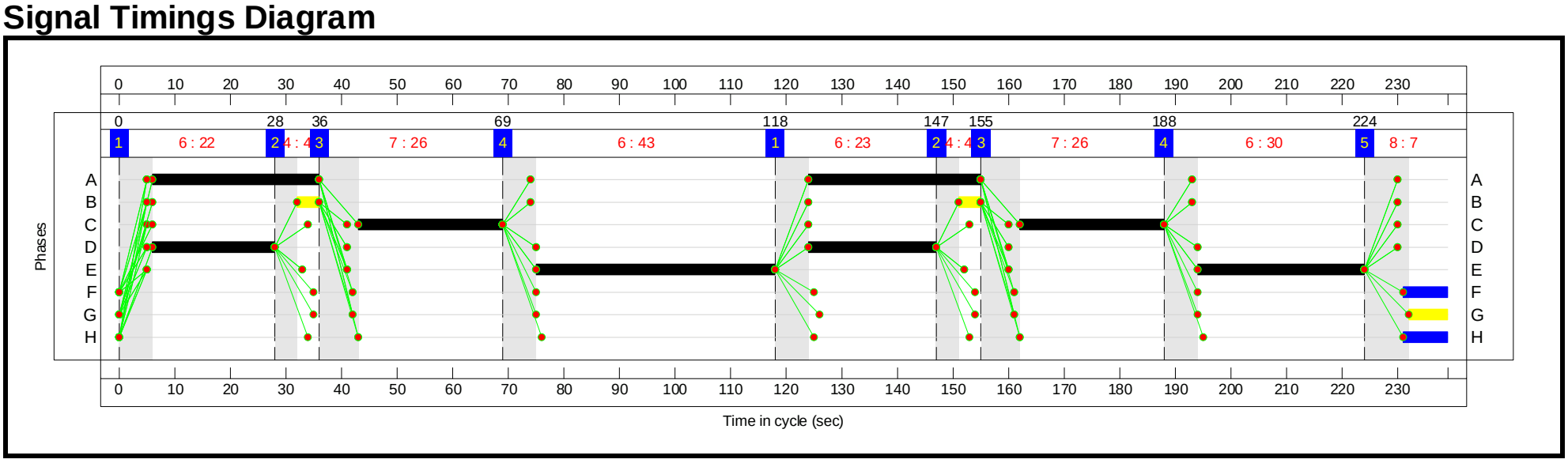
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3	4	5
Duration	22	4	26	43	23	4	26	30	7
Change Point	0	28	36	69	118	147	155	188	224

Signal Timings Diagram

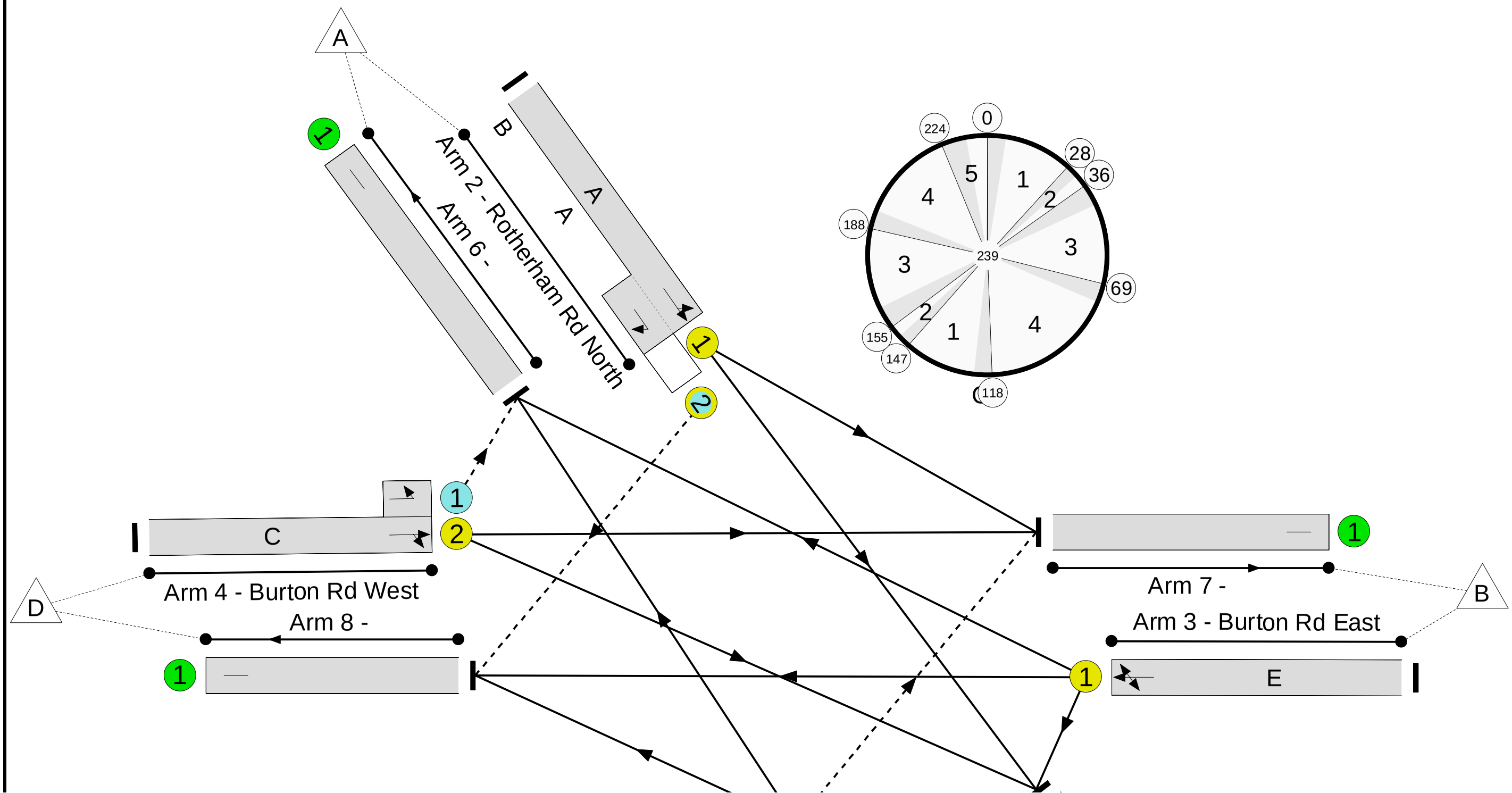


Full Input Data And Results

Rotherham Road/ Burton Road

PRC: -4.0 %

Total Traffic Delay: 40.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A633 Rotherham Road / Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.6%**
Rotherham Road/ Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.6%**
1/1	Rotherham Rd South Ahead Right Left	O	N/A	N/A	D		2	45	-	392	2159	425	92.3%
2/1+2/2	Rotherham Rd North Ahead Left Right	U+O	N/A	N/A	A	B	2	61	8	449	2096:1773	477+82	80.4 : 80.4%
3/1	Burton Rd East Left Right Ahead	U	N/A	N/A	E		2	73	-	630	2170	681	92.5%
4/2+4/1	Burton Rd West Right Left Ahead	U+O	N/A	N/A	C -		2	52	-	466	2168:2052	468+30	93.6 : 93.6%
5/1		U	N/A	N/A	-		-	-	-	458	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	738	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**25**	**73**	**2**	**22.9**	**17.2**	**0.1**	**40.3**	**-**	**-**	**-**	**-**
Rotherham Road/ Burton Road	**-**	**-**	**25**	**73**	**2**	**22.9**	**17.2**	**0.1**	**40.3**	**-**	**-**	**-**	**-**
1/1	392	392	6	0	0	5.1	4.7	0.0	9.8	90.2	12.8	4.7	17.5
2/1+2/2	449	449	17	48	1	5.1	2.0	0.1	7.2	57.4	13.5	2.0	15.4
3/1	630	630	-	-	-	7.0	5.1	-	12.1	69.3	21.9	5.1	27.0
4/2+4/1	466	466	2	26	0	5.8	5.4	-	11.2	86.4	15.1	5.4	20.5
5/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	738	738	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

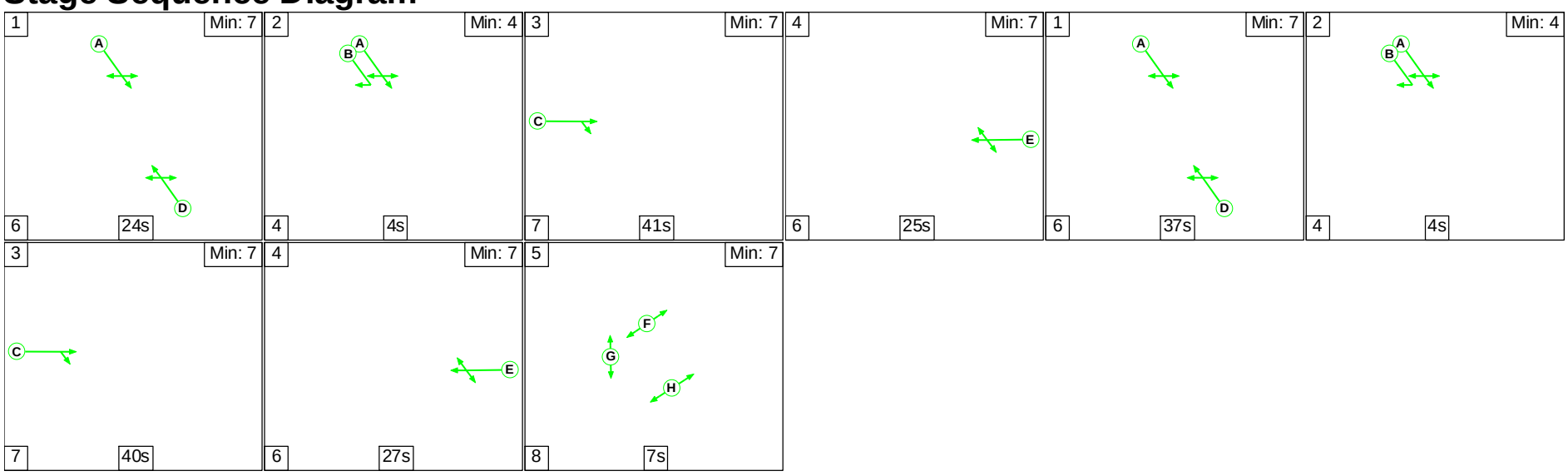
C1 PRC for Signalled Lanes (%): -4.0 Total Delay for Signalled Lanes (pcuHr): 40.31 Cycle Time (s): 239

PRC Over All Lanes (%): -4.0 Total Delay Over All Lanes(pcuHr): 40.31

Full Input Data And Results

Scenario 6: '2020 Predicted PM Peak' (FG6: '2020 Predicted PM Peak', Plan 1: 'Network Control Plan 1')

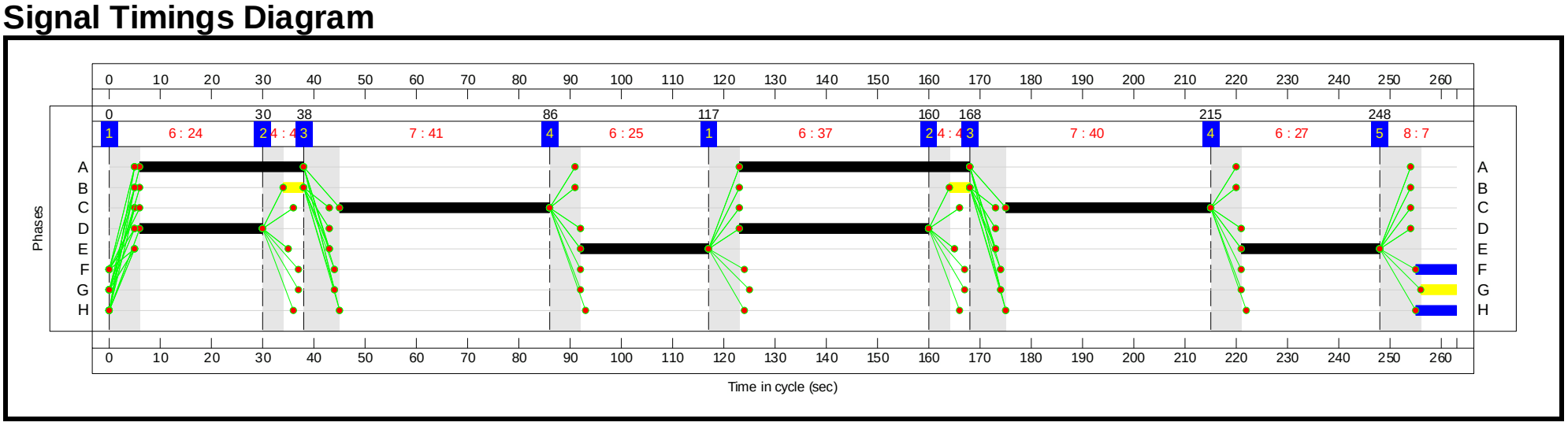
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3	4	5
Duration	24	4	41	25	37	4	40	27	7
Change Point	0	30	38	86	117	160	168	215	248

Signal Timings Diagram

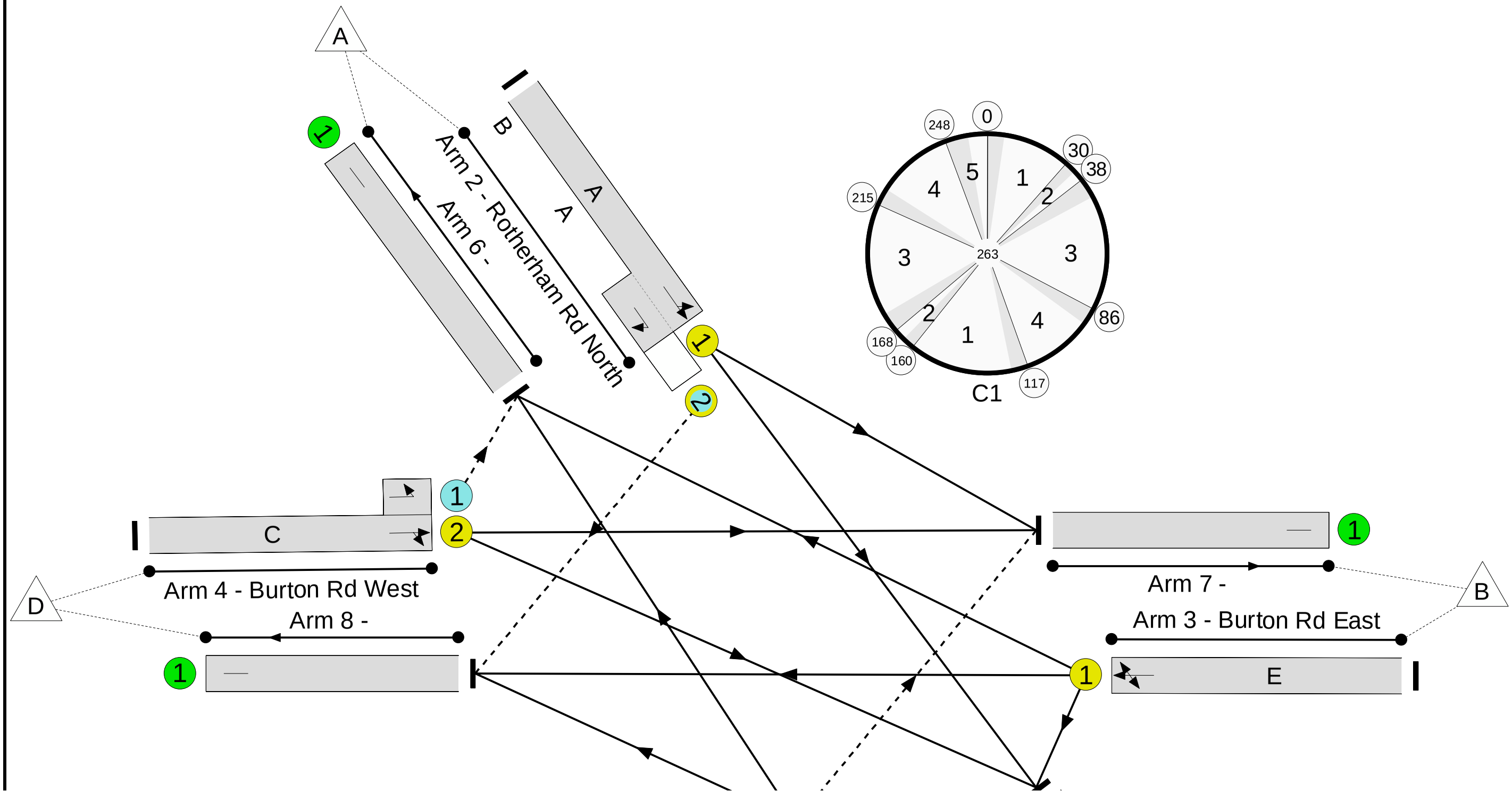


Full Input Data And Results

Rotherham Road/ Burton Road

PRC: -6.3 %

Total Traffic Delay: 46.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A633 Rotherham Road / Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
Rotherham Road/ Burton Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
1/1	Rotherham Rd South Ahead Right Left	O	N/A	N/A	D		2	61	-	475	2159	504	94.3%
2/1+2/2	Rotherham Rd North Ahead Left Right	U+O	N/A	N/A	A	B	2	77	8	360	2096:1773	541+91	57.0 : 57.0%
3/1	Burton Rd East Left Right Ahead	U	N/A	N/A	E		2	52	-	426	2170	446	95.6%
4/2+4/1	Burton Rd West Right Left Ahead	U+O	N/A	N/A	C -		2	81	-	660	2168:2052	669+21	95.6 : 95.6%
5/1		U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	603	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A633 Rotherham Road / Burton Road	**-**	**-**	**37**	**46**	**2**	**25.7**	**20.4**	**0.2**	**46.3**	**-**	**-**	**-**	**-**
Rotherham Road/ Burton Road	**-**	**-**	**37**	**46**	**2**	**25.7**	**20.4**	**0.2**	**46.3**	**-**	**-**	**-**	**-**
1/1	475	475	11	0	1	7.7	5.9	0.0	13.6	103.0	19.2	5.9	25.0
2/1+2/2	360	360	25	26	1	3.9	0.7	0.1	4.7	46.6	11.4	0.7	12.1
3/1	426	426	-	-	-	6.1	6.5	-	12.6	106.9	15.5	6.5	22.0
4/2+4/1	660	660	1	19	0	8.0	7.4	-	15.4	83.9	24.0	7.4	31.4
5/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	603	603	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	46.28	Cycle Time (s): 263
	PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	46.28	

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2015

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

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Burton Rd_High St FINAL.arc8
Path: T:\70009242 - Cross Street, Monk Bretton\D Design and Analysis\Development\ARCADY
Report generation date: 14/04/2015 14:55:58

» (Default Analysis Set) - Base 2015, AM
» (Default Analysis Set) - Base 2015, PM
» (Default Analysis Set) - Base 2020 + CD, AM
» (Default Analysis Set) - Base 2020 + CD, PM
» (Default Analysis Set) - Predicted, AM
» (Default Analysis Set) - Predicted, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - Base 2015							
Arm 1	0.39	4.50	0.28	A	0.56	5.63	0.36	A
Arm 2	0.48	3.42	0.32	A	0.40	3.28	0.29	A
Arm 3	0.59	3.83	0.37	A	1.03	5.09	0.51	A
Arm 4	0.30	6.87	0.23	A	0.53	9.21	0.35	A
Arm 5	0.19	4.19	0.16	A	0.25	4.94	0.20	A
	A1 - Base 2020 + CD							
Arm 1	0.45	4.76	0.31	A	0.58	5.41	0.37	A
Arm 2	0.55	3.63	0.35	A	0.45	3.45	0.31	A
Arm 3	0.66	4.05	0.40	A	0.79	4.52	0.44	A
Arm 4	0.34	7.29	0.25	A	0.54	8.75	0.35	A
Arm 5	0.21	4.38	0.18	A	0.25	4.72	0.20	A
	A1 - Predicted							
Arm 1	0.45	4.77	0.31	A	0.67	6.19	0.40	A
Arm 2	0.55	3.63	0.35	A	0.46	3.47	0.31	A
Arm 3	0.68	4.09	0.41	A	1.23	5.66	0.55	A
Arm 4	0.34	7.34	0.25	A	0.63	10.24	0.39	B
Arm 5	0.22	4.40	0.18	A	0.28	5.30	0.22	A

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

"D1 - Base 2015, AM " model duration: 07:45 - 09:15
"D2 - Base 2015, PM" model duration: 16:45 - 18:15
"D5 - Base 2020 + CD, AM" model duration: 07:45 - 09:15
"D6 - Base 2020 + CD, PM" model duration: 16:45 - 18:15
"D7 - Predicted, AM" model duration: 07:45 - 09:15
"D8 - Predicted, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 14/04/2015 14:55:56

File summary

Title	(untitled)
Location	
Site Number	
Date	05/03/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKSXH704
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) - Base 2015, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
Base 2015, AM	Base 2015	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5			4.15	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fish Dam Lane	
2	2	Burton Road (E)	
3	3	Burton Road	
4	4	High Street	
5	5	St Helens Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

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	4.60	7.30	1.00	11.50	54.00	45.00	
2	3.70	7.80	12.50	57.00	54.00	20.00	
3	4.00	6.30	7.00	25.50	54.00	20.00	
4	3.80	5.20	1.50	5.50	54.00	70.00	
5	3.80	7.70	3.50	27.00	54.00	45.00	

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)	0.501	1348.257
2		(calculated)	(calculated)	0.634	1841.978
3		(calculated)	(calculated)	0.588	1621.925
4		(calculated)	(calculated)	0.372	921.068
5		(calculated)	(calculated)	0.515	1354.697

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	✓	287.00	100.000
2	ONE HOUR	✓	459.00	100.000
3	ONE HOUR	✓	501.00	100.000
4	ONE HOUR	✓	141.00	100.000
5	ONE HOUR	✓	150.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	21.000	187.000	53.000	26.000
	2	50.000	0.000	348.000	37.000	24.000
	3	183.000	233.000	0.000	10.000	75.000
	4	27.000	24.000	66.000	0.000	24.000
	5	50.000	25.000	62.000	13.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.07	0.65	0.18	0.09
	2	0.11	0.00	0.76	0.08	0.05
	3	0.37	0.47	0.00	0.02	0.15
	4	0.19	0.17	0.47	0.00	0.17
	5	0.33	0.17	0.41	0.09	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.28	4.50	0.39	A
2	0.32	3.42	0.48	A
3	0.37	3.83	0.59	A
4	0.23	6.87	0.30	A
5	0.16	4.19	0.19	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	216.07	215.19	317.14	0.00	1189.52	0.182	0.22	3.691	A
2	345.56	344.50	305.07	0.00	1648.57	0.210	0.26	2.757	A
3	377.18	375.88	152.29	0.00	1532.41	0.246	0.33	3.110	A
4	106.15	105.50	443.41	0.00	755.98	0.140	0.16	5.528	A
5	112.93	112.49	437.18	0.00	1129.44	0.100	0.11	3.537	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	258.01	257.75	379.88	0.00	1158.12	0.223	0.29	3.997	A
2	412.63	412.32	365.49	0.00	1610.25	0.256	0.34	3.005	A
3	450.39	450.00	182.34	0.00	1514.76	0.297	0.42	3.381	A
4	126.76	126.56	530.85	0.00	723.43	0.175	0.21	6.030	A
5	134.85	134.72	523.59	0.00	1084.91	0.124	0.14	3.788	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	315.99	315.56	465.08	0.00	1115.48	0.283	0.39	4.499	A
2	505.37	504.83	447.46	0.00	1558.29	0.324	0.48	3.415	A
3	551.61	550.96	223.24	0.00	1490.71	0.370	0.58	3.829	A
4	155.24	154.91	649.94	0.00	679.09	0.229	0.29	6.863	A
5	165.15	164.95	641.02	0.00	1024.40	0.161	0.19	4.187	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	315.99	315.99	465.72	0.00	1115.16	0.283	0.39	4.504	A
2	505.37	505.36	448.11	0.00	1557.88	0.324	0.48	3.419	A
3	551.61	551.60	223.50	0.00	1490.56	0.370	0.59	3.833	A
4	155.24	155.24	650.69	0.00	678.81	0.229	0.30	6.875	A
5	165.15	165.15	641.88	0.00	1023.96	0.161	0.19	4.191	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	258.01	258.43	380.90	0.00	1157.61	0.223	0.29	4.005	A
2	412.63	413.16	366.53	0.00	1609.60	0.256	0.35	3.011	A
3	450.39	451.03	182.75	0.00	1514.51	0.297	0.43	3.388	A
4	126.76	127.08	532.05	0.00	722.98	0.175	0.21	6.046	A
5	134.85	135.04	524.96	0.00	1084.20	0.124	0.14	3.792	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	216.07	216.33	318.85	0.00	1188.67	0.182	0.22	3.705	A
2	345.56	345.88	306.81	0.00	1647.46	0.210	0.27	2.768	A
3	377.18	377.57	152.99	0.00	1532.00	0.246	0.33	3.121	A
4	106.15	106.35	445.39	0.00	755.24	0.141	0.16	5.549	A
5	112.93	113.05	439.44	0.00	1128.27	0.100	0.11	3.548	A

(Default Analysis Set) - Base 2015, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
Base 2015, PM	Base 2015	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5			5.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fish Dam Lane	
2	2	Burton Road (E)	
3	3	Burton Road	
4	4	High Street	
5	5	St Helens Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

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	4.60	7.30	1.00	11.50	54.00	45.00	
2	3.70	7.80	12.50	57.00	54.00	20.00	
3	4.00	6.30	7.00	25.50	54.00	20.00	
4	3.80	5.20	1.50	5.50	54.00	70.00	
5	3.80	7.70	3.50	27.00	54.00	45.00	

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)	0.501	1348.257
2		(calculated)	(calculated)	0.634	1841.978
3		(calculated)	(calculated)	0.588	1621.925
4		(calculated)	(calculated)	0.372	921.068
5		(calculated)	(calculated)	0.515	1354.697

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	✓	329.00	100.000
2	ONE HOUR	✓	399.00	100.000
3	ONE HOUR	✓	665.00	100.000
4	ONE HOUR	✓	189.00	100.000
5	ONE HOUR	✓	163.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	46.000	173.000	72.000	38.000
	2	64.000	0.000	251.000	55.000	29.000
	3	203.000	366.000	0.000	10.000	86.000
	4	33.000	55.000	67.000	0.000	34.000
	5	22.000	54.000	63.000	24.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.14	0.53	0.22	0.12
	2	0.16	0.00	0.63	0.14	0.07
	3	0.31	0.55	0.00	0.02	0.13
	4	0.17	0.29	0.35	0.00	0.18
	5	0.13	0.33	0.39	0.15	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.36	5.63	0.56	A
2	0.29	3.28	0.40	A
3	0.51	5.09	1.03	A
4	0.35	9.21	0.53	A
5	0.20	4.94	0.25	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	247.69	246.55	471.34	0.00	1112.35	0.223	0.28	4.153	A
2	300.39	299.49	327.38	0.00	1634.42	0.184	0.22	2.695	A
3	500.65	498.65	211.51	0.00	1497.61	0.334	0.50	3.595	A
4	142.29	141.28	589.43	0.00	701.62	0.203	0.25	6.412	A
5	122.71	122.19	590.57	0.00	1050.40	0.117	0.13	3.877	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	295.76	295.38	564.68	0.00	1065.63	0.278	0.38	4.672	A
2	358.69	358.43	392.30	0.00	1593.26	0.225	0.29	2.915	A
3	597.82	597.11	253.26	0.00	1473.07	0.406	0.68	4.106	A
4	169.91	169.54	705.79	0.00	658.30	0.258	0.34	7.361	A
5	146.53	146.37	707.44	0.00	990.18	0.148	0.17	4.265	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	362.24	361.52	691.07	0.00	1002.37	0.361	0.56	5.612	A
2	439.31	438.87	480.12	0.00	1537.58	0.286	0.40	3.274	A
3	732.18	730.80	310.04	0.00	1439.69	0.509	1.02	5.067	A
4	208.09	207.37	863.86	0.00	599.44	0.347	0.52	9.166	A
5	179.47	179.18	865.76	0.00	908.60	0.198	0.24	4.932	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	362.24	362.22	692.51	0.00	1001.65	0.362	0.56	5.629	A
2	439.31	439.30	481.13	0.00	1536.94	0.286	0.40	3.278	A
3	732.18	732.15	310.48	0.00	1439.44	0.509	1.03	5.089	A
4	208.09	208.08	865.38	0.00	598.88	0.347	0.53	9.211	A
5	179.47	179.46	867.57	0.00	907.67	0.198	0.25	4.943	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	295.76	296.47	566.91	0.00	1064.51	0.278	0.39	4.692	A
2	358.69	359.12	393.86	0.00	1592.27	0.225	0.29	2.922	A
3	597.82	599.18	253.95	0.00	1472.66	0.406	0.69	4.129	A
4	169.91	170.61	708.12	0.00	657.43	0.258	0.35	7.407	A
5	146.53	146.82	710.21	0.00	988.76	0.148	0.17	4.276	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	247.69	248.08	474.34	0.00	1110.85	0.223	0.29	4.175	A
2	300.39	300.65	329.56	0.00	1633.04	0.184	0.23	2.704	A
3	500.65	501.38	212.56	0.00	1496.99	0.334	0.51	3.617	A
4	142.29	142.67	592.57	0.00	700.45	0.203	0.26	6.457	A
5	122.71	122.88	594.23	0.00	1048.51	0.117	0.13	3.889	A

(Default Analysis Set) - Base 2020 + CD, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
Base 2020 + CD, AM	Base 2020 + CD	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5			4.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fish Dam Lane	
2	2	Burton Road (E)	
3	3	Burton Road	
4	4	High Street	
5	5	St Helens Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

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	4.60	7.30	1.00	11.50	54.00	45.00	
2	3.70	7.80	12.50	57.00	54.00	20.00	
3	4.00	6.30	7.00	25.50	54.00	20.00	
4	3.80	5.20	1.50	5.50	54.00	70.00	
5	3.80	7.70	3.50	27.00	54.00	45.00	

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)	0.501	1348.257
2		(calculated)	(calculated)	0.634	1841.978
3		(calculated)	(calculated)	0.588	1621.925
4		(calculated)	(calculated)	0.372	921.068
5		(calculated)	(calculated)	0.515	1354.697

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	✓	310.00	100.000
2	ONE HOUR	✓	495.00	100.000
3	ONE HOUR	✓	537.00	100.000
4	ONE HOUR	✓	152.00	100.000
5	ONE HOUR	✓	161.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	23.000	202.000	57.000	28.000
	2	54.000	0.000	375.000	40.000	26.000
	3	196.000	250.000	0.000	11.000	80.000
	4	29.000	26.000	71.000	0.000	26.000
	5	54.000	27.000	66.000	14.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.07	0.65	0.18	0.09
	2	0.11	0.00	0.76	0.08	0.05
	3	0.36	0.47	0.00	0.02	0.15
	4	0.19	0.17	0.47	0.00	0.17
	5	0.34	0.17	0.41	0.09	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.31	4.76	0.45	A
2	0.35	3.63	0.55	A
3	0.40	4.05	0.66	A
4	0.25	7.29	0.34	A
5	0.18	4.38	0.21	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	233.38	232.40	340.34	0.00	1177.91	0.198	0.25	3.804	A
2	372.66	371.48	328.26	0.00	1633.86	0.228	0.29	2.849	A
3	404.28	402.85	164.28	0.00	1525.37	0.265	0.36	3.202	A
4	114.43	113.71	475.62	0.00	743.99	0.154	0.18	5.706	A
5	121.21	120.72	469.37	0.00	1112.85	0.109	0.12	3.626	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	278.68	278.39	407.70	0.00	1144.20	0.244	0.32	4.157	A
2	444.99	444.63	393.30	0.00	1592.62	0.279	0.39	3.136	A
3	482.75	482.31	196.69	0.00	1506.32	0.320	0.47	3.513	A
4	136.64	136.42	569.44	0.00	709.06	0.193	0.24	6.283	A
5	144.74	144.60	562.17	0.00	1065.03	0.136	0.16	3.911	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	341.32	340.81	499.10	0.00	1098.45	0.311	0.45	4.748	A
2	545.01	544.36	481.48	0.00	1536.72	0.355	0.55	3.626	A
3	591.25	590.48	240.81	0.00	1480.39	0.399	0.66	4.042	A
4	167.36	166.96	697.15	0.00	661.51	0.253	0.34	7.272	A
5	177.26	177.03	688.21	0.00	1000.09	0.177	0.21	4.373	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	341.32	341.31	499.85	0.00	1098.08	0.311	0.45	4.756	A
2	545.01	545.00	482.24	0.00	1536.24	0.355	0.55	3.630	A
3	591.25	591.24	241.12	0.00	1480.20	0.399	0.66	4.049	A
4	167.36	167.35	698.04	0.00	661.18	0.253	0.34	7.289	A
5	177.26	177.26	689.22	0.00	999.57	0.177	0.21	4.377	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	278.68	279.18	408.88	0.00	1143.61	0.244	0.32	4.166	A
2	444.99	445.63	394.51	0.00	1591.86	0.280	0.39	3.144	A
3	482.75	483.50	197.19	0.00	1506.03	0.321	0.47	3.525	A
4	136.64	137.03	570.84	0.00	708.54	0.193	0.24	6.305	A
5	144.74	144.96	563.77	0.00	1064.21	0.136	0.16	3.916	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	233.38	233.69	342.24	0.00	1176.96	0.198	0.25	3.816	A
2	372.66	373.03	330.21	0.00	1632.63	0.228	0.30	2.858	A
3	404.28	404.73	165.06	0.00	1524.91	0.265	0.36	3.216	A
4	114.43	114.66	477.83	0.00	743.16	0.154	0.18	5.729	A
5	121.21	121.35	471.89	0.00	1111.55	0.109	0.12	3.635	A

(Default Analysis Set) - Base 2020 + CD, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
Base 2020 + CD, PM	Base 2020 + CD	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5			4.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fish Dam Lane	
2	2	Burton Road (E)	
3	3	Burton Road	
4	4	High Street	
5	5	St Helens Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

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	4.60	7.30	1.00	11.50	54.00	45.00	
2	3.70	7.80	12.50	57.00	54.00	20.00	
3	4.00	6.30	7.00	25.50	54.00	20.00	
4	3.80	5.20	1.50	5.50	54.00	70.00	
5	3.80	7.70	3.50	27.00	54.00	45.00	

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)	0.501	1348.257
2		(calculated)	(calculated)	0.634	1841.978
3		(calculated)	(calculated)	0.588	1621.925
4		(calculated)	(calculated)	0.372	921.068
5		(calculated)	(calculated)	0.515	1354.697

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	✓	353.00	100.000
2	ONE HOUR	✓	428.00	100.000
3	ONE HOUR	✓	571.00	100.000
4	ONE HOUR	✓	202.00	100.000
5	ONE HOUR	✓	176.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	49.000	186.000	77.000	41.000
	2	69.000	0.000	269.000	59.000	31.000
	3	218.000	250.000	0.000	11.000	92.000
	4	35.000	59.000	72.000	0.000	36.000
	5	24.000	58.000	68.000	26.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.14	0.53	0.22	0.12
	2	0.16	0.00	0.63	0.14	0.07
	3	0.38	0.44	0.00	0.02	0.16
	4	0.17	0.29	0.36	0.00	0.18
	5	0.14	0.33	0.39	0.15	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	5.41	0.58	A
2	0.31	3.45	0.45	A
3	0.44	4.52	0.79	A
4	0.35	8.75	0.54	A
5	0.20	4.72	0.25	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	265.76	264.56	399.40	0.00	1148.35	0.231	0.30	4.069	A
2	322.22	321.23	352.14	0.00	1618.72	0.199	0.25	2.773	A
3	429.88	428.26	227.26	0.00	1488.35	0.289	0.40	3.392	A
4	152.08	151.02	525.79	0.00	725.31	0.210	0.26	6.257	A
5	132.50	131.95	526.91	0.00	1083.20	0.122	0.14	3.782	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	317.34	316.94	478.54	0.00	1108.74	0.286	0.40	4.544	A
2	384.76	384.47	421.96	0.00	1574.46	0.244	0.32	3.025	A
3	513.32	512.78	272.12	0.00	1461.98	0.351	0.54	3.790	A
4	181.59	181.22	629.54	0.00	686.68	0.264	0.36	7.118	A
5	158.22	158.05	631.19	0.00	1029.47	0.154	0.18	4.131	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	388.66	387.94	585.71	0.00	1055.10	0.368	0.58	5.390	A
2	471.24	470.73	516.46	0.00	1514.55	0.311	0.45	3.447	A
3	628.68	627.71	333.14	0.00	1426.12	0.441	0.78	4.503	A
4	222.41	221.70	770.66	0.00	634.14	0.351	0.53	8.714	A
5	193.78	193.49	772.56	0.00	956.63	0.203	0.25	4.716	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	388.66	388.65	586.82	0.00	1054.55	0.369	0.58	5.405	A
2	471.24	471.23	517.46	0.00	1513.91	0.311	0.45	3.451	A
3	628.68	628.67	333.60	0.00	1425.85	0.441	0.79	4.515	A
4	222.41	222.39	771.80	0.00	633.72	0.351	0.54	8.752	A
5	193.78	193.78	773.99	0.00	955.89	0.203	0.25	4.723	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	317.34	318.05	480.27	0.00	1107.88	0.286	0.40	4.561	A
2	384.76	385.27	423.53	0.00	1573.46	0.245	0.33	3.032	A
3	513.32	514.28	272.86	0.00	1461.55	0.351	0.54	3.806	A
4	181.59	182.29	631.33	0.00	686.02	0.265	0.36	7.155	A
5	158.22	158.50	633.42	0.00	1028.32	0.154	0.18	4.139	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	265.76	266.16	401.90	0.00	1147.10	0.232	0.30	4.088	A
2	322.22	322.52	354.42	0.00	1617.28	0.199	0.25	2.780	A
3	429.88	430.42	228.39	0.00	1487.69	0.289	0.41	3.408	A
4	152.08	152.46	528.40	0.00	724.34	0.210	0.27	6.298	A
5	132.50	132.67	530.07	0.00	1081.58	0.123	0.14	3.796	A

(Default Analysis Set) - Predicted, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
Predicted, AM	Predicted	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5			4.41	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fish Dam Lane	
2	2	Burton Road (E)	
3	3	Burton Road	
4	4	High Street	
5	5	St Helens Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

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	4.60	7.30	1.00	11.50	54.00	45.00	
2	3.70	7.80	12.50	57.00	54.00	20.00	
3	4.00	6.30	7.00	25.50	54.00	20.00	
4	3.80	5.20	1.50	5.50	54.00	70.00	
5	3.80	7.70	3.50	27.00	54.00	45.00	

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)	0.501	1348.257
2		(calculated)	(calculated)	0.634	1841.978
3		(calculated)	(calculated)	0.588	1621.925
4		(calculated)	(calculated)	0.372	921.068
5		(calculated)	(calculated)	0.515	1354.697

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	✓	310.00	100.000
2	ONE HOUR	✓	494.00	100.000
3	ONE HOUR	✓	546.00	100.000
4	ONE HOUR	✓	152.00	100.000
5	ONE HOUR	✓	161.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	23.000	202.000	57.000	28.000
	2	54.000	0.000	374.000	40.000	26.000
	3	202.000	253.000	0.000	11.000	80.000
	4	29.000	26.000	71.000	0.000	26.000
	5	54.000	27.000	66.000	14.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.07	0.65	0.18	0.09
	2	0.11	0.00	0.76	0.08	0.05
	3	0.37	0.46	0.00	0.02	0.15
	4	0.19	0.17	0.47	0.00	0.17
	5	0.34	0.17	0.41	0.09	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.31	4.77	0.45	A
2	0.35	3.63	0.55	A
3	0.41	4.09	0.68	A
4	0.25	7.34	0.34	A
5	0.18	4.40	0.22	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	233.38	232.40	342.59	0.00	1176.79	0.198	0.25	3.809	A
2	371.91	370.74	328.26	0.00	1633.86	0.228	0.29	2.847	A
3	411.06	409.59	164.28	0.00	1525.37	0.269	0.37	3.222	A
4	114.43	113.71	482.37	0.00	741.48	0.154	0.18	5.729	A
5	121.21	120.72	476.11	0.00	1109.38	0.109	0.12	3.639	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	278.68	278.39	410.38	0.00	1142.85	0.244	0.32	4.163	A
2	444.10	443.73	393.30	0.00	1592.63	0.279	0.38	3.133	A
3	490.84	490.39	196.69	0.00	1506.32	0.326	0.48	3.541	A
4	136.64	136.42	577.51	0.00	706.05	0.194	0.24	6.316	A
5	144.74	144.60	570.25	0.00	1060.87	0.136	0.16	3.929	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	341.32	340.81	502.39	0.00	1096.81	0.311	0.45	4.759	A
2	543.90	543.27	481.47	0.00	1536.73	0.354	0.54	3.622	A
3	601.16	600.37	240.81	0.00	1480.39	0.406	0.68	4.087	A
4	167.36	166.96	707.03	0.00	657.83	0.254	0.34	7.327	A
5	177.26	177.03	698.09	0.00	995.00	0.178	0.22	4.400	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	341.32	341.31	503.15	0.00	1096.42	0.311	0.45	4.767	A
2	543.90	543.90	482.24	0.00	1536.24	0.354	0.55	3.626	A
3	601.16	601.15	241.12	0.00	1480.20	0.406	0.68	4.095	A
4	167.36	167.35	707.94	0.00	657.49	0.255	0.34	7.343	A
5	177.26	177.26	699.13	0.00	994.46	0.178	0.22	4.404	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	278.68	279.19	411.60	0.00	1142.25	0.244	0.32	4.174	A
2	444.10	444.73	394.51	0.00	1591.86	0.279	0.39	3.139	A
3	490.84	491.62	197.19	0.00	1506.03	0.326	0.49	3.553	A
4	136.64	137.03	578.96	0.00	705.52	0.194	0.24	6.338	A
5	144.74	144.96	571.89	0.00	1060.02	0.137	0.16	3.934	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	233.38	233.69	344.51	0.00	1175.83	0.198	0.25	3.824	A
2	371.91	372.28	330.21	0.00	1632.63	0.228	0.30	2.856	A
3	411.06	411.52	165.06	0.00	1524.91	0.270	0.37	3.233	A
4	114.43	114.67	484.62	0.00	740.64	0.155	0.18	5.752	A
5	121.21	121.35	478.68	0.00	1108.05	0.109	0.12	3.650	A

(Default Analysis Set) - Predicted, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
Predicted, PM	Predicted	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4,5			5.72	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fish Dam Lane	
2	2	Burton Road (E)	
3	3	Burton Road	
4	4	High Street	
5	5	St Helens Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

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	4.60	7.30	1.00	11.50	54.00	45.00	
2	3.70	7.80	12.50	57.00	54.00	20.00	
3	4.00	6.30	7.00	25.50	54.00	20.00	
4	3.80	5.20	1.50	5.50	54.00	70.00	
5	3.80	7.70	3.50	27.00	54.00	45.00	

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)	0.501	1348.257
2		(calculated)	(calculated)	0.634	1841.978
3		(calculated)	(calculated)	0.588	1621.925
4		(calculated)	(calculated)	0.372	921.068
5		(calculated)	(calculated)	0.515	1354.697

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	✓	358.00	100.000
2	ONE HOUR	✓	430.00	100.000
3	ONE HOUR	✓	717.00	100.000
4	ONE HOUR	✓	202.00	100.000
5	ONE HOUR	✓	176.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	49.000	191.000	77.000	41.000
	2	69.000	0.000	271.000	59.000	31.000
	3	220.000	394.000	0.000	11.000	92.000
	4	35.000	59.000	72.000	0.000	36.000
	5	24.000	58.000	68.000	26.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.14	0.53	0.22	0.11
	2	0.16	0.00	0.63	0.14	0.07
	3	0.31	0.55	0.00	0.02	0.13
	4	0.17	0.29	0.36	0.00	0.18
	5	0.14	0.33	0.39	0.15	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.40	6.19	0.67	A
2	0.31	3.47	0.46	A
3	0.55	5.66	1.23	A
4	0.39	10.24	0.63	B
5	0.22	5.30	0.28	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	269.52	268.22	507.20	0.00	1094.40	0.246	0.32	4.357	A
2	323.73	322.73	355.77	0.00	1616.42	0.200	0.25	2.782	A
3	539.80	537.53	227.23	0.00	1488.37	0.363	0.57	3.776	A
4	152.08	150.94	635.06	0.00	684.63	0.222	0.28	6.732	A
5	132.50	131.91	636.15	0.00	1026.92	0.129	0.15	4.019	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	321.83	321.36	607.68	0.00	1044.11	0.308	0.44	4.977	A
2	386.56	386.26	426.35	0.00	1571.67	0.246	0.32	3.037	A
3	644.57	643.70	272.10	0.00	1462.00	0.441	0.78	4.395	A
4	181.59	181.15	760.46	0.00	637.94	0.285	0.39	7.872	A
5	158.22	158.03	762.08	0.00	962.03	0.164	0.20	4.476	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	394.17	393.25	743.53	0.00	976.11	0.404	0.67	6.166	A
2	473.44	472.92	521.69	0.00	1511.23	0.313	0.45	3.465	A
3	789.43	787.67	333.07	0.00	1426.16	0.554	1.22	5.622	A
4	222.41	221.50	930.60	0.00	574.59	0.387	0.62	10.169	B
5	193.78	193.43	932.43	0.00	874.26	0.222	0.28	5.285	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	394.17	394.15	745.35	0.00	975.20	0.404	0.67	6.195	A
2	473.44	473.43	522.96	0.00	1510.42	0.313	0.46	3.470	A
3	789.43	789.40	333.60	0.00	1425.85	0.554	1.23	5.656	A
4	222.41	222.38	932.53	0.00	573.88	0.388	0.63	10.240	B
5	193.78	193.77	934.71	0.00	873.08	0.222	0.28	5.299	A

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

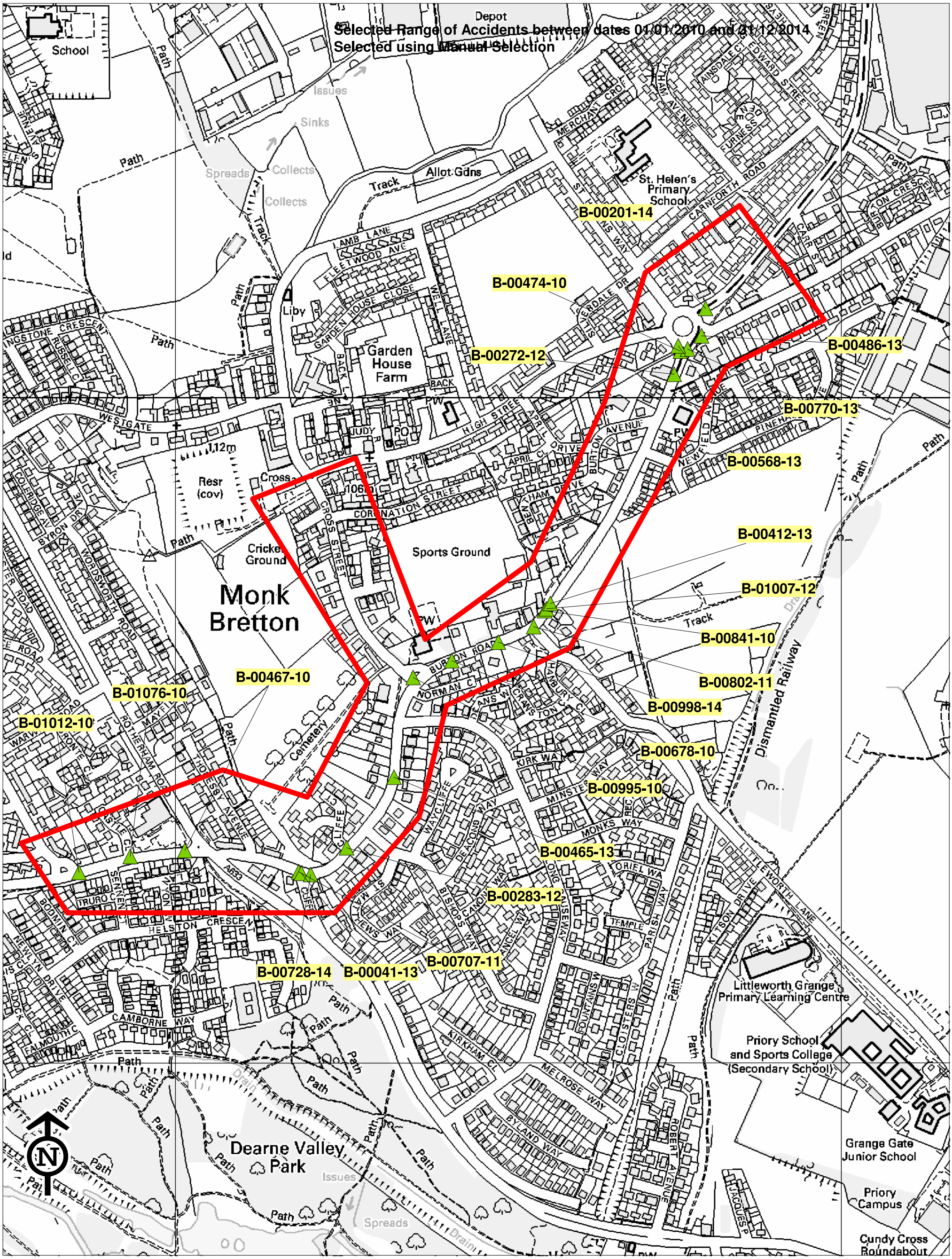
Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	321.83	322.73	610.44	0.00	1042.72	0.309	0.45	5.007	A
2	386.56	387.07	428.29	0.00	1570.44	0.246	0.33	3.042	A
3	644.57	646.31	272.93	0.00	1461.51	0.441	0.80	4.426	A
4	181.59	182.49	763.37	0.00	636.86	0.285	0.40	7.938	A
5	158.22	158.56	765.54	0.00	960.24	0.165	0.20	4.492	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	269.52	270.00	510.64	0.00	1092.68	0.247	0.33	4.379	A
2	323.73	324.03	358.29	0.00	1614.82	0.200	0.25	2.789	A
3	539.80	540.69	228.41	0.00	1487.67	0.363	0.57	3.804	A
4	152.08	152.53	638.67	0.00	683.28	0.223	0.29	6.787	A
5	132.50	132.70	640.36	0.00	1024.74	0.129	0.15	4.036	A

Appendix E

ACCIDENT DATA



All rights reserved. Rotherham MBC Licence No. 100019587.
South Yorkshire LTP Partnership Licence No. 100019587 2015

MAKING SOUTH YORKSHIRE ROADS SAFER

Selected map area

SCALE	1 : 7530
DATE	02/04/2015
DRWG No.	
DRN BY	

Accidents between dates **01/01/2010 and 31/12/2014** (60) months

Selection:
Selected using Manual Selection

Notes:
WSP Group - Aimee Hanson

Police Ref.	Acc Class	Date	Time	Grid References		Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
B-00467-10	Slight	02/05/2010	1245	436014	407318	0	0	2	405V2B	0 0 0	Light	Fine without high winds	Wet/Damp	9 9
B-00474-10	Slight	04/05/2010	1105	436758	408068	0	0	1	510V2A 405V2B	0 0 0	Light	Fine without high winds	Dry	9 9
B-00678-10	Slight	25/06/2010	0712	436415	407603	0	0	1	409V1A 306V1A 408V1A 410V1A 602V1B	0 0 0	Light	Fine without high winds	Dry	9
B-00841-10	Slight	13/08/2010	2349	436554	407678	0	0	1	501C1A	5 1 5	Dark	Raining without high winds	Wet/Damp	9
B-00995-10	Slight	21/09/2010	1420	436357	407578	0	0	1	408V1B	0 0 0	Light	Fine without high winds	Dry	11
B-01012-10	Slight	24/09/2010	1235	435855	407285	0	0	1	802C1A 808C1A	5 3 5	Light	Fine without high winds	Wet/Damp	9
B-01076-10	Slight	11/10/2010	1725	435932	407309	0	0	1	408V1A	0 0 0	Light	Fine without high winds	Dry	11
B-00707-11	Slight	17/07/2011	1640	436185	407286	0	0	3	405V1A	0 0 0	Light	Raining without high winds	Wet/Damp	9 9
B-00802-11	Slight	23/08/2011	1855	436538	407654	0	0	1	510V1A	0 0 0	Light	Fine without high winds	Dry	9 9
B-00283-12	Slight	23/03/2012	1305	436257	407322	0	0	2	703V2A 108V2A 404V1A	0 0 0	Light	Fine without high winds	Dry	9 11
B-00272-12	Slight	25/03/2012	1509	436749	408033	0	0	1	405V3A	0 0 0	Light	Fine without high winds	Dry	9 9 9
B-01007-12	Slight	05/11/2012	0835	436557	407681	0	0	2	406V1A 403V1B 103V1B 108V1B 307V1B	0 0 0	Light	Fine without high winds	Wet/Damp	9 9 9 9
B-00041-13	Slight	13/03/2013	0945	436189	407284	0	0	2	410V1A 401V1B	0 0 0	Light	Fine without high winds	Dry	9 9
B-00412-13	Slight	02/07/2013	1918	436563	407689	0	0	1	308V1A 405V1A 406V1A 510V1A	0 0 0	Light	Unknown	Dry	9 9
B-00465-13	Slight	06/08/2013	2115	436328	407428	0	0	1	306V1B 409V1B 410V1B 509V1B	0 0 0	Dark	Fine without high winds	Dry	9
B-00486-13	Slight	15/08/2013	1350	436790	408091	0	0	1	405V2B	0 0 0	Light	Fine without high winds	Dry	9 9
B-00568-13	Slight	26/09/2013	1530	436755	408076	0	0	1	405V2A	0 0 0	Light	Unknown	Dry	9 9
B-00770-13	Slight	14/11/2013	1254	436769	408071	0	0	1	405V1A 509V1B 706V1B 710V1B	0 0 0	Light	Fine with high winds	Dry	1 9
B-00201-14	Slight	01/03/2014	0450	436796	408132	0	0	1	103V1A 307V1A 408V1B 605V1B	0 0 0	Dark	Fine without high winds	Frost/Ice	9
B-00728-14	Slight	06/08/2014	0844	436203	407282	0	0	3	405V2A 406V2A	0 0 0	Light	Fine without high winds	Dry	9 9
B-00998-14	Slight	29/09/2014	0728	436485	407631	0	0	1	409V2A 602V2B 902V2B	0 0 0	Light	Fine without high winds	Dry	9 9

Accidents between dates **01/01/2010** **and** **31/12/2014** (60) months

Selection:
Selected using Manual Selection

Notes:
WSP Group - Aimee Hanson

Police Ref.	Acc Class	Date	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
Column Totals					0	0	29						

Total number of accidents listed: 21

Appendix F

TRICS OUTPUT

WSP STREET NAME TOWN/CITY Licence No: 100304

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	SC	SURREY	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	3 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
09	NORTH		
	CB	CUMBRIA	2 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	2 days
	DO	DOWN	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: 40 to 138 (units:)
Range Selected by User: 40 to 140 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/06 to 23/01/14

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	6 days
Tuesday	5 days
Wednesday	3 days
Thursday	5 days
Friday	4 days

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

Selected survey types:

Manual count	23 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	12
Edge of Town	10

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

Selected Location Sub Categories:

Residential Zone	16
Out of Town	1
No Sub Category	6

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	23 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	6 days
5,001 to 10,000	7 days
10,001 to 15,000	2 days
15,001 to 20,000	4 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	4 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	4 days
125,001 to 250,000	3 days
250,001 to 500,000	4 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	4 days
1.1 to 1.5	17 days
1.6 to 2.0	1 days

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

Travel Plan:

No	23 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 AN-03-A-06 SEMI-DET. ANTRIM
GLENMOUNT ROAD

NEWTOWNABBEY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 132
Survey date: THURSDAY *10/06/10* *Survey Type: MANUAL*

2 AN-03-A-07 SEMI DETACHED/TERRACED HOUSING ANTRIM
CASTLE WAY

ANTRIM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 55
Survey date: TUESDAY *20/12/11* *Survey Type: MANUAL*

3 CB-03-A-03 SEMI DETACHED CUMBRIA
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY *20/11/08* *Survey Type: MANUAL*

4 CB-03-A-04 SEMI DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY *24/04/09* *Survey Type: MANUAL*

5 CH-03-A-06 SEMI-DET./BUNGALOWS CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

6 CW-03-A-02 SEMI D./DETATCHED CORNWALL
BOSVEAN GARDENS

TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: TUESDAY *18/09/07* *Survey Type: MANUAL*

7 DL-03-A-07 SEMI DET./TERRACED DUBLIN
CASTLE DAWSON
BLACKROCK
DUBLIN
Edge of Town Centre
Residential Zone
Total Number of dwellings: 56
Survey date: MONDAY *26/09/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 DO-03-A-03 DETACHED/SEMI DETACHED DOWN
OLD MILL HEIGHTS
DUNDONALD
BELFAST
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *23/10/13* *Survey Type: MANUAL*

9 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD

NORWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

10 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

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

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

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

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

13 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD

BYFLEET
Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

14 SF-03-A-01 SEMI DETACHED SUFFOLK
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77
Survey date: WEDNESDAY *23/05/07* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 SF-03-A-03 MIXED HOUSES SUFFOLK
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY *15/05/06* *Survey Type: MANUAL*

16 SH-03-A-04 TERRACED SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY *11/06/09* *Survey Type: MANUAL*

17 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
SUTTON HILL
TELFORD
Edge of Town
Residential Zone
Total Number of dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

18 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
BENTLEY RISE
DONCASTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

19 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY *02/10/06* *Survey Type: MANUAL*

20 WM-03-A-01 TERRACED WEST MIDLANDS
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79
Survey date: FRIDAY *03/02/06* *Survey Type: MANUAL*

21 WM-03-A-03 MIXED HOUSING WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY *24/09/07* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

22 WO-03-A-02 SEMI DETACHED WORCESTERSHIRE
MEADOWHILL ROAD

REDDITCH
Edge of Town
No Sub Category
Total Number of dwellings: 48
Survey date: TUESDAY *02/05/06* *Survey Type: MANUAL*

23 WO-03-A-03 DETACHED WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138
Survey date: FRIDAY *05/05/06* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	23	82	0.092	23	82	0.433	23	82	0.525
08:00 - 09:00	23	82	0.240	23	82	0.798	23	82	1.038
09:00 - 10:00	23	82	0.245	23	82	0.375	23	82	0.620
10:00 - 11:00	23	82	0.216	23	82	0.263	23	82	0.479
11:00 - 12:00	23	82	0.274	23	82	0.265	23	82	0.539
12:00 - 13:00	23	82	0.284	23	82	0.253	23	82	0.537
13:00 - 14:00	23	82	0.275	23	82	0.262	23	82	0.537
14:00 - 15:00	23	82	0.264	23	82	0.281	23	82	0.545
15:00 - 16:00	23	82	0.574	23	82	0.354	23	82	0.928
16:00 - 17:00	23	82	0.558	23	82	0.302	23	82	0.860
17:00 - 18:00	23	82	0.617	23	82	0.304	23	82	0.921
18:00 - 19:00	23	82	0.417	23	82	0.303	23	82	0.720
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.056			4.193			8.249

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:	40 - 138 (units:)
Survey date date range:	01/01/06 - 23/01/14
Number of weekdays (Monday-Friday):	23
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

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

Appendix G

MODE SPLIT CENSUS DATA

Method of Travel to Work (QS701EW)

			Monk Bretton Ward	
Train	Count	Persons	53	1.3%
Bus, Minibus or Coach	Count	Persons	370	8.8%
Motorcycle, Scooter or Moped	Count	Persons	46	1.1%
Driving a Car or Van	Count	Persons	2866	68.2%
Passenger in a Car or Van	Count	Persons	356	8.5%
Bicycle	Count	Persons	39	0.9%
On Foot	Count	Persons	470	11.2%
			4200	100.0%

Appendix H

2011 JOURNEY TO WORK CENSUS DATA & MSOA MAP

MSOA	Distance (km)	Car Drivers	Percentage
018-Barnsley 013	3	275	14%
017-Barnsley 012	4	155	8%
007-Barnsley 002	2	127	7%
020-Barnsley 015	2	115	6%
015-Barnsley 010	1	103	5%
012-Barnsley 007	1	91	5%
014-Barnsley 009	0	82	4%
016-Barnsley 011	1	74	4%
075-Rotherham 002	10	42	2%
022-Barnsley 017	2	40	2%
073-Leeds(part)	27	40	2%
024-Barnsley 019	5	38	2%
028-Barnsley 023	5	37	2%
033-Barnsley 028	7	37	2%
013-Barnsley 008	3	36	2%
011-Barnsley 006	5	35	2%
026-Barnsley 021	4	32	2%
009-Barnsley 004	4	28	1%
010-Barnsley 005	6	27	1%
095-Sheffield 018	17	24	1%
027-Barnsley 022	10	24	1%
135-East Midlands	55	24	1%
006-Barnsley 001	3	23	1%
146-Yorkshire and The	33	23	1%
097-Sheffield 027	19	22	1%
106-Sheffield 073	20	21	1%
031-Barnsley 026	6	21	1%
074-Rotherham 001	8	21	1%
134-Wakefield(part)	12	21	1%
035-Barnsley 030	7	21	1%
058-Kirklees(part)	19	20	1%
047-Doncaster(part)	22	20	1%
117-Wakefield 014	16	19	1%
119-Wakefield 017	13	18	1%
109-Sheffield(part)	19	16	1%
096-Sheffield 022	18	16	1%
071-Leeds 111	26	15	1%
139-North West	60	15	1%
032-Barnsley 027	12	15	1%
004-Shropshire 034	129	14	1%
023-Barnsley 018	2	14	1%
131-Wakefield 042	9	13	1%
123-Wakefield 028	11	13	1%
133-Wakefield 044	11	13	1%
081-Rotherham 017	16	13	1%
021-Barnsley 016	10	12	1%
108-Sheffield 075	20	12	1%
124-Wakefield 030	11	12	1%
		1929	

Date Modified: 30/03/2015

Drawn By: UKJXC082

File: Q:\WSP_UK\WSP_D\Cambridge\DP\JGC\GIS Spreadsheet\Monk Bretton\Mapfiles\Monk_Bretton_MSOAs.mxd

Wakefield 036

Wakefield 038

Wakefield 040

Kirklees 054

Kirklees 054

Barnsley 001

Barnsley 002

Barnsley 003

Barnsley 004

Barnsley 005

Barnsley 006

Barnsley 007

Wakefield 045

Doncaster 020

Barnsley 009

Barnsley 010

Barnsley 008

Barnsley 011

Barnsley 016

Barnsley 012

Barnsley 013

Barnsley 014

Barnsley 015

Barnsley 017

Barnsley 018

Barnsley 020

Barnsley 019

Barnsley 023

Barnsley 021

Barnsley 029

Barnsley 027

Barnsley 026

Barnsley 028

Barnsley 030

Key

Site Location

2011 MSOAs

Contains Ordnance Survey data © Crown copyright and database right 2015.

0 0.275 0.55 1.1 1.65 2.2 Kilometres

WSP

TITLE:

MSOA NAMES
IN AND AROUND
MONK BRETTON

FIGURE No:

FIGURE 2