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Proposed Residential Development
Land off Cork Lane
Glen Parva
Leicestershire

Transport Assessment

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1.0 Introduction

1.1 Background

1.1.1 This report has been prepared by JPP Consulting Limited on behalf of Manor Oak Homes to support an outline planning application for residential development comprising 166 dwellings with associated highway infrastructure and public open space. The benefit of this report is limited to our instructing Client.

1.1.2 The proposed residential development is located at land off Cork Lane, Glen Parva. Glen Parva is located to the south of Leicester and north of Blaby as shown on the location plan in Figure 1 and enclosed in Appendix A. The proposed development is bound by residential development to the north and south, agricultural land to the west and Cork Lane to the east.

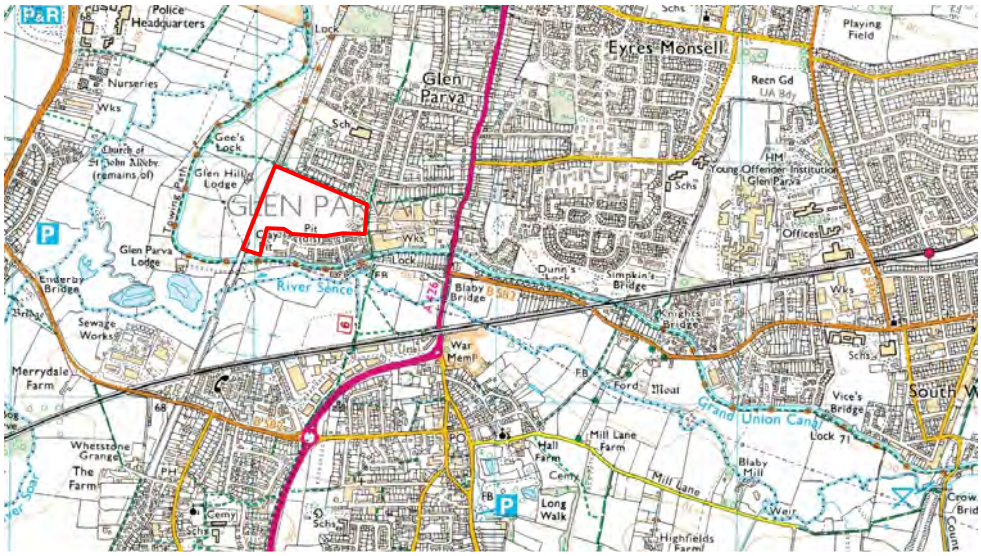


Figure 1: Site Location Plan

1.2 Scope of Assessment

1.2.1 The aim of the Transport Assessment is to support an outline planning application for a residential development comprising up to 166 dwellings. The proposed development layout is shown on the drawing enclosed in Appendix B.

1.2.2 This report will consider the wider highway network implications of the new development and will also focus on the sustainable credentials of the development.

1.2.3 This report is accompanied by a Framework Residential Travel Plan, JPP reference R-RTP-R6711PP-01. The Travel Plans and Transport Assessment should be read as sister documents.

1.3 Consultation

1.3.1 A scoping note was produced in October 2013 and sent to Leicestershire County Council and Leicester City Council, who are the local highway authorities for the roads affected by this development. A copy of the scoping note is enclosed in Appendix F. Comments received from both authorities to the scoping note are also enclosed in Appendix F.

1.3.2 The Transport Assessment has been written generally in line with the submitted Scoping Note and comments received from both highways authorities.

1.4 Structure of Report

1.4.1 Following this introductory chapter the report is structured as follows:

- Section 2 describes the site and development proposal;
- Section 3 reviews relevant national and local transport policies;
- Section 4 describes the characteristics of the existing transport network surrounding the development site;
- Section 5 assesses the accessibility of the site to education, health, employment, retail and leisure facilities;
- Section 6 sets out the person trips and mode assignment from the proposed development;
- Section 7 assesses the impact of the proposed development on more sustainable forms of transport;
- Section 8 assesses the impact of the proposed development on vehicular highway network; and
- Section 9 is the conclusions.

2.0 Site Description and Development Proposals

2.1 Site Location

2.1.1 The proposed residential development is located to the south of Leicester and north of Blaby at land off Cork Lane, Leicester as shown on the location plan below in Figure 1 and enclosed in Appendix A. The proposed development is bound by residential developments to the north and south, Cork Lane to the east and agricultural land to the west.

2.2 Development Description

2.2.1 The proposed development will comprise up to 166 residential dwellings with associated highway infrastructure and public open space. The proposed development layout is shown on the plan enclosed in Appendix B.

2.2.2 The main estate roads within the development will comprise 5.5m wide carriageway with 2 x 2m wide verges and 2 x 2m wide footway

2.3 Vehicular Access

2.3.1 The proposed residential development will be accessed via an extension of cork lane into the development site. The proposed access is shown in Appendix B.

2.4 Pedestrian and Cycle Access

2.4.1 In addition to the vehicular access the proposed residential development will provide a pedestrian link to the public footpath which runs parallel to the site's northern boundary.

2.5 Parking

2.5.1 Car and cycle parking for the development will be provided in line with guidance set out in the 6Cs Design Guide.

2.6 Planning Background

2.6.1 The proposed development site is currently agricultural land. It has previously been used as a quarry and landfill.

3.0 Policy Review

3.1 Introduction

3.1.1 The following section of the report provides an examination of current polices relating to transport at national and local level as they relate to the proposed development.

3.2 National Policy

3.2.1 Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, The Transport White Paper was published in January 2011 by the Coalition Government. The Document outlines a vision 'for a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities.' Consequently, reducing carbon emissions derived from transport together with generating economic growth and contributing to economic vitality. The Localism Agenda is another strong theme with the White Paper supporting local solutions that are tailored to specific needs and behaviour patterns to deliver effective local transport.

3.2.2 The priority for local transport, as outlined is to "encourage sustainable local travel and economic growth by making public transport and cycling and walking more attractive and effective, promoting lower carbon transport and tackling local road congestion.

3.2.3 The White Paper Chapter 4 is titled Enabling Sustainable Transport Choices. The chapter states that 'the Government wants to encourage and enable more sustainable transport choices'. The document goes on to explain the "nudge" concept that taps into human behavioural tendencies to encourage "good" choices. Nudge interventions are described as being easy and not forbidding choice and travel planning is listed as an example of such.

3.3 National Planning Policy Framework

3.3.1 In March 2012, the National Policy Framework (NPPF) was published by the coalition government with its overarching principle being a *'presumption in favour of sustainable development.'* The policies contained within the NPPF applied with immediate effect and thereby replaced, amongst other PPS's and PPG's, PPG 13 'Transport'. Section 4 of the NPPF 'Promoting sustainable transport' covers the transport policy, detailed below are the policies that are of relevance.

3.3.2 In paragraph 29, the NPPF acknowledges that *'transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives' and goes on to say 'the transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel'.*

3.3.3 Paragraph 36 states that *'All developments which generates significant amounts of movement should be required to provide a Travel Plan'.*

3.3.4 Paragraph 38 states *'Where practical, particularly within large scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties'*.

4.0 Existing Conditions

4.1 Road Network

4.1.1 The existing local highway infrastructure is shown on the plan enclosed in Appendix C.

4.1.2 The proposed development will be accessed off Cork Lane. Cody Road has a width of 5.5m and is bound by 1.8m wide footways on both sides of the carriageway. Cork Lane provides connections to Glenville Avenue and West View Avenue which both in turn connect at their eastern end with A426 Leicester Road a primary route which provides the development connections to the centres of Leicester and Blaby. All roads are subject to a 30mph speed limit and are street lit.

4.2 Pedestrian Facilities

4.2.1 The surrounding roads are typically bound by footways on both sides of the carriageway and generally provide dropped kerbs with occasional tactile paving at the appropriate locations.

1.5.2.2 A metaled bridleway connects Cork Lane with New Bridge Road and Winchester Avenue to the south.

1.5.2.2 Walking distances and the proximity of key facilities is shown on the plan enclosed in Appendix C.

4.3 Cycle Facilities

4.3.1 There are a number of dedicated cycling facilities within the vicinity including national cycle route number 6 on Cork Lane. The existing cycling facilities within the vicinity of the site are shown in Appendix E.

1.5.3.2 Cycling distances and the proximity of key facilities is shown on the plan enclosed in Appendix C.

4.4 Public Transport

4.4.1 Bus

4.4.1.1 The nearest existing bus stops for the proposed development are located Leicester Road approximately 550m from the proposed site entrance. The location of the existing bus stops is shown on the facilities plan enclosed in Appendix C.

4.4.1.2 General bus service frequencies and routes of buses utilising the bus stops are set out in table 3.1 below. Full time table and bus route information is enclosed in Appendix D. The information provided in the tables below and the appendices was correct at the time of publication.

Summary of bus services

Service	Route	Service Times	Day Time Frequency
84	Leicester - Blaby - Whetstone - Cosby - Broughton Astley – Lutterworth	First ≈ 0630 Last ≈ 2120	Every 10 mins
84A	Leicester - Blaby – Whetstone		
85	Leicester - Blaby - Countesthorpe - South Wigston		

Table 3.1

4.4.1.3 The combined 84/84A/85 bus routes will provide residents with a regular bus service to Leicester City Centre and Blaby and therefore offers commuters a sustainable alternative to the private car. Leicestershire County Council and Leicestershire City Council have recently completed bus lane works to the A426 between the Blaby and Leicester. These works will improve journey times for buses therefore increasing the likelihood that buses will be utilised as an alternative to the private car.

4.4.2 Rail

4.4.2.1 The nearest railway station is located approximately 3.1km (1.9miles) from the proposed development at South Wigston. The railway station is located on the Birmingham to Peterborough line and is served by occasional trains travelling between Birmingham and Leicester. The nearest full service train station is Leicester Station located approximately 6.5km (4.0 miles)

4.4.2.2 The railway stations will offer opportunities for commuters making long distance journeys to travel my more sustainable forms of transport.

4.5 Recorded Accident Data

4.5.1 Recorded accident data was obtained from Leicestershire County Council for the five year period from 1st September 2009 to 31st December 2013. A plan of the collision data obtained from Leicestershire County Council is enclosed in Appendix G.

4.5.2 There are a number of accidents within the area considered comprising 38 slight injury accidents and 3 serious accidents.

4.5.3 Of the recorded accidents near the proposed development there is no significant theme which would suggest there are any geometric deficiencies.

4.5.4 From the reported accident data there does not appear to be a significant accident problem on the surrounding highway infrastructure. We therefore do not consider that the proposed development will result in conditions detrimental to highway safety.

4.6 Summary

4.6.1 The proposed residential development is located to the south of Leicester and north of Blaby at land off Cork Lane, Leicester. The proposed residential development will be accessed via an extension of Cork Lane into the development site. In addition to the vehicular access the proposed residential development will provide a pedestrian link to the public footpath which runs parallel to the site's northern boundary.

4.6.2 The proposed development has good links to the existing walking and cycling infrastructure.

4.6.3 The nearest bus stops to the development are served by three regular bus services which combine to offer a 10 minute service to Blaby and Leicester. These buses will offer residents of the development the opportunity to travel to Leicester City Centre and Blaby via more sustainable forms of transport for work and leisure trips. Recent works to provide a dedicated bus lane on the A426 will result in improved journey times for passengers.

4.6.4 The nearest railway station is located approximately 3.1km (1.9miles) from the proposed development at South Wigston. The railway station is located on the Birmingham to Peterborough line and is served by occasional trains travelling between Birmingham and Leicester. The nearest full service train station is Leicester Station located approximately 6.5km (4.0 miles)

4.6.5 From the report accident data there does not appear to be a significant accident problem on the surrounding highway infrastructure. We therefore do not consider that the proposed development will result in conditions detrimental to highway safety.

5.0 Accessibility

5.1 Introduction

5.1.1 The review of the planning policy presented in section 3 of this report highlights the need for need for sustainable developments to have good accessibility to education, health facilities, employment, leisure and retail. Paragraph 38 of the National Planning Policy Framework states 'Where practical, particularly within large scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties'.

5.1.2 This section therefore considers the accessibility from the development, by modes of sustainable transport to local facilities including education, health services, employment, leisure and retail. A plan showing the location of key local facilities local to the development site is enclosed in Appendix C.

5.1.3 Walking

5.1.3.1 With reference to the Chartered Institution of Highways and Transportation (CIHT) publication 'Guidelines for Providing for Journeys on Foot' (2000), it is suggested that around 80% of walk journeys and walk stages are less than 1 mile (1610m). This guidance also provides 'suggested acceptable walking distances' which are set out in table 5.1 below.

5.1.3.2 Indicative walking time calculations have been calculated assuming a 'typical' walking speed of approximately 1.4m/s or 3mph. These are shown against the suggested walking distances set out in table 5.1 below.

Walking Distance and Journey Times

	Town Centre		Commuting / School / Sight Seeing		Elsewhere	
	Distance (m)	Time (mins)	Distance (m)	Time (mins)	Distance (m)	Time (mins)
Desirable	200	2.4	500	6	400	4.8
Acceptable	400	4.8	1000	11.9	800	9.5
Preferred Maximum	800	9.5	2000	23.8	1200	14.3

Table 5.1

5.1.3.3 A plan showing local facilities and walking distances is enclosed in Appendix C.

5.1.4 Cycling

5.1.4.1 Section 3.10 of the Local Transport note 01/04 states that generally a 4km cycle distance is considered acceptable.

5.1.4.2 Assuming a cycling speed of 12kmph the maximum accepted time for a cycling journey is 20mins.

5.1.4.3 A plan showing the location of key local facilities local to the development site is enclosed in Appendix E. It can be seen that all facilities within Blaby are located within a 1.6km radial distance from the proposed development's access.

5.2 Accessibility to Education

5.2.1 The proposed development is located within approximately 400m walking distance of the nearest existing primary school, Glen Hills, which is located on Featherby Drive. This is within the desirable walking distance for school journeys as set out in table 5.1 above.

5.2.2 The nearest secondary school, South Wigston High School, is located approximately 2600m from the proposed development. This school is within an acceptable cycling distance a significant proportion of which can be completed on off road cycle routes.

5.2.3 The proposed development is shown to be located within acceptable walking and cycling distances of schools.

5.3 Accessibility to Health

5.3.1 The nearest doctors' is located approximately 1700m from the proposed development in Blaby, see Appendix C. The doctors' surgery is located within the preferred maximum walking distance.

5.3.2 The nearest dentist and pharmacy are located approximately 800m from the development on Grange Drive. The dentist and pharmacy are located within the desirable walking distances, see Appendix C.

5.3.3 The proposed development is shown to be located within acceptable walking and cycling distances of health services.

5.4 Accessibility to Retail and Leisure

5.4.1 The proposed development site is located within walking distance of Blaby town centre. The proposed development is also within close proximity of a regular bus service which provides connections to shopping and leisure opportunities in Blaby town centre and Leicester City Centre.

5.4.2 The proposed development is shown to be located within acceptable walking, cycling and public transport distances of retail and leisure services.

5.5 Accessibility to Employment

5.5.1 The development site is located within walking distance of Blaby town centre. The proposed development is also within close proximity of a regular bus service which provides connections to employment opportunities in Blaby town centre and Leicester City Centre.

5.5.2 The proposed development is shown to be located within suitable walking, cycling and public transport distances of employment opportunities.

6.0 Trip Generation and Distribution

6.1 The proposed development will comprise 166 residential dwellings. Person trip generation rates have been obtained from the TRICS database version 2013(6)v6.12.2. The TRICS data is enclosed in Appendix H. Person trip rates are shown in table 6.1 below.

Proposed Person Trip Generation Rate – 85th %ile						
	AM Peak (0800-0900)			PM Peak (1700-1800)		
Use	Arrivals	Departures	Total	Arrivals	Departures	Total
Residential per dwelling	0.438	1.1	1.538	0.812	0.399	1.211

Table 6.1

6.2 From the above vehicle trip rates the number of person trips for the proposed development can be calculated based on a development size of 166 dwellings. The predicted person trip numbers from the proposed development are set out in table 6.2 below.

Proposed Person Trips						
	AM Peak (0800-0900)			PM Peak (1700-1800)		
Use	Arrivals	Departures	Total	Arrivals	Departures	Total
Residential	73	183	255	135	66	201

Table 6.2

6.3 To predict the number of trips generated by mode of transport, travel to work data has been obtained from the 2011 Census for the Saxondale ward which the proposed development is located within. The journey to work data is shown in table 6.3 below.

Method of Travel to Work Resident Population – Saxondale Ward 2011 Census	
Mode	Percentage
Driving a Car or Van	73.6%
On Foot	8.3%
Bus, Minibus or Coach	6.5%
Passenger in a Car or Van	5.7%
Bicycle	4.0%
Train	0.8%
Motorcycle, Scooter or Moped	0.7%
Taxi	0.3%

Table 6.3

6.4 Using the above modal split information it is possible to predict the number of trips made using all forms of transport. Whilst the data does not reflect the fact that not all peak period trips are made to work it offers a good reflection of the actual circumstances. The predicted number of trips by mode from the proposed development is set out in table 6.4 below.

Proposed Trip Numbers by Mode						
	AM Peak (0800-0900)			PM Peak (1700-1800)		
Mode	Arrivals	Departures	Total	Arrivals	Departures	Total
Car Driver	54	134	188	99	49	148
On Foot	6	15	21	11	5	17
Bus	5	12	17	9	4	13
Car Passenger	4	10	15	8	4	12
Bicycle	3	7	10	5	3	8
Train	1	1	2	1	1	2
Motorcycle	1	1	2	1	0	1
Taxi	0	1	1	0	0	1

Table 6.4

6.5 Vehicle trips generated by the proposed development have been distributed on to the surrounding highway infrastructure using 2001 origin and destination census data. This census data and assignment is enclosed in Appendix I. The proposed assignment of these vehicles is shown on the highway network vehicle trip diagrams enclosed in Appendix J.

7.0 Sustainable Modes of Transport Impact

7.1 Introduction

7.1.1 This section of the Transport Assessment will assess the impact of the proposed development on the local sustainable transport infrastructure.

7.1.2 The trip generation for the sustainable modes of transport has been calculated in section 6. The sustainable trips predicted from the proposed development are summarised in table 7.1 below.

Proposed More Sustainable Trip Numbers

	AM Peak (0800-0900)			PM Peak (1700-1800)		
Mode	Arrivals	Departures	Total	Arrivals	Departures	Total
On Foot	6	15	21	11	5	17
Train	5	12	17	9	4	13
Car Passenger	4	10	15	8	4	12
Bus	3	7	10	5	3	8
Bicycle	1	1	2	1	1	2
Motorcycle	1	1	2	1	0	1

Table 7.1

7.2 Walking

7.2.1 The proposed development is predicted to generate 17 and 13 additional pedestrian trips during the morning and evening peak hours respectively. The proposed development will connect to the existing pedestrian network via footways and bridleways on Cork Lane.

7.2.2 The new pedestrian trips equates to one journey in any direction every 3.5 to 4.6 minutes. This small number of pedestrians can be accommodated on the existing and proposed pedestrian infrastructure.

7.3 Cycling

7.3.1 The proposed development is predicted to generate approximately 2 cyclist trips in the both the morning and evening peak periods. The number of predicted cyclist trips is small and could be accommodated on the existing highway infrastructure.

7.3.2 The proposed development will incorporate cycle parking provision for each dwelling.

7.4 Public Transport

7.4.1 The proposed development is predicted to generate approximately 10 and 8 additional bus journeys in the morning and evening peak periods respectively. The number of predicted bus journeys is small and could be accommodated within existing services.

8.0 Vehicular Impact

8.1 Introduction

8.1 This section will assess the impact of the proposed development on the existing vehicular infrastructure.

8.2 Area of Assessment

8.2.1 The area of assessment has been agreed with Leicestershire County Council and Leicester City Council in pre-application discussions with the following junctions highlighted for further assessment:

1. Glenville Road / Leicester Road;
2. Leicester Road / Little Glen Road;
3. Leicester Road / Soar Valley Way / Glenhills Way; and
4. Leicester Road / Middleton Street.d

8.3 Background Traffic

8.3.1 Vehicle counts at the above junctions were completed on Tuesday 3rd December. The traffic count data is enclosed in Appendix K.

8.4 Committed Development Traffic

8.4.1 As discussed with Leicestershire County Council and Leicester City Council we are not aware of any significant developments within close proximity which would affect the assessment. Therefore no committed developments have been included in the assessment.

8.5 Assessment Periods

8.5.1 The impact of the development will be considered on the surrounding highway infrastructure during the morning and evening peak periods of 0800-0900 and 1700-1800.

8.5.2 In line Department of Transport document 'Guidance for Transport Assessment' future year assessments have been completed for 2018 or five years after the planning application was submitted.

8.5.3 To adjust these traffic counts to the assessment years of 2018 traffic growth factors have been utilised from NTEM dataset 6.2 and NTM dataset AF09. Growth factors have been obtained for Blaby and Leicester (main). The growth factors are set out in table 8.5 below.

Tempro Growth Factors		
	AM Peak	PM Peak
2013-2018 – Blaby	1.0369	1.0385
2013-2018 – Leicester (main)	1.0702	1.0693

Table 8.5

8.5.4 It can be seen that the growth factors for Leicester (main) are larger than for Blaby. To ensure a conservative and robust approach is taken growth factors for Leicester (main) will be applied across background traffic at all junctions.

8.6 Junction Assessments

8.6.1 The junctions listed in section 8.1 have been assessed where appropriate utilising TRL software Junctions 8 and Transyt 14. The results of the junction assessments are set out below.

8.6.2 J1: Glenville Road / Leicester Road

8.6.2.1 A junction assessment of the Glenville Road / Leicester Road simple priority junction has been completed. The results of the assessment are summarised in the table below with full input data and results enclosed in Appendix L.

Glenville Road / Leicester Road – AM Peak 0800-0900 – 2018						
	2018 Background		2018 Background + Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
B-C	0.11	0	0.50	1	0.39	1
B-A	0.32	0	0.63	2	0.31	2
C-AB	0.21	1	0.36	1	0.15	0

Table 8.6.2a

Glenville Road / Leicester Road – PM Peak 1700-1800 – 2018						
	2018 Background		2018 Background + Development		Difference	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
B-C	0.04	0	0.12	0	0.08	0
B-A	0.19	0	0.35	0	0.16	0
C-AB	0.10	0	0.41	2	0.31	2

Table 8.6.2b

8.6.2.2 It can be seen that the Glenville Road / Leicester Road junction operates within capacity in 2018 both without and with the proposed development during both peak periods.

8.6.3 J2: Leicester Road / Little Glen Road;

8.6.3.1 A junction assessment of the Leicester Road / Little Glen Road traffic signal controlled junction has been completed. The results of the assessment are summarised in the table below with full input data and results enclosed in Appendix M.

Leicester Road / Little Glen Road – AM Peak 0800-0900 – 2018						
	2018 Background		2018 Background + Development		Difference	
	DoS (%)	Mean Max Queue	DoS (%)	DoS (%)	Mean Max Queue	DoS (%)
A426 – Leics Road (N)						
A	83	19	85	21	2	2
Little Glen Road						
B-1	82	13	85	14	3	1
B-2	30	3	31	4	1	1
A426 – Leics Road (S)						
C-1	53	9	53	9	0	0
C-2	78	8	82	9	4	1
Table 8.6.3a						

Leicester Road / Little Glen Road – AM Peak 1700-1800 – 2018						
	2018 Background		2018 Background + Development		Difference	
	DoS (%)	Mean Max Queue	DoS (%)	DoS (%)	Mean Max Queue	DoS (%)
A426 – Leics Road (N)						
A	92	21	92	21	0	0
Little Glen Road						
B-1	90	15	90	15	0	0
B-2	25	3	27	3	2	0
A426 – Leics Road (S)						
C-1	56	9	58	10	2	1
C-2	89	16	93	18	4	2
Table 8.6.3a						

8.6.3.2 It can be seen that the Leicester Road / Little Glen Road junction will generally operate within capacity with Degree of Saturation (DoS) values below 90% in the morning peak period in 2018 both without and with the proposed development.

8.6.3.3 During the evening peak period the Leicester Road (North) arm of the junction is shown to be overcapacity in 2018 with a DoS value of 92% although this is unaffected by the proposed development. The remaining arms, Little Glen Road and Leicester Road (South) are within capacity with DoS values of 90% and 89% respectively. Little Glen Road remains within capacity with the proposed development, however, DoS values on Leicester Road (South) are increased by 4% resulting a maximum DoS value of 93%.

8.6.3.4 Whilst the proposed development will result in the Leicester Road (South) arm of the junction operating over capacity the predicted mean maximum queue length will only increase by 2 vehicles. Due to the small increase in queue length and limited opportunities for measures which will increase real capacity no mitigation measures are proposed.

8.6.4 J3: Leicester Road / Soar Valley Way / Glenhills Way

8.6.4.1 A junction assessment of the Leicester Road / Soar Valley Way / Glenhills Way traffic signal controlled junction has been completed. This junction was recently improved as part of the A426 Bus Corridor works with the purpose of improving journey times along the A426 for Buses. The results of the assessment are summarised in the table below with full input data and results enclosed in Appendix N.

Leicester Road / Soar Valley Way / Glenhills Way – AM Peak 0800-0900 – 2018						
	2018 Background		2018 Background + Development		Difference	
	DoS (%)	Mean Max Queue	DoS (%)	DoS (%)	Mean Max Queue	DoS (%)
A563 Glenhills Way						
A-1	73	22	76	22	3	0
A-2	64	18	66	18	2	0
A-3	**113**	**54**	**116**	**59**	**3**	**5**
A-4	5	1	5	1	0	0
A426 Lutterworth Road (S)						
B-1	**127**	**68**	**129**	**77**	**2**	**9**
B-2	47	7	48	7	1	0
B-4	45	6	45	7	0	1
A563 Soar Valley Way						
C-1	53	10	53	10	0	0
C-2	**99**	**58**	**99**	**58**	**0**	**0**
C-3	74	7	75	7	1	0
A426 Lutterworth Road (N)						
D-1	**134**	**72**	**148**	**89**	**14**	**17**
D-3	54	7	58	7	4	0

Table 8.6.4a

Leicester Road / Soar Valley Way / Glenhills Way – AM Peak 1700-1800 – 2018						
	2018 Background		2018 Background + Development		Difference	
	DoS (%)	Mean Max Queue	DoS (%)	DoS (%)	Mean Max Queue	DoS (%)
A563 Glenhills Way						
A-1	73	19	77	20	4	1
A-2	58	13	60	14	2	1
A-3	**122**	**51**	**122**	**51**	**0**	**0**
A-4	9	2	10	2	1	0
A426 Lutterworth Road (S)						
B-1	**134**	**62**	**140**	**70**	**6**	**8**
B-2	56	7	58	7	2	0
B-4	47	5	48	5	1	0
A563 Soar Valley Way						
C-1	66	16	66	16	0	0
C-2	**99**	**74**	**99**	**74**	**0**	**0**
C-3	78	12	79	13	1	1
A426 Lutterworth Road (N)						
D-1	**136**	**96**	**143**	**111**	**7**	**15**
D-3	41	6	41	6	0	0

Table 8.6.4B

8.6.4.2 The above assessment is based on the geometry and signal phases / stages post completion of the A426 Bus Corridor Improvements. It can be seen that one traffic stream on each arm of the junction is predicted to operate above capacity in 2018 without the proposed development. Maximum Degree of Saturation (DoS) values of 143% were recorded during the peak period without the proposed development.

8.6.4.3 With the proposed development RFC values are increased on all arms with the exception of the A563 Soar Valley Way. The increase in Degree of Saturation is generally minor, however, the A426 Lutterworth Road (N) arm of the junction experiences the largest increase in DoS values with the values increasing by 14%.

8.6.4.4 The Leicester Road / Soar Valley Way / Glenhills Way junction has recently undergone works to improve its operation and maximise capacity at the junction. These works were aimed at improving bus journey times along the A426 corridor. Whilst the proposed development is predicated to have a slight impact on the operational capacity of the junction there are limited options available to improve the operation of the junction as the highway land is fully utilised therefore preventing the creation of new arms.

8.6.4.5 It is therefore proposed that no mitigation works will be completed at the junction and further emphasis will be placed within the Travel Plan to promote bus travel for new residents. As the A426 Bus Corridor Improvements will improve journey times making them more reliable bus travel should be considered an attractive form of transport for Leicester bound journeys which would have otherwise route through the junction.

8.6.5 J4 - Leicester Road / Middleton Street

8.6.5.1 A junction assessment of the Leicester Road / Middleton Street traffic signal controlled junction has been completed. The results of the assessment are summarised in the table below with full input data and results enclosed in Appendix O.

Leicester Road / Middleton Street – AM Peak 0800-0900 – 2018						
	2018 Background		2018 Background + Development		Difference	
	DoS (%)	Mean Max Queue	DoS (%)	DoS (%)	Mean Max Queue	DoS (%)
A426 Lutterworth Rd (S)						
A-1	7	1	7	1	0	0
A-2	85	19	88	21	3	2
Middleton St						
B-1	84	13	87	13	3	0
B-2	10	1	11	1	1	0
A426 Lutterworth Rd (N)						
C-1	39	5	40	25	1	20
C-1	83	11	83	11	0	0

Table 8.6.5a

Leicester Road / Middleton Street – PM Peak 1700-1800 – 2018						
	2018 Background		2018 Background + Development		Difference	
	DoS (%)	Mean Max Queue	DoS (%)	DoS (%)	Mean Max Queue	DoS (%)
A426 Lutterworth Rd (S)						
A-1	8	1	8	1	0	0
A-2	**90**	**21**	**90**	**22**	**0**	**1**
Middleton St						
B-1	87	13	87	13	0	0
B-2	17	2	18	2	1	0
A426 Lutterworth Rd (N)						
C-1	49	7	51	8	2	1
C-1	87	14	**90**	**15**	**3**	**1**

Table 8.6.5b

8.6.5.2 It can be seen that the Leicester Road / Middleton Street junction will operate within capacity in, with Degree of Saturation Values at or below 90%, in both peak periods during 2018 without and with the proposed development.

9.0 Public Consultation

9.1 A public consultation event was held on 28th January 2014 to inform and discuss the proposed development with local residents. At the consultation event a number of specific concerns were raised by residents regarding the use of the local highway infrastructure to access the development. These concerns are summarised as:

- The width of Glenville Avenue and West View Avenue are inadequate to serve the proposed development;
- The junction visibility of Glenville Avenue is poor.

9.2 Glenville Avenue and West View Avenue have widths of 6.2m and 6.1m respectively. In line with Manual for Streets widths of 5.5m and above are adequate for two lorries to pass. With the exception of Glen Hills School, two care holmes and four businesses neither of which are retail shops the two roads serve dwellings. Therefore the majority of vehicles utilising the roads will be cars which only require 4.1m to pass in line with Manual for Streets. This allows 2.1m and 2.0m for cars to park on Glenville Avenue and West View Avenue respectively and not prohibit the free flow of vehicles.

9.3 A topographical survey of Glenville Avenue and Leicester Road shows that the junction has adequate junction visibility meeting the minimum 2.4m x 43m visibility for 30mph roads. To the left the maximum achievable visibility is 2.4m x 66m equivalent to the visibility distance required for a 40mph road. A drawing enclosed in Appendix P shows that the visibility splays are achievable in both the horizontal and vertical planes.

10.0 Conclusions

10.1 The proposed residential development is located to the south of Leicester and north of Blaby at land off Cork Lane, Leicester. The proposed development is bound by residential developments to the north and south, Cork Lane to the east and agricultural land to the west.

10.2 The proposed development will comprise up to 166 dwellings with associated highway infrastructure and public open space.

10.3 The proposed development is shown to be well served and accessible to more sustainable modes of transport. The proposed development has good accessibility to education, health, employment, retail and leisure facilities.

10.4 The proposed development will be accessed via an extension of Cork Lane.

10.5 The proposed development is not predicted to have an adverse impact on the sustainable transport infrastructure.

10.6 Junction assessments have been completed at 4 junctions within Leicester. It is shown that the proposed development does not have a significant adverse impact on the operation of any of these junctions.

10.7 Framework travel plans have been produced for the development. These Travel Plans which will be secured under a S106 agreement will target a reduction in single occupancy vehicle trips.

10.8 From the reported accident data there does not appear to be a significant accident problem on the surrounding highway infrastructure. We therefore do not consider that the proposed development will result in conditions detrimental to highway safety.

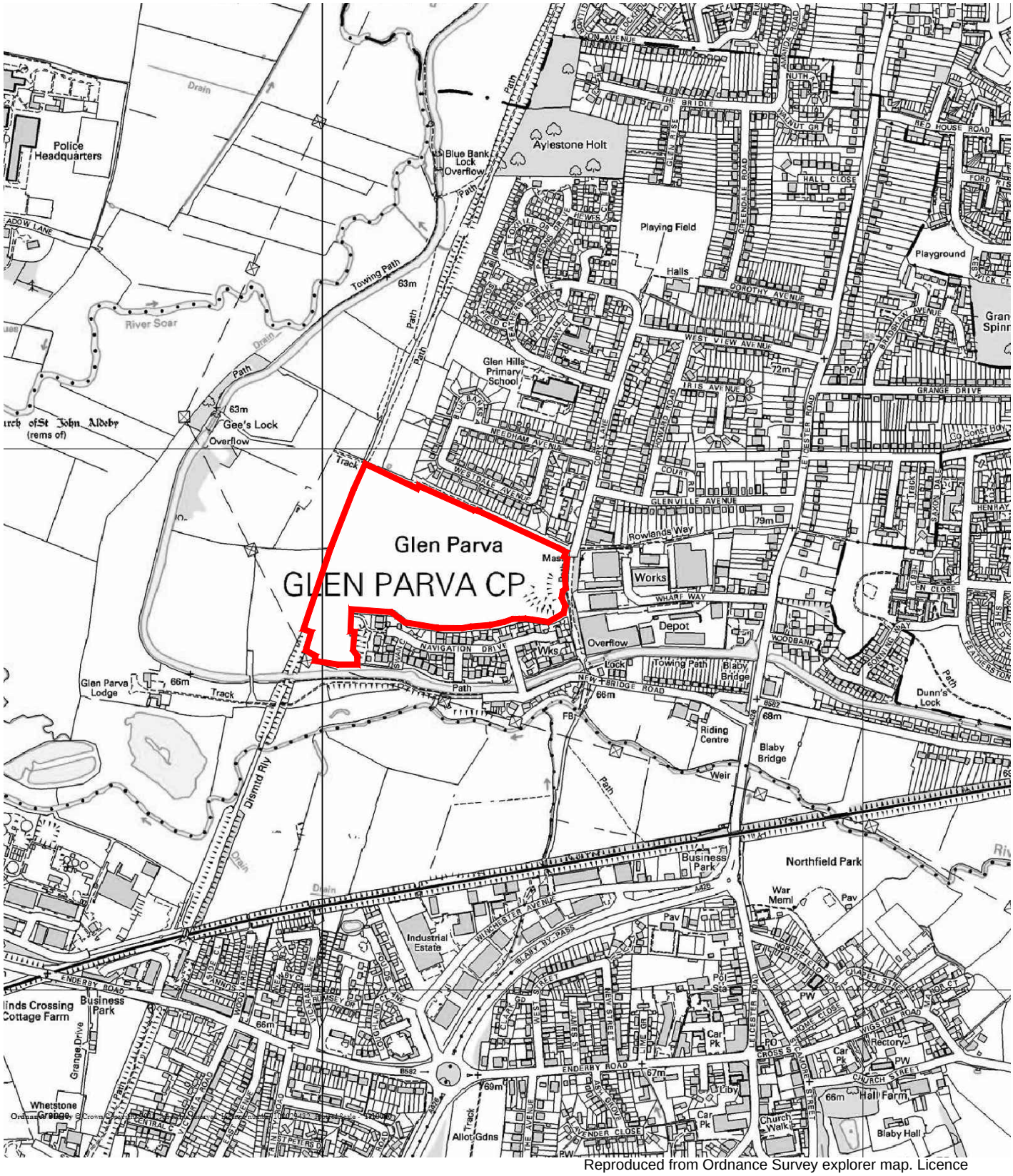
10.9 There are therefore no reasons on highway grounds why planning permission for the present development should not be granted.

Appendix A

Site Location Plan

JPP Drawing no. R6711PP-TA01

Client	MANOR OAK HOMES			Date OCTOBER 2013	jpp consulting Civil & Structural Engineers T: (01604) 781811 E: mail@jppuk.net F: (01604) 781999 W: www.jppuk.net
Project	Residential Development Glen Parva, Leicester			Drawn by DGB	
Title	Location Plan			Checked by	
Project ref R6711/PP		Drawing no. TA01	Revision	Scale at A4 1:10000	



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Appendix B

Proposed Masterplan
rg+p drawing no. 7779 005C

Site Area	=	10.55 ha
Development Area	=	6.09 ha
POS & Area of Natural Open Space	=	4.46 ha
Total Number of Dwellings	=	165 units
Site Density	=	27 p/ha

Revision: Date:

A	Layout modified to reduce development area following comments from engineers & client	SA	11.10.13
B	Focal routes introduced to west side of development	SA	17.10.13
C	Property against the eastern boundary removed for pedestrian link to Cork Lane; private drives on south and east broken with green space. Additional planting and boundary treatment around car park areas. Play area location modified; site ownership red line modified.	SA	26.02.14

N

Architects · Project Managers · Quantity Surveyors
130 New Walk
Leicester, LE1 7JA
Tel: 0116 204 5800, Fax: 0116 204 5801
email: design@rg-p.co.uk, www.rg-p.co.uk

Project: Residential Development
Cork Lane, Glen Pava

Client: Manor Oak Homes

Sheet title: Proposed Masterplan

Ref: 7779 / 005 C

Scale: 1:1000 @ A1

Date: 27/09/13

Drawn: SA Checked: RAW

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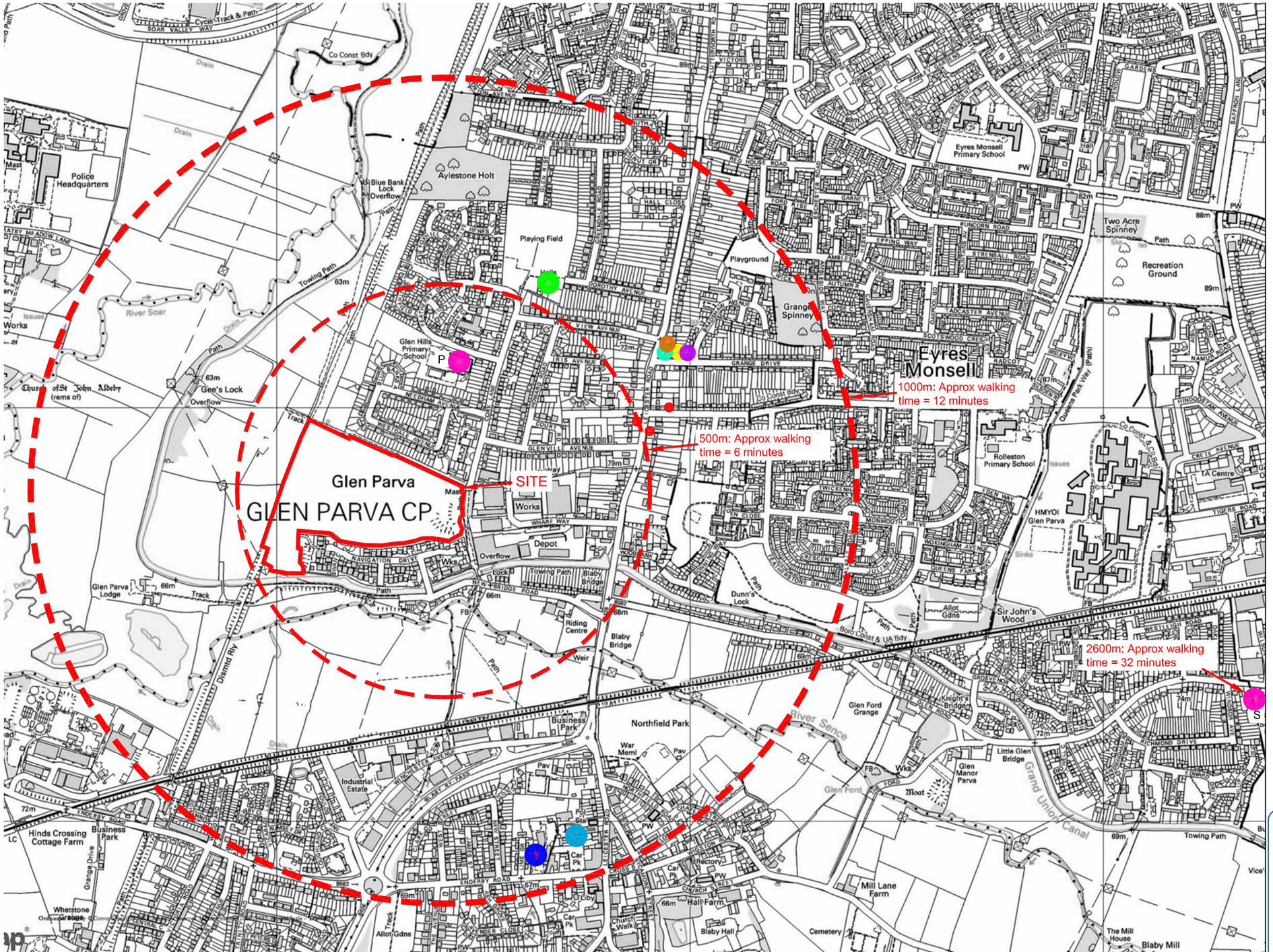
Appendix C

Local Facilities Plan

JPP drawing no. R6711PP-TA02



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NOTE

Walking distances based on a walking speed of 1.4 m/s from 'Providing For Journeys On Foot'

KEY

- Site Boundary
- Radius Distance Line
- Bus stops
- Doctors Surgery / Hospital
- Library
- Post Office
- Convience Store/Supermarket (Closest Shown)
- Pharmacy
- School/College
  P=Primary S=Secondary
- Leisure Facilities
  1 - The Blaby Hotel (Including gym etc.)
- Dentist

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Client	MANOR OAK HOMES
Project	Residential Development Glen Parva Leicester
Title	Location Plan

Scale at A3	1:10000	Drawn by DGB	Checked by
Date	OCTOBER 2013		
Status		Project ref R6711/PP	Drawing no. TA02 Revision

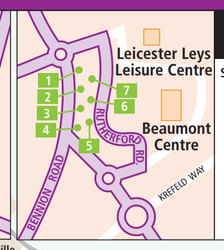
Appendix D

Bus Route Map and Timetables

Main bus routes in Greater Leicester

Glenfield Hospital

Leicester Leys Leisure Centre / Beaumont Centre



Beaumont Centre

Stop	Services
1	not in use
2	14A, 40, UHL
3	25, 55, 74
4	54, 54A, 154
5	Tesco Free Bus
6	74, 154
7	26, 40, 55

Main Bus Routes (coloured lines with black route numbers)

6	25.26	50.50A.52	80.80A
10.11	26.27.28 29.29A	51	81
12	31.31A	53.53A	84.84A.85
13A	36	54	86
14.14A	38.38A	54A	87
16	40	55	88.88A
17	44.44A	56	94
18	47.47A 48.48A	58.58A	104
21.21A	49.49A	70	162
22	49B	73	UHL
22A.22B		74	

Please note that services **10/11, 27 40** and **80A** do not operate to or from the City Centre

Other bus routes (grey lines with red numbers) X3
Routes running occasionally
Bus route terminus 14
Park & Ride service P&R

Travel Information

Bus station
Railway and station
Great Central Railway and station

Places of Interest

Cricket Ground
Football Ground
Rugby Ground
Hospital
Shopping Centre
County Hall

Leicester City Council
Leicestershire County Council
traveline public transport info 0871 200 22 33 (calls from landlines cost 10p per minute)
ARRIVA
Centrebus
First
Kinchbus
skylink leicester
Stagecoach greener smarter travel

Leicester - Blaby - Whetstone - Cosby - Broughton Astley - Lutterworth 84
Leicester - Blaby - Whetstone 84A
Leicester - Blaby - Countesthorpe - South Wigston 85

Monday to Friday

Route Number	84	85	84	85	84	85	85	84	84A	85	84	84A	85	84	
Note					BC		Sch								
Leicester, St. Margaret's Bus Stn	0626	0642	0657	0712	0722	0742	---	0757	0807	0817	0827	0837	0847	0857	
Leicester, Charles Street CB	0629	0645	0700	0715	0725	0745	---	0800	0810	0820	0830	0840	0850	0900	
Aylestone Road / Grace Road	0637	0653	0708	0723	0733	0753	---	0808	0818	0828	0838	0848	0858	0908	
Lutterworth Road/Gilmorton Avenue	---	---	---	---	---	---	0800	---	---	---	---	---	---	---	
Blaby, opp Social Centre	0652	0708	0723	0738	0748	0808	0804	0823	0833	0843	0853	0903	0913	0923	then
Countesthorpe, College	---	0716	---	0746	---	---	0812	---	---	0851	---	---	---	---	at
Countesthorpe, Square	---	0721	---	0751	---	0821	---	---	---	0856	---	---	0926	---	these
South Wigston, Canal Street/Blaby Roa	---	0727	---	0757	---	0827	---	---	---	0901	---	---	0931	---	mins
Countesthorpe Road	---	0728	---	0758	---	0828	---	---	---	0902	---	---	0932	---	past
Whetstone, Dog & Gun Lane	0702	---	0733	---	0758	---	---	0833	0843	---	0903	0913	---	0933	each
Cosby, Village Hall	0708	---	0739	---	0804	---	---	0839	---	---	0909	---	---	0939	hour
Broughton Astley, Bulls Head	0716	---	0747	---	0812	---	---	0847	---	---	0917	---	---	0947	
Broughton Astley, Red Admiral	0721	---	0752	---	0817	---	---	0852	---	---	0922	---	---	0952	
Dunton Bassett, Coopers Lane	---	---	0757	---	0822	---	---	0857	---	---	0927	---	---	0957	
Lutterworth, High Street	---	---	0805	---	0835	---	---	0905	---	---	0935	---	---	1005	

Route Number	84A	85	84	84A	85	84		84A	85	84	84A	85	84	84A	85
			every 10 mins												
Leicester, St. Margaret's Bus Stn	07	17	27	37	47	57		1607	1617	1627	1637	1647	1657	1707	1717
Leicester, Charles Street CB	10	20	30	40	50	00		1610	1620	1630	1640	1650	1700	1710	1720
Aylestone Road / Grace Road	18	28	38	48	58	08		1618	1630	1640	1650	1700	1710	1720	1730
Blaby, opp Social Centre	33	43	53	03	13	23		1633	1653	1703	1713	1723	1733	1743	1753
Countesthorpe, Square	--	56	--	--	26	--		---	1703	---	---	1736	---	---	1806
South Wigston, Canal Street/Blaby Roa	--	01	--	--	31	--	until	---	1711	---	---	1741	---	---	1811
Countesthorpe Road	--	02	--	--	32	--		---	1712	---	---	1742	---	---	1812
Whetstone, Dog & Gun Lane	43	--	03	13	--	33		1643	---	1713	1723	---	1743	1753	---
Cosby, Village Hall	--	--	09	--	--	39		---	---	1719	---	---	1749	---	---
Broughton Astley, Bulls Head	--	--	17	--	--	47		---	---	1727	---	---	1757	---	---
Broughton Astley, Red Admiral	--	--	22	--	--	52		---	---	1732	---	---	1802	---	---
Dunton Bassett, Coopers Lane	--	--	27	--	--	57		---	---	1737	---	---	1807	---	---
Lutterworth, High Street	--	--	35	--	--	05		---	---	1745	---	---	1815	---	---

Route Number	84	84A	85	84	84A	85	85	84	84	85	84A	85	84A	85	84A
Leicester, St. Margaret's Bus Stn	1727	1737	1747	1757	1807	1817	1817	1832	1832	1847	1915	1945	---	---	---
Leicester, Charles Street CB	1730	1740	1750	1800	1810	1820	1820	1835	1835	1850	1918	1948	2015	2045	2115
Aylestone Road / Grace Road	1740	1750	1800	1810	1820	1830	1830	1843	1843	1858	1925	1955	2025	2055	2125
Blaby, opp Social Centre	1803	1813	1823	1833	1843	1848	1848	1858	1858	1913	1939	2009	2039	2109	2139
Countesthorpe, Square	---	---	1836	---	---	1901	1901	---	---	1926	---	2020	---	2120	---
South Wigston, Canal Street/Blaby Roa	---	---	1841	---	---	1906	1906	---	---	1931	---	---	---	---	---
Countesthorpe Road	---	---	1842	---	---	1907	1907	---	---	1932	---	---	---	---	---
Whetstone, Dog & Gun Lane	1813	1823	---	1843	1853	---	---	1908	1908	---	1948	---	2048	---	1048
Cosby, Village Hall	1819	---	---	1849	---	---	---	1914	1914	---	---	---	---	---	---
Broughton Astley, Bulls Head	1827	---	---	1857	---	---	---	1922	1922	---	---	---	---	---	---
Broughton Astley, Red Admiral	1832	---	---	1902	---	---	---	1927	1927	---	---	---	---	---	---
Dunton Bassett, Coopers Lane	1837	---	---	1907	---	---	---	1932	1932	---	---	---	---	---	---
Lutterworth, High Street	1845	---	---	1915	---	---	---	---	---	---	---	---	---	---	---

Route Number	85	84A	85	84A
Leicester, Charles Street CB	2145	2215	2245	2315
Aylestone Road / Grace Road	2155	2225	2255	2325
Blaby, opp Social Centre	2209	2239	2309	2339
Countesthorpe, Square	2220	---	2320	---
South Wigston, Canal St/Blaby Road	---	---	2324	---
Countesthorpe Road	---	---	2325	---
Whetstone, Dog & Gun Lane	---	2248	---	2348

Notes: Sch - Schooldays **BC** - Operates via Bill Crane Way and Bitteswell Road in Lutterworth

Saturday

Route Number	84	85	84	85	84	85	84	84A	85	84	84A	85	84		84A
Leicester, St. Margaret's Bus Stn	0727	0742	0757	0812	0827	0842	0857	0907	0917	0927	0937	0947	0957		07
Leicester, Charles Street CB	0730	0745	0800	0815	0830	0845	0900	0910	0920	0930	0940	0950	1000		10
Aylestone Road / Grace Road	0738	0753	0808	0823	0838	0853	0908	0918	0928	0938	0948	0958	1008		18
Blaby, opp Social Centre	0753	0808	0823	0838	0853	0908	0923	0933	0943	0953	1003	1013	1023		33
Countesthorpe, Square	---	0821	---	0851	---	0921	---	---	0956	---	---	1026	---	then	--
South Wigston, Canal St/Blaby Road	---	0827		0857	---	0927			1001	---	---	1031	---	at	--
Countesthorpe Road	---	0828	---	0858	---	0928	---	---	1002	---	---	1032	---	these	--
Whetstone, Dog & Gun Lane	0803	---	0833	---	0903	---	0933	0943	---	1003	1013	---	1033	mins	43
Cosby, Village Hall	0809	---	0839	---	0909	---	0939	---	---	1009	---	---	1039	past	--
Broughton Astley, Bulls Head	0817	---	0847	---	0917	---	0947	---	---	1017	---	---	1047	each	--
Broughton Astley, Red Admiral	0822	---	0852	---	0922	---	0952	---	---	1022	---	---	1052	hour	--
Dunton Bassett, Coopers Lane	0827	---	0857	---	0927	---	0957	---	---	1027	---	---	1057		--
Lutterworth, High Street	0835	---	0905	---	0935	---	1005	---	---	1035	---	---	1105		--

Route Number	**85**	**84**	**84A**	**85**	**84**		**84A**	**85**	**84**	**84A**	**85**	**84**	**84A**	**85**	**84**
		every 10 mins													
Leicester, St. Margaret's Bus Stn	17	27	37	47	57		1607	1617	1627	1637	1647	1657	1707	1717	1727
Leicester, Charles Street CB	20	30	40	50	00		1610	1620	1630	1640	1650	1700	1710	1720	1730
Aylestone Road / Grace Road	28	38	48	58	08		1618	1628	1638	1648	1658	1708	1718	1728	1738
Blaby, opp Social Centre	43	53	03	13	23		1633	1643	1653	1703	1713	1723	1733	1743	1753
Countesthorpe, Square	56	--	--	26	--		---	1656	---	---	1726	---	---	1756	---
South Wigston, Canal St/Blaby Road	01	--	--	31	--	until	---	1701	---	---	1731	---	---	1801	---
Countesthorpe Road	02	--	--	32	--		---	1702	---		1732	---	---	1802	---
Whetstone, Dog & Gun Lane	--	03	13	--	33		1643	---	1703	1713	---	1733	1743	---	1803
Cosby, Village Hall	--	09	--	--	39		---	---	1709	---	---	1739	---	---	1809
Broughton Astley, Bulls Head	--	17	--	--	47		---	---	1717	---	---	1747	---	---	---
Broughton Astley, Red Admiral	--	22	--	--	52		---	---	1722	---	---	1752	---	---	1822
Dunton Bassett, Coopers Lane	--	27	--	--	57		---	---	1727	---	---	1757	---	---	1825
Lutterworth, High Street	--	35	--	--	05		---	---	1735	---	---	1805	---	---	1835

Route Number	**85**	**84**	**85**	**84**	**85**	**84A**	**85**	**84A**	**85**	**84A**	**85**	**84A**	**85**	**84A**
Leicester, St. Margaret's Bus Stn	1742	1757	1812	1827	1845	1915	1945	---	---	---	---	---	---	---
Leicester, Charles Street CB	1745	1800	1815	1830	1848	1918	1948	2015	2045	2115	2145	2215	2245	2315
Aylestone Road / Grace Road	1753	1808	1823	1838	1855	1925	1955	2025	2055	2125	2155	2225	2255	2325
Blaby, opp Social Centre	1808	1823	1838	1853	1909	1939	2009	2039	2109	2139	2209	2239	2309	2339
Countesthorpe, Square	1821	---	1851	---	1920	---	2020	---	2120	---	2220	---	2320	---
South Wigston, Canal St/Blaby Road	1826	---	1856	---	1924	---	---	---	---	---	---	---	2324	---
Countesthorpe Road	1827	---	1857	---	1925	---	---	---	---	---	---	---	2325	---
Whetstone, Dog & Gun Lane	---	1833	---	1903	---	1948	---	2048	---	1048	---	2248	---	2348
Cosby, Village Hall	---	1839	---	1909	---	---	---	---	---	---	---	---	---	---
Broughton Astley, Bulls Head	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Broughton Astley, Red Admiral	---	1852	---	1922	---	---	---	---	---	---	---	---	---	---
Dunton Bassett, Coopers Lane	---	---	---	1927	---	---	---	---	---	---	---	---	---	---
Lutterworth, High Street	---	1905	---	---	---	---	---	---	---	---	---	---	---	---

Leicester - Blaby - Whetstone — 84A
Leicester - Blaby - Countesthorpe — 85

Sunday and Bank Holiday Monday

Route Number	85	84A	then	85	84A		85	84A	85
			at	every 30 mins					
Leicester, Charles Street CB	0945	1015	these	45	15		1645	1715	1745
Aylestone Road / Grace Road	0955	1025	mins	55	25	until	1655	1725	1755
Blaby, opp Social Centre	1009	1039	past	09	39		1709	1739	1809
Countesthorpe, Square	1020	---	each	20	--		1720	---	1820
Whetstone, Dog & Gun Lane	---	1048	hour	--	48		---	1748	---

Lutterworth - Broughton Astley - Cosby - Whetstone - Blaby - Leicester — 84
Whetstone - Blaby - Leicester — 84A
South Wigston - Countesthorpe - Blaby - Leicester — 85

Monday to Friday

Route Number	85	84	85	84	85	84	85	84A	84	85	84	84A	85	84	84A
Lutterworth, High Street	---	---	---	---	---	---	---	---	0635	---	---	---	---	---	---
Lutterworth, Coventry Rd/Red Arrow	---	---	---	---	---	---	---	---	0640	---	---	---	---	---	---
Lutterworth, George Street	---	---	---	---	---	---	---	---	0648	---	---	---	---	---	---
Dunton Bassett, Coopers Lane	---	0543	---	0608	---	0633	---	---	0658	---	---	---	---	0746	---
Broughton Astley, Red Admiral	---	0547	---	0612	---	0637	---	---	0701	---	0721	---	---	0751	---
Broughton Astley, Bulls Head	---	0554	---	0619	---	0644	---	---	0708	---	0728	---	---	0758	---
Cosby, Village Hall	---	0606	---	0631	---	0656	---	---	0720	---	0740	---	---	0810	---
Whetstone, Dog & Gun Lane	---	0611	---	0636	---	0701	---	0716	0726	---	0746	0756	---	0816	0826
Countesthorpe Road	0549	---	0619	---	0644	---	0659	---	---	0729	---	---	0759	---	---
Countesthorpe, Square	0556	---	0626	---	0651	---	0706	---	---	0736	---	---	0806	---	---
Blaby, Social Centre	0608	0623	0638	0648	0703	0713	0718	0728	0738	0748	0758	0808	0818	0828	0838
Aylestone Road / Grace Road	0619	0634	0649	0659	0714	0724	0729	0739	0749	0759	0809	0819	0829	0839	0849
Leicester, St. Margaret's Bus Stn	0634	0649	0704	0714	0729	0739	0749	0759	0809	0819	0829	0839	0849	0859	0909

Route Number	85	84A	84	85		84A	84	85	84A	84	85		84A	84	85
Lutterworth, High Street	---	---	0805	---		--	35	--	--	05	--		---	1335	---
Lutterworth, Coventry Rd/Red Arrow	---	---	0811	---	then	--	41	--	--	11	--		---	1341	---
Lutterworth, George Street	---	---	0823	---	at	--	53	--	--	23	--		---	1353	---
Dunton Bassett, Coopers Lane	---	---	0833	---	these	--	03	--	--	33	--		---	1403	---
Broughton Astley, Red Admiral	---	---	0836	---	mins	--	06	--	--	36	--	until	---	1406	---
Broughton Astley, Bulls Head	---	---	0843	---	past	--	13	--	--	43	--		---	1413	---
Cosby, Village Hall	---	---	0855	---	each	--	25	--	--	55	--		---	1425	---
Whetstone, Dog & Gun Lane	---	0851	0901	---	hour	21	31	--	51	01	--		1421	1431	---
Countesthorpe Road	0829	---	---	0904		--	--	34	--	--	04		---	---	1434
Countesthorpe, Square	0836	---	---	0911		--	--	41	--	--	11		---	---	1441
Blaby, Social Centre	0848	0903	0913	0923		33	43	53	03	13	23		1433	1443	1453
Aylestone Road / Grace Road	0859	0914	0924	0934		44	54	04	14	24	34		1444	1454	1504
Leicester, St. Margaret's Bus Stn	0919	0929	0939	0949		59	09	19	29	39	49		1459	1509	1519

Route Number		84A	84 $	85 SHol	85 Sch	84 $	85	84	85	84	85	84	85	84	85
Lutterworth, High Street		---	1405	---	---	1435	---	1505	---	1535	---	1605	---	1635	---
Lutterworth, Coventry Rd/Red Arrow		---	1411	---	---	1441	---	1511	---	1541	---	1611	---	1641	---
Lutterworth, George Street		---	1423	---	---	1453	---	1523	---	1553	---	1623	---	1653	---
Dunton Bassett, Coopers Lane		---	1433	---	---	1503	---	1533	---	1603	---	1633	---	1703	---
Broughton Astley, Red Admiral		---	1436	---	---	1506	---	1536	---	1606	---	1636	---	1706	---
Broughton Astley, Bulls Head		---	1443	---	---	1513	---	1543	---	1613	---	1643	---	1713	---
Cosby, Village Hall		---	1455	---	---	1525	---	1555	---	1625	---	1655	---	1725	---
Whetstone, Dog & Gun Lane		1451	1501	---	---	1531	---	1601	---	1631	---	1701	---	1731	---
Countesthorpe Road		---	---	1504	1504	---	1539	---	1609	---	1639	---	1714	---	1742
Countesthorpe, Square		---	---	1511	1511	---	1546	---	1616	---	1646	---	1721	---	1749
Countesthorpe, College	arr	---	---	---	1516	---	---	---	---	---	---	---	---	---	---
Countesthorpe, College	**dep**	---	---	---	1522	---	---	---	---	---	---	---	---	---	---
Blaby, Social Centre		1503	1513	1523	1529	1543	1558	1613	1628	1643	1658	1713	1733	1743	1801
Aylestone Road / Grace Road		1514	1524	1534	1540	1554	1609	1624	1639	1654	1709	1724	1744	1754	1812
Leicester, St. Margaret's Bus Stn		1529	1539	1549	1555	1609	1624	1639	1654	1709	1724	1739	1759	1809	1827

Route Number	84	84	85	84	85	84	84A	84	85	84A	85	84A	85
Lutterworth, High Street	1705	1745	---	1815	---	1845	---	1915	---	---	---	---	---
Lutterworth, Coventry Rd/Red Arrow	1711	1751	---	1821	---	1851	---	1921	---	---	---	---	---
Lutterworth, George Street	1723	1757	---	1827	---	1857	---	1927	---	---	---	---	---
Dunton Bassett, Coopers Lane	1733	---	---	1837	---	---	---	---	---	---	---	---	---
Broughton Astley, Red Admiral	1736	---	---	1840	---	---	---	---	---	---	---	---	---
Broughton Astley, Bulls Head	1743	---	---	1846	---	---	---	---	---	---	---	---	---
Cosby, Village Hall	1755	---	---	1858	---	---	---	---	---	---	---	---	---
Whetstone, Dog & Gun Lane	1801	---	---	1903	---	---	1952	---	---	2052	---	2152	---
Countesthorpe Road	---	---	1825	---	1916	---	---	---	---	---	---	---	---
Countesthorpe, Square	---	---	1831	---	1922	---	---	---	2022	---	2122	---	2222
Blaby, Social Centre	1813	---	1841	1914	1932	---	2002	---	2032	2102	2132	2202	2232
Aylestone Road / Grace Road	1824	---	1851	1925	1942	---	2012	---	2042	2112	2142	2212	2242
Leicester, Charles Street CB	---	---	---	---	1956	---	2026	---	2056	2126	2156	2226	2256
Leicester, St. Margaret's Bus Stn	1839	---	1905	1940	---	---	---	---	---	---	---	---	---

Notes: Sch - Schooldays, **SHol** - School holidays, **$** - These journeys do not serve Woodmarket or Woodway Road in Lutterworth

Saturday

Route Number	85	84	85	84	85	84	85	84A	84	85	84A	84	85	84A	84
Lutterworth, High Street	---	---	---	0635	---	---	---	---	0735	---	---	---	---	---	0835
Lutterworth, Coventry Rd/Red Arrow	---	---	---	0641	---	---	---	---	0741	---	---	---	---	---	0841
Lutterworth, George Street	---	---	---	0649	---	---	---	---	0753	---	---	---	---	---	0853
Dunton Bassett, Coopers Lane	---	0627	---	0659	---	0727	---	---	0803	---	---	0832	---	---	0903
Broughton Astley, Red Admiral	---	0631	---	0701	---	0731	---	---	0806	---	---	0836	---	---	0906
Broughton Astley, Bulls Head	---	0638	---	0708	---	0738	---	---	0813	---	---	0843	---	---	0913
Cosby, Village Hall	---	0650	---	0720	---	0750	---	----	0825	---	---	0855	---	---	0925
Whetstone, Dog & Gun Lane	---	0656	---	0726	---	0756	---	0821	0831	---	0851	0901	---	0921	0931
Countesthorpe Road	0634	---	0704	---	0734	---	0804	---	---	0834	---	---	0904	---	---
Countesthorpe, Square	0641	---	0711	---	0741	---	0811	---	---	0841	---	---	0911	---	---
Blaby, Social Centre	0653	0708	0723	0738	0753	0808	0823	0833	0843	0853	0903	0913	0923	0933	0943
Aylestone Road / Grace Road	0704	0719	0734	0749	0804	0819	0834	0844	0854	0904	0914	0924	0934	0944	0954
Leicester, St. Margaret's Bus Stn	0719	0734	0749	0804	0819	0834	0849	0859	0909	0919	0929	0939	0949	0959	1009

Route Number	85	84A		84	85	84A	84	85	84A		84	85	84A	84	85
Lutterworth, High Street	---	---		05	--	--	35	--	--		1505	---	---	1535	---
Lutterworth, Coventry Rd/Red Arrow	---	---		11	--	--	41	--	--		1511	---	---	1541	---
Lutterworth, George Street	---	---		23	--	--	53	--	--		1523	---	---	1553	---
Dunton Bassett, Coopers Lane	---	---	then	33	--	--	03	--	--		1533	---	---	1603	---
Broughton Astley, Red Admiral	---	---	at	36	--	--	06	--	--		1536	---	---	1606	---
Broughton Astley, Bulls Head	---	---	these	43	--	--	13	--	--		1543	---	---	1613	---
Cosby, Village Hall	---	---	mins	55	--	--	25	--	--	until	1555	---	---	1625	---
Whetstone, Dog & Gun Lane	---	0951	past	01	--	21	31	--	51		1601	---	1621	1631	---
Countesthorpe Road	0934	---	each	--	04	--	--	34	--		---	1604	---	---	1634
Countesthorpe, Square	0941	---	hour	--	11	--	--	41	--		---	1611	---	---	1641
Blaby, Social Centre	0953	1003		13	23	33	43	53	03		1613	1623	1633	1643	1653
Aylestone Road / Grace Road	1004	1014		24	34	44	54	04	14		1624	1634	1644	1654	1704
Leicester, St. Margaret's Bus Stn	1019	1029		39	49	59	09	19	29		1639	1649	1659	1709	1719

Route Number	84	85	84	85	84	84	85	84	85	84	84	84A	85	84A	85
Lutterworth, High Street	1605	---	1635	---	1705	1735	---	1805	---	1835	1905	---	---	---	---
Lutterworth, Coventry Rd/Red Arrow	1611	---	1641	---	1711	1741	---	1811	---	1841	1911	---	---	---	---
Lutterworth, George Street	1620	---	1650	---	1726	1747	---	1827	---	1847	1917	---	---	---	---
Dunton Bassett, Coopers Lane	1630	---	1700	---	1736	---	---	1837	---	---	---	---	---	---	---
Broughton Astley, Red Admiral	1633	---	1703	---	1739	---	---	1840	---	---	---	---	---	---	---
Broughton Astley, Bulls Head	1640	---	1710	---	1746	---	---	1846	---	---	---	---	---	---	---
Cosby, Village Hall	1652	---	1722	---	1758	---	---	1858	---	---	---	---	---	---	---
Whetstone, Dog & Gun Lane	1658	---	1728	---	1803	---	---	1903	---	---	---	1952	---	2052	---
Countesthorpe Road	---	1706	---	1736	---	---	1825	---	1916	---	---	---	---	---	---
Countesthorpe, Square	---	1713	---	1743	---	---	1831	---	1922	---	---	---	2022	---	2122
Blaby, Social Centre	1710	1725	1740	1755	1814	---	1841	1914	1932	---	---	2002	2032	2102	2132
Aylestone Road / Grace Road	1721	1736	1751	1806	1825	---	1851	1925	1942	---	---	2012	2042	2112	2142
Leicester,Charles Street	---	---	---	---	---	---	1904	1939	1956	---	---	2026	2056	2126	2156
Leicester, St. Margaret's Bus Stn	1736	1751	1806	1821	1840	---	1905	1940	---	---	---	---	---	---	---

Route Number	84A	85
Whetstone, Dog & Gun Lane	2152	---
Countesthorpe, Square	---	2222
Blaby, Social Centre	2202	2232
Aylestone Road / Grace Road	2212	2242
Leicester,Charles Street CA	2226	2256

Whetstone - Blaby - Leicester 84A
Countesthorpe - Blaby - Leicester 85

Sunday and Bank Holiday Monday

Route Number	84A	85	then	84A	85		84A	85	84A
Whetstone, Dog & Gun Lane	0852	---	at	52	--		1552	---	1652
Countesthorpe, Square	---	0922	these	--	22		---	1622	---
Blaby, Social Centre	0902	0932	mins	02	32	until	1602	1632	1702
Aylestone Road / Grace Road	0912	0942	past	12	42		1612	1642	1712
Leicester, Charles Street CB	0926	0956	each hour	26	56		1626	1656	1726

Appendix E
Cycle Route Map

Cycling map LEICESTER

N1 FREE

Collect the series of six cycling maps
Latest versions available for download at www.leics.gov.uk/cycling

This map has been prepared in consultation with Leicester Cycle-city Workshop representing bike projects, clubs and organisations supporting cycling across Leicester.

If you would like help in understanding the text on this leaflet in an alternative language or require it in a larger font/audio format please contact Leicestershire County Council on 0116 252 7000. The map section can be enlarged if required.

Users of these routes do so at their own risk. Refer to the good cycling tips inside this leaflet.

Designed by Leicestershire County Council Environment Section Tel 0116 305 6973
Published by CycleCity Guides for Leicestershire County Council Highways Transport Property Guides, The Woodyard, Park Hill Drive, Frome, Somerset, BA11 2LE. www.cyclecityguides.com. This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

The representation of a road or track is no evidence of a right of way. Users of all routes shown on this map do so entirely at their own risk. We cannot guarantee that all routes will always be available to the public or passable by bike particularly in wet weather. Leicester City Council and CycleCity Guides accept no responsibility for omissions or errors.

LEICESTER South

KEY

- Recommended route
- National Cycle Network On-road / Off-road
- Off-road surfaced / unsurfaced
- Bridleway
- Pedestrian street / with restricted vehicle access
- Footway where you should walk your bike
- On-road cycle lane
- Bus lane
- One way
- Railway with station / Level crossing
- Cycle parking
- Toucan crossing
- Pelican crossing
- School / College / University
- Hospital
- Library
- Park and ride

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Ordnance Survey 100019226

LOOK OUT FOR THESE SIGNS

- Shared route for cyclists and pedestrians together
- Segregated route for cyclists and pedestrians on separate side of path
- Route for use by cyclists only
- Route recommended for pedal cyclists (usually on road with no special provision)
- Caution - cycle route ahead
- Cycle parking
- No cycling
- Direction to cycle parking
- With-flow cycle lane ahead
- Direction sign showing route recommended for cyclists
- Direction sign for National Cycle Route
- With-flow cycle lane
- Warning to drivers of cycle lane at junction

Road sign images are Crown copyright.

Advanced stop lines

Some signal-controlled junctions have advanced stop lines which allow cycles to move into a 'safe area' ahead of motorists.

Cyclists must stop at the advanced cycle stop line and only proceed when the lights are green.

Motorists must stay behind the motor vehicle stop line and not obstruct the forward 'safe area'.

Braunstone
Leicester Forest East
Highfields
Stoneygate
Stoughton
Leicester Airport
Knighton
Oadby
Aylestone
Enderby
Narborough
Eyres Monsell
Saint Marys
Wigston
South Wigston
Whetstone
Huncote
Littlethorpe
Blaby
Croft
Cosby
Countesthorpe

15 minutes cycling will take you this far at 6 mph
21 minutes cycling will take you this far at 6 mph
27 minutes cycling will take you this far at 6 mph
33 minutes cycling will take you this far at 6 mph

Leicester City Council

LEICESTER South

Appendix F

Transport Assessment Scoping Note and highway authority Correspondence

Proposed Residential Development
Land off Cork Lane
Glen Parva
Leicestershire

Scoping for Transport Assessment

Cedar Barn, White Lodge,
Walgrave,
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Proposed Residential Development
Land off Cork Lane
Glen Parva
Leicestershire

Scoping for Transport Assessment

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Report Reference	R-TAS-R6711PP-01-0

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		Page no	Revision
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A	Site Location Plan - JPP drawing no. R6711PP-TA01
B	Proposed Development
C	TRICS Trip Rates
D	Vehicle Trip Distribution
E	Vehicle Trip Data

1.0 Introduction

1.1 This report has been prepared to scope a Transport Assessment for a proposed residential development comprising 166 dwellings. The proposed development is located at land off Cork Lane, Glen Parva. Glen Parva is located to the south of Leicester and north of Blaby as shown on Figure 1 below.

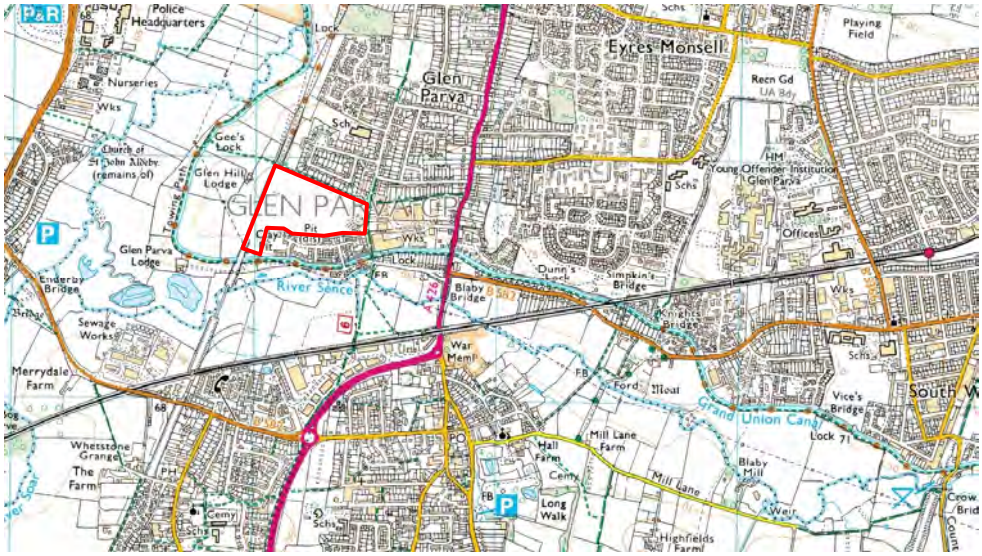


Figure 1: Site Location Plan

1.2 This scoping document has been prepared with reference to Guidance on Transport Assessments published by the Department for Transport in 2007 and summarises the requirements for the contents of the TA in relation to the following:

- Traffic counts and traffic growth
- Trip generation, distribution and assignment
- Committed developments
- Junction assessments
- Accident analysis
- Sustainable transport

1.3 The Transport Assessment will support an outline planning application with access unreserved.

2.0 Site Description and Development Proposals

2.1 Site Location

2.1.1 The proposed residential development is located at land off Cork Lane, Glen Parva. Glen Parva is located to the south of Leicester and north of Blaby as shown on the location plan in Figure 1 and enclosed in Appendix A. The proposed development is bound by residential development to the north and south, agricultural land to the west and Cork Lane to the east.

2.2 Development Description

2.2.1 The proposed development will comprise 166 residential dwellings.

2.2.2 The proposed development layout is shown on the plan enclosed in Appendix B.

2.3 Vehicular Access

2.3.1 The proposed development will provide a single all movements access off Cork Lane. The location of the accesses is shown on the plan enclosed in Appendix B.

2.4 Pedestrian and Cycle Access

2.4.1 The vehicle access for the development will provide pedestrians and cyclists with access into the development.

2.5 Parking

2.5.1 Car and cycle parking for the development will be provided in line with guidance set out in the 6Cs Design Guide.

2.6 Accessibility

2.6.1 The Transport Assessment will provide an assessment of the accessibility to key local facilities close to the development site by sustainable modes of transport. This will set out acceptable walking and cycling distances as well as providing a comparison of the work destinations based on current census data and destinations that are within the acceptable walking and cycling distance and public transport destinations.

2.6.2 A framework travel plan shall be prepared to supplement the TA.

2.7 Personnel Injury Accidents

2.7.1 Personnel injury accident records shall be obtained from Leicestershire County Council for the most recent five year period. The personnel injury accident records will be analysed to indentify any common accident cause, with particular reference to pedestrian and cyclists accidents.

3.0 Vehicular Impact Assessment

3.1 Introduction

3.1.1 This section will set out the parameters for the vehicular impact assessment and will define:

- The person trip generation rates;
- Travel Mode;
- Vehicle Trip Numbers;
- Proposed distribution and assignment;
- Committed developments / growth factors;
- Assessment years;
- Background Traffic; and
- Assessment locations.

3.2 Person Generation Rates

3.2.1 Person trip generation rates have been obtained from the TRICS database version 2013(6)v6.12.2. The TRICS data is enclosed in Appendix C. Person trip rates are shown in table 3.2.2 below.

Person Trip Rates

		AM Peak (0800-0900)			PM Peak (1700-1800)		
		Arr	Dep	Total	Arr	Dep	Total
Dwellings	Person trips per dwelling	0.230	0.708	0.938	0.553	0.344	0.897

Table 3.2.2

3.3 Travel Mode

3.3.1 Travel to work data for the resident population of the Saxondale Ward has been obtained from the 2011 Census and is set out below in table 3.3.1. This will be used to assign the person trip rates for the development.

Method of Travel to Work Resident Population – Saxondale Ward 2011 Census	
Mode	Percentage
Driving a Car or Van	73.6%
On Foot	8.3%
Bus, Minibus or Coach	6.5%
Passenger in a Car or Van	5.7%
Bicycle	4.0%
Train	0.8%
Motorcycle, Scooter or Moped	0.7%
Taxi	0.3%

Table 3.3.1

3.4 Vehicle Trip Numbers

3.4.1 From the trip generation rates and mode assignment data above the predicted number of vehicles which will be generated by the 166 dwelling development in the AM 0800-0900 and PM 1700-1800 peak periods can be calculated. These are shown in table 3.4.1 below full details are enclosed in Appendix D.

Predicted Vehicle Trip Numbers							
		AM Peak (0800-0900)			PM Peak (1700-1800)		
		Arr	Dep	Total	Arr	Dep	Total
Dwellings	166 dwellings	28	86	115	68	42	110

Table 3.4.1

3.4.2 It can be seen that the proposed development is predicted to generate 115 and 110 vehicle trips in the morning and evening peak periods respectively. This equates to approximately one new vehicle on the highway network every 30 seconds.

3.5 Proposed distribution and assignment

3.5.1 Vehicle trip distribution data has been obtained from the 2001 Census Travel to Work data for the Saxondale ward. Proposed vehicle trips have been assigned to the highway network using online route planning software. Trip distribution and assignment calculations are shown in Appendix D.

5.8.1.2 From these assignment proportions the predicted number of new vehicles on the highway network can be calculated. The new vehicle trips at key locations can be seen on the drawings enclosed in Appendix E.

3.6 Committed developments / growth factors

3.6.1 We are not aware of any significant committed developments within the vicinity of the proposed development. Therefore background traffic will be growthed utilising the most recent release of NTEM and NTM growth factors.

3.7 Assessment years

3.7.1 A planning application will be submitted in 2013 therefore junction analysis will be completed for assessment years of 2015 (opening) and 2018 (five years post registration) in line with guidance set out with Department of Transport publication 'Guidance for Transport Assessment'.

3.8 Background Traffic

3.8.1 Background traffic counts will be completed in November 2013 at each of the junctions identified for assessment below. Classified turning counts will be completed for the periods 0730-0930 and 1630-1830.

3.9 Assessment locations

3.9.1 Assessment of vehicle impact will be completed at the junctions listed below. All of these junctions are predicted to have an increase of one-way vehicle trips of 30 or greater. A 30 trip threshold is selected as this is 50% below the threshold for a Transport Assessment identified in 'Guidance for Transport Assessment' Appendix B which recommends a transport assessment for any development generating 30 or more two-way vehicle trips.

- Glenville Road / Leicester Road;
- Leicester Road / Little Glen Road;
- Leicester Road / Soar Valley Way / Glenhills Way; and
- Leicester Road / Middleton Street.

4.0 Summary

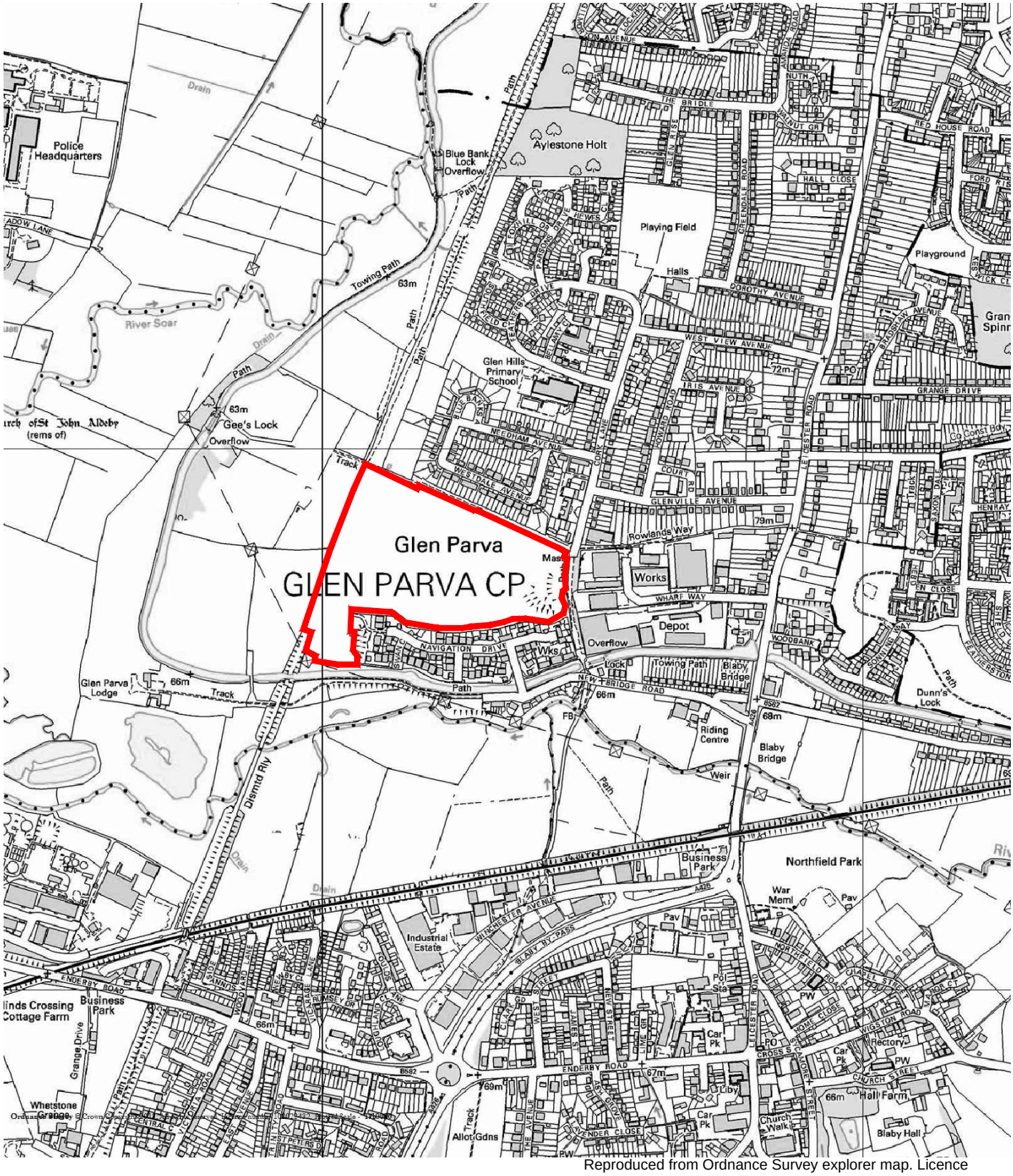
4.1 This scoping report for a Transport Assessment for a residential development has provided information on the issues proposed to be considered in the Transport Assessment. It has also provided information on the proposed arrangements for access and vehicular impact assessment.

Appendix A

Site Location Plan

JPP drawing no. R6711PP-TA101

Client	MANOR OAK HOMES			Date OCTOBER 2013	jpp consulting Civil & Structural Engineers T: (01604) 781811 E: mail@jppuk.net F: (01604) 781999 W: www.jppuk.net
Project	Residential Development Glen Parva, Leicester			Drawn by DGB	
Title	Location Plan			Checked by	
Project ref R6711/PP		Drawing no. TA01	Revision	Scale at A4 1:10000	



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Appendix B
Proposed Development

Site Area	= 10.60 ha
Development Area	= 6.15 ha
POS & Area of Natural Open Space	= 4.45 ha
Total Number of Dwellings	= 166 units
Site Density	= 27 p/ha

Revision:		Date:
A	Layout modified to reduce development area following comments from engineers & client	SA 11.10.13
B	Focal routes introduced to west side of development	SA 17.10.13

DRAFT

N

Architects · Project Managers · Quantity Surveyors
130 New Walk
Leicester, LE1 7JA
Tel: 0116 204 5800, Fax: 0116 204 5801
email: design@rg-p.co.uk, www.rg-p.co.uk

Project: Residential Development
Cork Lane, Glen Pava

Client: Manor Oak Homes

Sheet title: Proposed Masterplan

Ref: 7779 / 005 B

Scale: 1:1, 1:1000 @ A1

Date: 27/09/13

Drawn: SA Checked: RAW

All dimensions to be checked on site. This drawing is the copyright of the Architect, and not to be reproduced without their permission. Ordnance Survey map information reproduced with permission of HMSO Crown Copyright reserved.
rg+p Ltd. Trading as rg+p.

Appendix C
TRICS Trip Rates

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	2 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	TV	TEES VALLEY	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: 6 to 372 (units:)
Range Selected by User: 6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 23/10/12

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

Selected survey days:

Monday	2 days
Tuesday	8 days
Wednesday	3 days
Thursday	6 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:

Suburban Area (PPS6 Out of Centre)	21
Neighbourhood Centre (PPS6 Local Centre)	2

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	20
No Sub Category	3

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	22 days

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

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	2 days
10,001 to 15,000	4 days
15,001 to 20,000	8 days
20,001 to 25,000	4 days
25,001 to 50,000	3 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	2 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	3 days
125,001 to 250,000	5 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	9 days
1.1 to 1.5	13 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 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

2 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

3 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

4 CW-03-A-01 TERRACED CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

5 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

6 DS-03-A-01 SEMI D./TERRACED DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

7 LN-03-A-02 MIXED HOUSES LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

9 MS-03-A-01 TERRACED MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

10 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

11 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

12 NY-03-A-01 MIXED HOUSES NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

13 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

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-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 23/10/12 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 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

18 TV-03-A-01 HOUSES & FLATS TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

19 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY 21/10/11 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-02 DETACHED & SEMI DET. WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 WO-03-A-01 DETACHED WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	23	78	0.102	23	78	0.367	23	78	0.469
08:00 - 09:00	23	78	0.230	23	78	0.708	23	78	0.938
09:00 - 10:00	23	78	0.231	23	78	0.328	23	78	0.559
10:00 - 11:00	23	78	0.237	23	78	0.290	23	78	0.527
11:00 - 12:00	23	78	0.261	23	78	0.257	23	78	0.518
12:00 - 13:00	23	78	0.285	23	78	0.273	23	78	0.558
13:00 - 14:00	23	78	0.268	23	78	0.262	23	78	0.530
14:00 - 15:00	23	78	0.268	23	78	0.310	23	78	0.578
15:00 - 16:00	23	78	0.527	23	78	0.342	23	78	0.869
16:00 - 17:00	23	78	0.485	23	78	0.309	23	78	0.794
17:00 - 18:00	23	78	0.553	23	78	0.344	23	78	0.897
18:00 - 19:00	23	78	0.380	23	78	0.349	23	78	0.729
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.827			4.139			7.966

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:	6 - 372 (units:)
Survey date date range:	01/01/05 - 23/10/12
Number of weekdays (Monday-Friday):	23
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

Appendix D
Vehicle Trip Distribution

2001 census - UK travel flows (ward)

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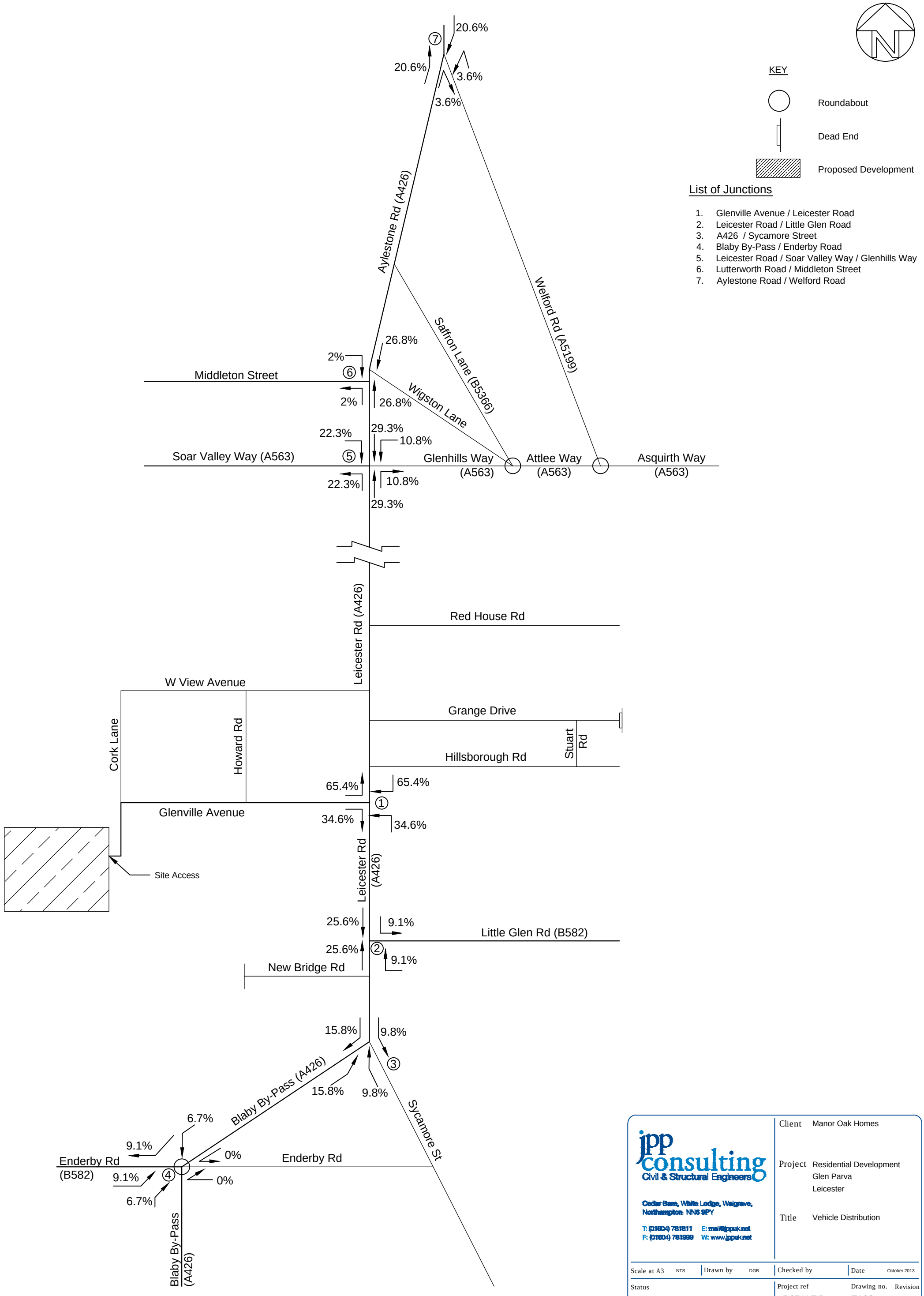
area of residence: 31UBGP : Saxondale (2003 CAS ward)

date: 2001

					Glenville Av / A426				A426 / A563						A426 / Middleton St				A426 Aylestone Rd / A594 Welford Road				A426 Leic Rd / B582 Little Glen Road				A426 Blaby By Pass / Sycamore St				A426 Blaby By Pass / B582 Enderby Road			
					N	S	N	S	W	N	E	W	N	E	N	W	N	W	N	S	N	S	S	E	S	E	W	S	W	S	W	S	W	S
							100.0%					62.5%					28.8%				24.2%				34.6%				25.6%				15.8%			
							65.4%	34.6%				22.3%	29.3%	10.8%			26.8%	2.0%			20.6%	3.6%			25.6%	9.1%			15.8%	9.8%			9.1%	6.7%		
area of workplace : 2003 CAS ward	**Local Authority**	**1,514**					989.5	524.5				338	444	164			406	30			312	55			387.45	137.05			239	148.45			138	101		
Belgrave	Leicester City	7	00FNNJ	A426 N	1		7	0		1		0	7	0	1		7	0	1		7	0												
Castle	Leicester City	194	00FNNL	A426 N	1		194	0		1		0	194	0	1		194	0	1		194	0												
Charnwood	Leicester City	6	00FNNM	A426 N - A594S	1		6	0		1		0	6	0	1		6	0		1	0	6												
Coleman	Leicester City	14	00FNNN	A426 N - A594S	1		14	0		1		0	14	0	1		14	0		1	0	14												
Freemen	Leicester City	42	00FNNS	A426 N - A563 E - B5366 N	1		42	0			1	0	0	42			0	0			0	0												
Humberstone and Hamilton	Leicester City	6	00FNNT	A426 N - A594S	1		6	0		1		0	6	0	1		6	0		1	0	6												
Latimer	Leicester City	15	00FNNW	A426 N - A594S	1		15	0		1		0	15	0	1		15	0		1	0	15												
Thurmaston	Charnwood	12	31UCHK	A426 N	1		12	0		1		0	12	0	1		12	0	1		12	0												
Abbey	Leicester City	49	00FNNF	A426 N	1		49	0		1		0	49	0	1		49	0	1		49	0												
Aylestone	Leicester City	29	00FNNG	A426 N	1		29	0		1		0	29	0	1		29	0	0	0	0	0												
Ravenhurst and Fosse	Blaby	6	31UBGN	A426 N - Braunstone Ln W	1		6	0		1		0	6	0		1	0	6			0	0												
Stoneygate	Leicester City	10	00FNPA	A426 N - A5199 S - B568 E	1		10	0		1		0	10	0	1		10	0	0	0	0	0												
Braunstone Park and Rowley Fields	Leicester City	9	00FNNK	A426 N - A5460 N	1		9	0			1	0	0	9			0	0			0	0												
Thurnby and Houghton	Harborough	4	31UDHC	A426 N - A563 E	1		4	0			1	0	0	4			0	0			0	0												
Knighton	Leicester City	15	00FNNU	A426 N - A563 E - A5199 N	1		15	0			1	0	0	15			0	0			0	0												
Wigston St Wolstan's	Oadby and Wigston	16	31UJFW	A426 N - A563 E - A5199 S	1		16	0			1	0	0	16			0	0			0	0												
Evington	Leicester City	20	00FNNP	A426 N - A563 E - A6 N	1		20	0			1	0	0	20			0	0			0	0												
Oadby Brocks Hill	Oadby and Wigston	4	31UJFL	A426 N - A563 E - A6 S	1		4	0			1	0	0	4			0	0			0	0												
Oadby Grange	Oadby and Wigston	7	31UJFM	A426 N - A563 E - A6 S	1		7	0			1	0	0	7			0	0			0	0												
Oadby St Peter's	Oadby and Wigston	15	31UJFN	A426 N - A563 E - A6 S	1		15	0			1	0	0	15			0	0			0	0												
Wigston Fields	Oadby and Wigston	32	31UJFT	A426 N - A563 E - B5418	1		32	0			1	0	0	32			0	0			0	0												
Enderby and St John's	Blaby	74	31UBGD	A426 N - A563 W - B4114	1		74	0	1			74	0	0			0	0			0	0												
Beaumont Leys	Leicester City	63	00FNNH	A426 N - A563 W - M1 N	1		63	0	1			63	0	0			0	0			0	0												
Anstey	Charnwood	5	31UCGG	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Loughborough Lemyngton	Charnwood	9	31UCGS	A426 N - A563 W - M1 N	1		9	0	1			9	0	0			0	0			0	0												
Loughborough Southfields	Charnwood	5	31UCGX	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Syston West	Charnwood	7	31UCHH	A426 N - A563 W - M1 N	1		7	0	1			7	0	0			0	0			0	0												
Groby	Hinckley and Bosworth	5	31UEGC	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Hinckley Castle	Hinckley and Bosworth	10	31UEGD	A426 N - A563 W - M1 N	1		10	0	1			10	0	0			0	0			0	0												
Hinckley Clarendon	Hinckley and Bosworth	11	31UEGE	A426 N - A563 W - M1 N	1		11	0	1			11	0	0			0	0			0	0												
Hinckley De Montfort	Hinckley and Bosworth	4	31UEGF	A426 N - A563 W - M1 N	1		4	0	1			4	0	0			0	0			0	0												
Markfield, Stanton and Fieldhead	Hinckley and Bosworth	5	31UEGH	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Ratby, Bagworth and Thornton	Hinckley and Bosworth	5	31UEGK	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Coalville	North West Leicestershire	11	31UHGG	A426 N - A563 W - M1 N	1		11	0	1			11	0	0			0	0			0	0												
St Crispin	Northampton	4	34UFGQ	A426 N - A563 W - M1 S	1		4	0	1			4	0	0			0	0			0	0												
Brownsover South	Rugby	6	44UDGE	A426 N - A563 W - M1 S	1		6	0	1			6	0	0			0	0			0	0												
Cheylesmore	Coventry	6	00CQFC	A426 N - A563 W - M69	1		6	0	1			6	0	0			0	0			0	0												
Bickenhill	Solihull	5	00CTFA	A426 N - A563 W - M69	1		5	0	1			5	0	0			0	0			0	0												
Millfield	Blaby	6	31UBGG	A426 N - A563 W - A5460 N	1		6	0	1			6	0	0			0	0			0	0												
New Parks	Leicester City	37	00FNNX	A426 N - A563 W - A563 N	1		37	0	1			37	0	0			0	0			0	0												
Ellis	Blaby	8	31UBGC	A426 N - A563 W - A563 N	1		8	0	1			8	0	0			0	0			0	0												
Fairestone	Blaby	11	31UBGE	A426 N - A563 W - A563 N	1		11	0	1			11	0	0			0	0			0	0												
Winstanley	Blaby	41	31UBGR	A426 N - A563 W - A563 N	1		41	0	1			41	0	0			0	0			0	0												
Stanton and Flamville	Blaby	6	31UBGQ	A426 S - B582 - B4114 S		1	0	6				0	0	0			0	0			0	0	1		6	0	1		6	0	1		6	0
Narborough and Littlethorpe	Blaby	23	31UBGJ	A426 S - B582 - B4114 S		1	0	23				0	0	0			0	0			0	0	1		23	0	1		23	0	1		23	0
Pastures	Blaby	38	31UBGM	A426 S - B582		1	0	38				0	0	0			0	0			0	0	1		38	0	1		38	0	1		38	0
Fosse	Leicester City	24	00FNNR	A426 N - A594 N - A50	1		24	0		1		0	24	0	1		24	0	1		24	0												
Rushey Mead	Leicester City	26	00FNNY	A426 N - A594 N - A6	1		26	0		1		0	26	0	1		26	0	1		26	0												
Westcotes	Leicester City	20	00FNPC	A426 N - Braunstone Ln E - A5460 N	1		20	0		1		0	20	0		1	0	20			0	0												
Western Park	Leicester City	4	00FNPD	A426 N - Braunstone Ln E - A5460 N	1		4	0		1		0	4	0		1	0	4			0	0												
Eyres Monsell	Leicester City	8	00FNNQ	A426 N - Hillsborough Rd	1		8	0		1		0	8	0	0	0	0	0			0	0												
Spinney Hills	Leicester City	14	00FNNZ	A426 N - Waterloo Rd - A47	1		14	0		1		0	14	0	1	0	14	0		1	0	14												
Cosby with South Whetstone	Blaby	63	31UBFZ	A426 S		1	0	63				0	0	0			0	0			0	0	1		63	0	1		63	0		1	0	63
North Whetstone	Blaby	16	31UBGL	A426 S		1	0	16				0	0	0			0	0			0	0	1		16	0	1		16	0	1		16	0
Saxondale	Blaby	174	31UBGP	A426 S	0.25	0.75	43.5	130.5				0	0	0			0	0			0	0	0.9	0.1	117.45	13.05		1	0	117.45			0	0
Broughton Astley - Broughton	Harborough	12	31UDGG	A426 S		1	0	12				0	0	0			0	0			0	0	1		12	0	1		12	0		1	0	12
Dunton	Harborough	4	31UDGK	A426 S		1	0	4				0	0	0			0	0			0	0	1		4	0	1		4	0		1	0	4
Lutterworth Springs	Harborough	6	31UDGS	A426 S		1	0	6				0	0	0			0	0			0	0	1		6	0	1		6	0		1	0	6
Lutterworth Swift	Harborough	11	31UDGT	A426 S		1	0	11				0	0	0			0	0			0	0	1		11	0	1		11	0		1	0	11
Peatling	Harborough	5	31UDHB	A426 S		1	0	5				0	0	0			0	0			0	0	1		5	0	1		5	0		1	0	5
South Wigston	Oadby and Wigston	75	31UJFR	A426 S - B582 E		1	0	75				0	0	0			0	0			0	0		1	0	75			0	0			0	0
Wigston All Saints	Oadby and Wigston	14	31UJFS	A426 S - B582 E		1	0	14				0	0	0			0	0			0	0		1	0	14			0	0			0	0
Wigston Meadowcourt	Oadby and Wigston	6	31UJFU	A426 S - B582 E		1	0	6				0	0	0			0	0			0	0		1	0	6			0	0			0	0
Fleckney	Harborough	8	31UDGL	A426 S - B582 E - A6 S		1	0	8				0	0	0			0	0			0	0		1	0	8			0	0			0	0
Glen	Harborough	5	31UDGM	A426 S - B582 E - A6 S		1	0	5				0	0	0			0	0			0	0		1	0	5			0	0			0	0
Market Harborough - Great Bowden and Arden	Harborough	12	31UDGU	A426 S - B582 E - A6 S		1	0	12				0	0	0			0	0			0	0		1	0	12			0	0			0	0
Barwell	Hinckley and Bosworth	4	31UEFX	A426 S - B582 W		1	0	4				0	0	0			0	0			0	0		1	0	4			0	0			0	0
Earl Shilton	Hinckley and Bosworth	4	31UEGB	A426 S - B582 W		1	0	4				0	0	0			0	0			0	0	1		4	0	1		4	0	1		4	0
Newbold Verdon with Desford and Peckleton	Hinckley and Bosworth	20	31UEGJ	A426 S - B582 W		1	0	20				0	0	0			0	0			0	0	1		20	0	1		20	0	1		20	0
Ullesthorpe	Harborough	31	31UDHE	A426 S - Broughton Road		1	0	31				0	0	0			0	0			0	0	1		31	0	1		31	0	1		31	0
Blaby South	Blaby	15	31UBFY	A426 S - Winchester Rd		1	0	15				0	0	0			0	0			0	0	1		15	0		1	0	15			0	0
Countesthorpe	Blaby	16	31UBGA	A426 S - Winchester Rd		1	0	16				0	0	0			0	0			0	0	1		16	0		1	0	16			0	0



KEY

Roundabout

Dead End

Proposed Development

List of Junctions

1. Glenville Avenue / Leicester Road
2. Leicester Road / Little Glen Road
3. A426 / Sycamore Street
4. Blaby By-Pass / Enderby Road
5. Leicester Road / Soar Valley Way / Glenhills Way
6. Lutterworth Road / Middleton Street
7. Aylestone Road / Welford Road

jpp consulting
Civil & Structural Engineers

Cedar Barn, White Lodge, Walgrave, Northampton NN6 9PY

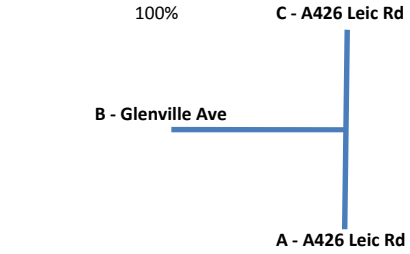
T: (01604) 781811 E: mail@jppuk.net
F: (01604) 781999 W: www.jppuk.net

Client	Manor Oak Homes
Project	Residential Development Glen Parva Leicester
Title	Vehicle Distribution

Scale at A3	NTS	Drawn by	DGB	Checked by	Date: October 2013
Status		Project ref	R6711/PP	Drawing no.	TA03
				Revision	

	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
	28	86	115	68	42	110

1 - Glenvill Avenue / Leicester Road



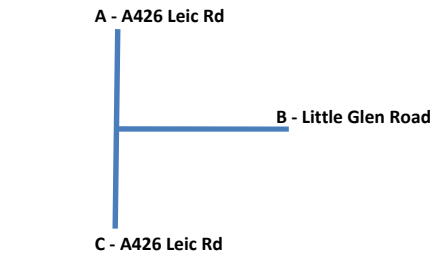
	A	B	C
A		34.6%	
B	34.6%		65.4%
C		65.4%	

100%

0800-0900	A	B	C
A		10	
B	30		57
C		18	

1700-1800	A	B	C
A		23	
B	15		27
C		44	

2 - Leicester Road / Little Glen Road



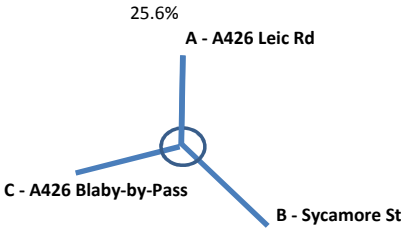
	A	B	C
A		9.1%	26%
B	9.1%		
C	26%		

34.6%

0800-0900	A	B	C
A		8	22
B	3		
C	7		

1700-1800	A	B	C
A		4	11
B	6		
C	17		

3 - A426 / Sycamore St



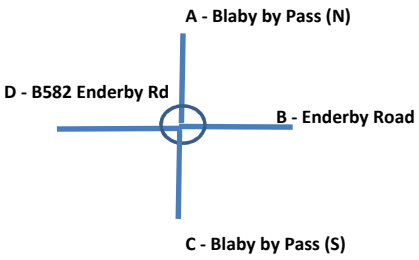
	A	B	C
A		9.8%	15.8%
B	9.8%		
C	15.8%		

25.6%

0800-0900	A	B	C
A		8	14
B	3		
C	4		

1700-1800	A	B	C
A		4	7
B	7		
C	11		

4 - A426 Blaby by Pass / Enderby Road



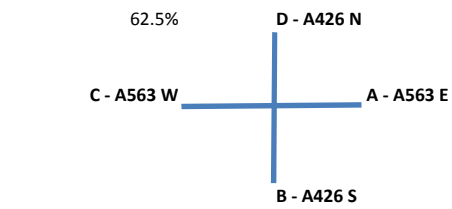
	A	B	C	D
A			6.7%	9.1%
B				
C	6.7%			
D	9.1%			

15.8%

0800-0900	A	B	C	D
A			6	8
B				
C	2			
D	3			

1700-1800	A	B	C	D
A			3	4
B				
C	5			
D	6			

5 - Leicester Road / Soar Valley Way / Glenhills Way



	A	B	C	D
A		10.8%		
B	10.8%		22.3%	29.3%
C		22.3%		
D		29.3%		

62%

0800-0900	A	B	C	D
A		3		
B	9		19	25
C		6		
D		8		

1700-1800	A	B	C	D
A		7		
B	5		9	12
C		15		
D		20		

6 - Lutterworth Road / Middleton Street

	A	B	C
A		2.0%	26.8%
B	2.0%		
C	26.8%		

29%

0800-0900	A	B	C
A		2	23
B	1		
C	8		

1700-1800	A	B	C
A		1	11
B	1		
C	18		

7 - Aylestone Road / Welford Road

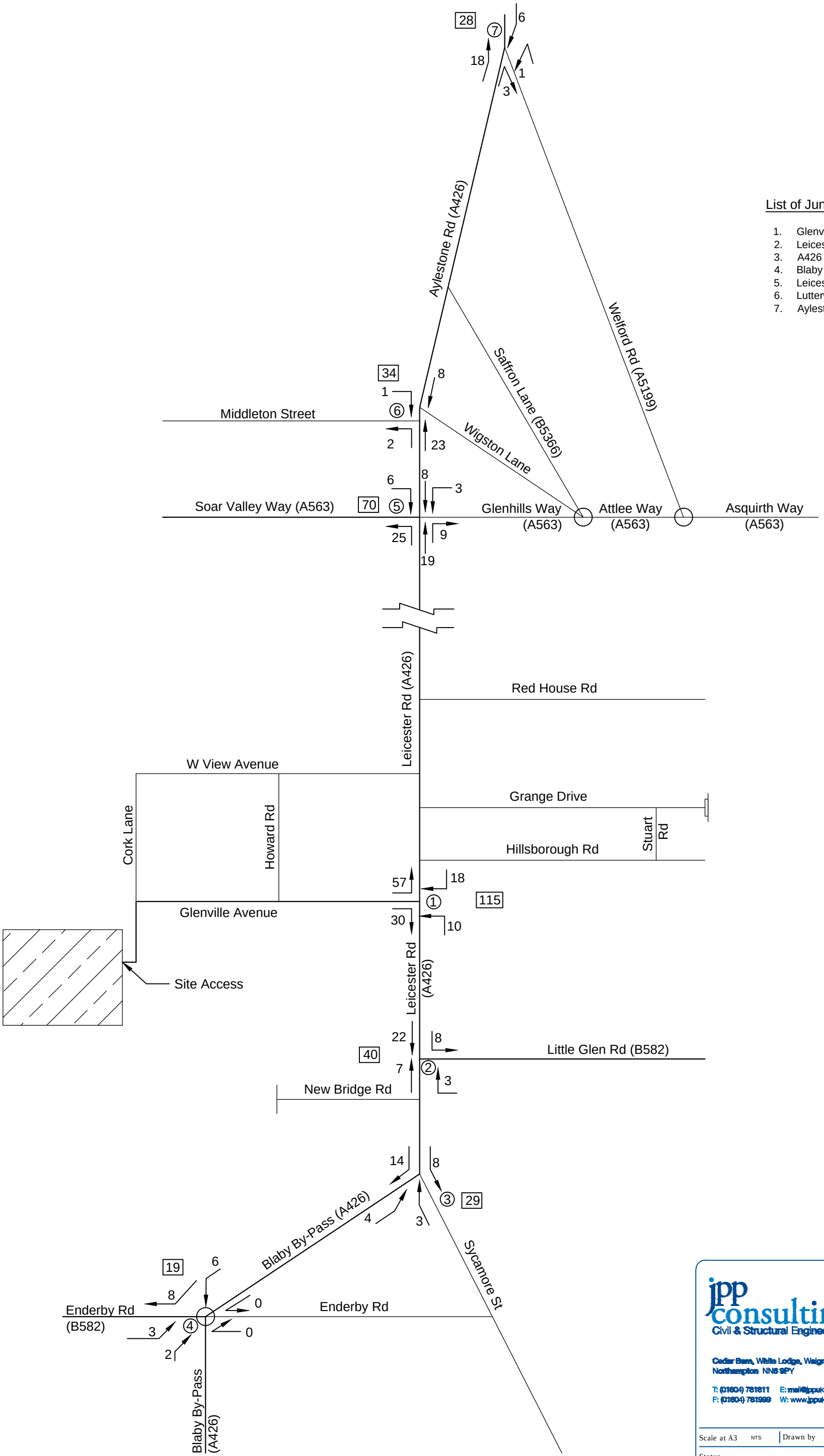
	A	B	C
A		3.6%	
B	3.6%		20.6%
C		20.6%	

24%

0800-0900	A	B	C
A		1	
B	3		18
C		6	

1700-1800	A	B	C
A		2	
B	2		9
C		14	

Appendix E
Vehicle Trip Data



KEY

Roundabout

Dead End

Proposed Development

List of Junctions

1. Glenville Avenue / Leicester Road
2. Leicester Road / Little Glen Road
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jpp consulting
Civil & Structural Engineers

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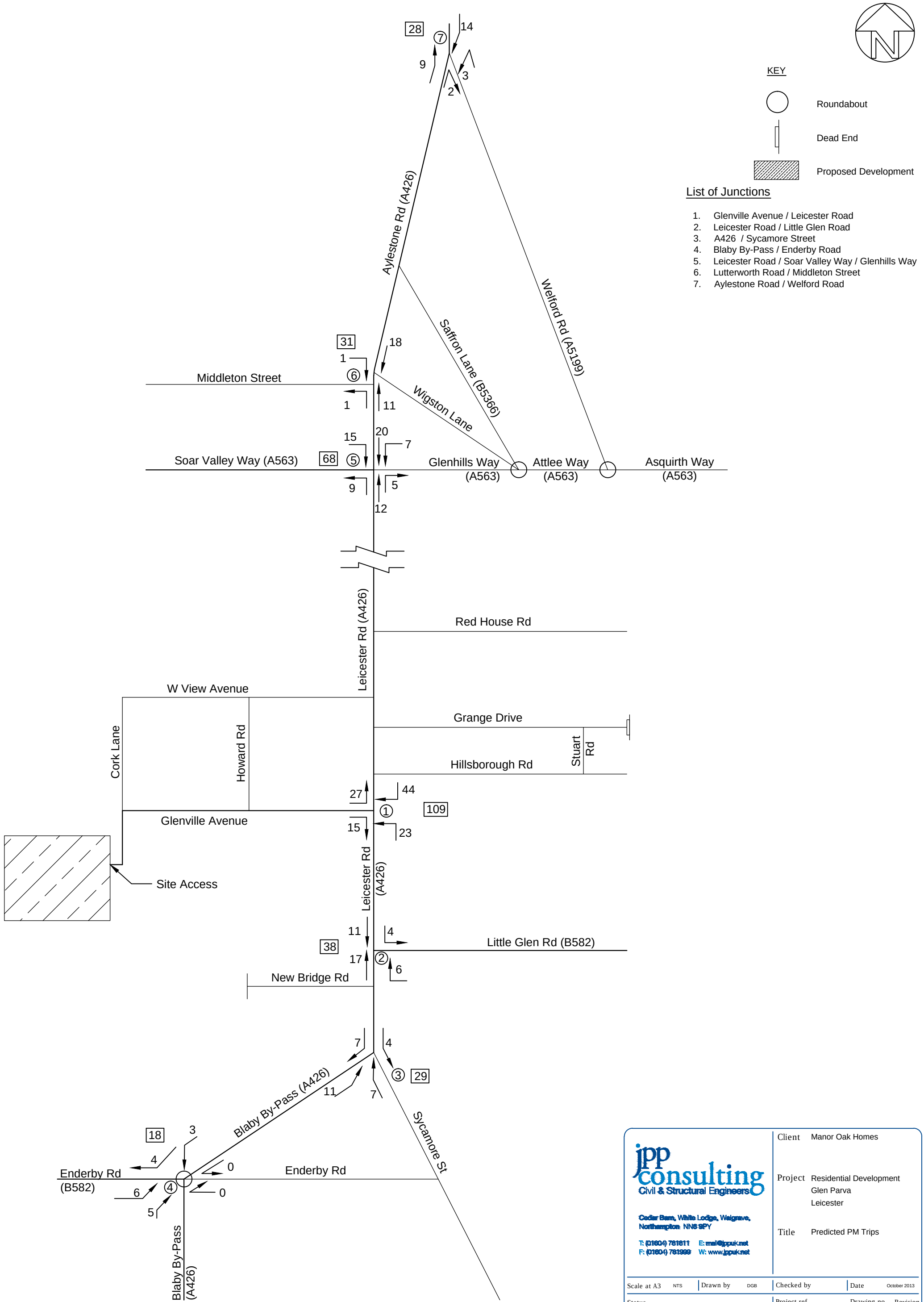
T: (01604) 781811 E: mail@jppuk.net
F: (01604) 781999 W: www.jppuk.net

Client	Manor Oak Homes
Project	Residential Development Glen Parva Leicester
Title	Predicted AM Trips

Scale at A3	Drawn by	Checked by	Date
NTS	DGB		October 2013

Status	Project ref	Drawing no.	Revision
	R6711/PP	TA04	



Client	Manor Oak Homes
Project	Residential Development Glen Parva Leicester
Title	Predicted PM Trips

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Civil & Structural Engineers

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F: (01604) 781999 W: www.jppuk.net

Scale at A3	Drawn by	Checked by	Date
NTS	DGB		October 2013

Status	Project ref	Drawing no.	Revision
	R6711/PP	TA05	

Martin Andrews

From: Kingsley Cook <Kingsley.Cook@leics.gov.uk>
Sent: 05 December 2013 17:19
To: Martin Andrews
Cc: michael.jeeves@leicester.gov.uk
Subject: 2013/HEN/2091 Cork Lane Glen Parva

Martin

Firstly my apologies for the delay in responding to your email and scoping report.

The scoping note is generally acceptable but as discussed the A426 suffers from congestion in the peak periods and you will need to demonstrate the development either has no significant impacts, or those impacts can be mitigated. I have the following general comments:

- The trip rates will need checking when the planning application is submitted, however the rates do not appear to be 85th percentile rates as required in the 6CsDG
- We will have to confirm the 2011 census data
- We are not aware of any committed developments in the vicinity but we recommend you confirm this with the City as the site is near the County/City boundary
- 5 year completion date is reasonable and 2018 is acceptable
- The junction assessment appears reasonable however we may request further junctions to be assessed if we feel it is justified
- We note that the traffic counts will be carried out in a non-neutral month therefore the 85th% trip rates are even more relevant

Kingsley

Kingsley Cook
Team Manager
Transport Development Control
Department of Environment and Transport
Leicestershire County Council
County Hall, Glenfield
Leicestershire LE3 8RJ
tel 0116 305 6782
fax 0116 305 7133

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Martin Andrews

From: Michael Jeeves <Michael.Jeeves@leicester.gov.uk>
Sent: 30 October 2013 15:26
To: Martin Andrews; 'matt.lennon@leics.gov.uk'
Subject: RE: R6711PP - 166 Dwel Development, Land off Cork Lane, Glen Parva

Martin, I have had a look at the Scoping Study and I have no problems with your approach.

I would expect Leics County to check trip generation. I doubt that the trips generated will have significant affect upon the highway network – given that the junctions on the A426 have recently been improved as part of the Bus Priority scheme this is something that would need to be considered by that Project Team (One for you Matt!!!)

Michael Jeeves
Team Leader
Travel Planning and Development Co-ordination Team
A6 New Walk Centre

Please note new phone phone number:

0116 454 2846

Michael.jeeves@leicester.gov.uk

We're backing the bid to make Leicester the UK City of Culture 2017
www.facebook.com/leicester2017
www.twitter.com/leicester2017

From: Martin Andrews [mailto:Martin.Andrews@jppuk.net]
Sent: 28 October 2013 15:15
To: 'matt.lennon@leics.gov.uk'; Michael Jeeves
Subject: R6711PP - 166 Dwel Development, Land off Cork Lane, Glen Parva

Matt / Michael,

Further to conversations with your colleagues I attach a Transport Assessment Scoping Note for a 166 dwelling development located off Cork Lane, Glen Parva. The development is located within Blaby District but based on distribution data is likely to have a larger impact on City controlled roads.

The scoping note is a brief document which primarily defines the:

- predicted person trip rates;
- vehicle trip numbers;
- distribution based on census data; and
- junctions to be assessed.

I would welcome your input into the scope of the Transport Assessment and confirmation that the extent of assessment is considered appropriate. Please call me to discuss if required. I am happy to attend a joint meeting to discuss the application if that is appropriate.

Regards,

Martin Andrews
MEng (Hons)
Project Engineer

jpp consulting
Civil & Structural Engineers

Cedar Barn, White Lodge, Walgrave
Northampton, NN6 9PY

T: (01604) 781811 F: (01604) 781999
E: martin.andrews@jppuk.net W: www.jppuk.net

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Appendix G
Accident Data

31/10/09 06538 Sat 1655 Daylight A426 040 Dry 456900
299085
Slight A426 LEICESTER ROAD GLEN PARVA. APPROX 35 M N HORTONS CLOSE.
V1 (M/CYCLE) TRAV N/E LEICESTER RD COLLS CHILD PED TRAV W
RUNNING INTO THE ROAD INFRONT V1. V1 LEAVES C/WAY N/S.

Motorcycle over 500cc
S NE Going ahead right hand bend Male 052 -
Casualty
Male 011 Pedestrian Slight

28/11/09 07220 Sat 1002 Daylight A426 040 Wet / Damp456880
298905
Slight A426 LEICESTER ROAD GLEN PARVA JW GLENVILLE AVENUE.
V2 & V3 TRAV N LEICESTER RD. V2 SLOWS TO TURN L TRAV W GLENVILLE AVE.
V3 COLLS REAR V2. V3 CROSSES C/WAY & COLLS V1 TRAV S LEICESTER RD.

Car
N S Going ahead other Male 042 -
Casualty
Male 042 Driver or rider Slight

Car
S W Turning left Male 034 -

Car
S N Going ahead other Male 055 -
Casualty
Male 055 Driver or rider Slight

04/02/10 00708 Thu 0050 Darkness: street lights present and lit
B582 030 Wet / Damp457360
298405
Slight B582 LITTLE GLEN ROAD GLEN PARVA. AT RAILWAY BRIDGE OUTSIDE TANGLEWOOD.
V1 TRAV S/E LITTLE GLEN RD COLLS KERB OF TRAFFIC CALMING CROSSES
C/WAY & COLLS RAILWAY BRIDGE. DRIVER V1 IMPAIRED BY ALCOHOL.

Car
NW SE Going ahead other Male 031 +
Casualty
Male 027 Vehicle or pillion passenger
Slight

17/05/10 02857 Mon 2250 Darkness: street lights present and lit
A426 040 Dry 456960
299315
Slight A426 LEICESTER ROAD GLEN PARVA. OUTSIDE HOUSE NO 123.
V1 (TAXI) PARKED FACING S LEICESTER RD MOVES OFF MAKING U TURN
IN FRONT V2 (MOPED) TRAV S LEICESTER RD. V2 COLLS O/S V1.

Taxi / Private hire car
N N U turn Male 042 -

Motorcycle 50cc and under
N S Going ahead other Male 017 -
Casualty
Male 017 Driver or rider Slight

26/05/10 02954 Wed 0840 Daylight A426 040 Dry 456885 298910
Slight A426 LEICESTER ROAD GLEN PARVA JW GLENVILLE AVENUE.
V1 (MOPED) TRAV S LEICESTER RD APPROACHING TRAFFIC QUEUE. V1 BRAKES HARD TO AVOID COLLS TRAFFIC AHEAD & RIDER FALLS FROM MACHINE.

Motorcycle 50cc and under
N S Slowing or stopping Male 024 ^
Casualty
Male 024 Driver or rider Slight

26/06/10 03600 Sat 1242 Daylight L3122 030 Dry 456920 299165
Slight WESTVIEW AVENUE GLEN PARVA JW LEICESTER ROAD.
V2 (CYCLE) TRAV N LEICESTER RD LEAVES FOOTWAY TO CROSS WESTVIEW AVE & COLLS V1 STATIONARY TRAV E WAITING TO TURN R TRAV S LEICESTER RD.

Car
W S Waiting to go ahead but held up Male 040 -

Pedal cycle
S N Going ahead other Female 012
Casualty
Female 012 Driver or rider Slight

03/07/10 03820 Sat 1700 Daylight A426 040 Dry 456930 299165
Slight A426 LUTTERWORTH ROAD GLEN PARVA JW WESTVIEW AVENUE.
V1 TRAV S LUTTERWORTH RD BRAKES BUT COLLS REAR V2 STATIONARY AHEAD WAITING TO TURN R TRAV W WESTVIEW AVE.

Car
N S Slowing or stopping Male 024 -

Car
N W Waiting to turn right Female 080 ^
Casualty
Female 080 Driver or rider Slight

21/07/10 04164 Wed 1540 Daylight A426 030 Dry 456700 298175
Slight A426 BLABY BY-PASS BLABY. APPROX 45 M W LEICESTER ROAD.
V1 TRAV W BLABY BY-PASS LANE 2 OVERTAKES HGV STATIONARY FACING W AT RED PED LIGHTS IN LANE 1. V1 BRAKES BUT COLLS CHILD PED TRAV N.

Car
E W Slowing or stopping Male 045 -
Casualty
Female 008 Pedestrian Slight

Goods vehicle over 3.5 tonnes and under 7.5 tonnes mgw
E W Waiting to go ahead but held up Not Known Null >

02/08/10 04377 Mon 1700 Daylight A426 040 Dry 457000 299470
Slight A426 LEICESTER ROAD GLEN PARVA JW PRIVATE DRIVE TO HOUSE NO 149.
V1 TRAV S LEICESTER RD TURNS L TRAV E ONTO PRIVATE
DRIVE & COLLS V2 (CYCLE) TRAV S ON FOOTWAY.

Car
N E Turning left Female 044 -

Pedal cycle
N S Going ahead other Male 014
Casualty
Male 014 Driver or rider Slight

24/08/10 04812 Tue 0911 Daylight A426 030 Dry 456910 299110
Slight A426 LUTTERWORTH ROAD GLEN PARVA JW GRANGE DRIVE.
V1 TRAV W GRANGE DRIVE TURNS R TRAV N
& COLLS V1 TRAV S LUTTERWORTH ROAD.

Car
E N Turning right Male 080 >

Car
N S Going ahead other Male 068 ^
Casualty
Male 068 Driver or rider Slight
Female 063 Vehicle or pillion passenger
Slight

26/08/10 04892 Thu 1815 Daylight A426 040 Wet / Damp 456910 299110
Slight A426 LEICESTER ROAD GLEN PARVA JW GRANGE ROAD.
V1 TRAV W GRANGE RD TURNS R TRAV N IN FRONT NK VEH TRAV S
GIVING V1 PRIORITY. V1 COLLS V2 TRAV N LEICESTER RD.

Car
E N Turning right Female 029 x

Car
S N Going ahead other Male 052 ^
Casualty
Male 052 Driver or rider Slight

14/10/10 05941 Thu 1518 Daylight A426 040 Dry 456915 299130
Slight A426 LEICESTER ROAD GLEN PARVA. OUTSIDE HOUSE NO 130.
CHILD PED TRAV W ON PED FACILITY SHOWING GREEN FOR TRAFFIC CROSSES
ROAD FROM V1 O/S. V1 TRAV N LEICESTER RD BRAKES SKIDS & COLLS PED.

Goods vehicle 3.5 tonnes mgw and under
S N Slowing or stopping Male 038 -
Casualty
Female 004 Pedestrian Slight

18/10/10 05989 Mon 1740 Darkness: street lights present and lit

A426 030 Dry 456735

298205

Slight A426 BLABY BY-PASS BLABY ROUNDABOUT JW LEICESTER ROAD.
V1 & V2 (CYCLE) STATIONARY TRAV E LANE 1 BLABY BY-PASS HELD AT R/ABOUT.
V1 & V2 COLLS N/S TO O/S MOVING OFF TURNING L TRAV N LEICESTER RD.

Car
W N Turning left Not Known Null >

Pedal cycle
W N Turning left Male 043
Casualty
Male 043 Driver or rider Slight

01/11/10 06361 Mon 1224 Daylight K3401 030 Dry 456965

299110

Slight GRANGE DRIVE GLEN PARVA. APPROX 50 M E LEICESTER ROAD.
V2 TRAV E GRANGE DRIVE IS DISTRACTED BY ONCOMING VEHICLE &
COLLS REAR O/S V1 PARKED IN C/WAY FACING E ON V1 N/S.

Car
Standing still
Standing still
Parked Female 024 x
Casualty
Female 024 Driver or rider Slight

Car
W E Overtaking stationary vehicle on its offside Female 064 x

---

05/11/10 06497 Fri 0900 Daylight B582 030 Dry 456875

298515

Slight B582 LITTLE GLEN ROAD GLEN PARVA. APPROX 60 M E LEICESTER ROAD.
V1 (M/CYCLE) TRAV W LITTLE GLEN RD OVERTAKING TRAFFIC QUEUE ON O/S. V2
(TAXI) CHANGES LANE R & COLLS V2. PASSENGER FALLS FROM MACHINE.

Motorcycle over 500cc
E W Overtaking moving vehicle on its offside Male 018 -
Casualty
Male 018 Driver or rider Slight
Male 019 Vehicle or pillion passenger
Slight

Taxi / Private hire car
E W Changing lane to right Male 025 -

16/03/11 01483 Wed 1311 Daylight A426 040 Dry 456895

298985

Serious A426 LEICESTER ROAD GLEN PARVA JW HILLSBOROUGH ROAD.
V2 TRAV N LEICS RD TURNS R TRAV E HILLSBOROUGH RD & COLLS V1
TRAV S LEICESTER RD. V2 COLLS V3 TRAV N LEICS RD BEHIND V2.

Car
N S Going ahead other Male 026 -
Casualty
Male 026 Driver or rider Slight
Female 027 Vehicle or pillion passenger

Serious

Car
S E Turning right Female 040 -
Casualty
Female 040 Driver or rider Serious

Car
S N Going ahead other Female 029 -
Casualty
Female 029 Driver or rider Slight
Male 043 Vehicle or pillion passenger
Slight

04/05/11 02416 Wed 1549 Daylight A426 040 Dry 456730
298200
Slight A426 BLABY BYPASS BLABY ROUNDABOUT JW LEICESTER ROAD.
V1 TRAV N/E LANE 1 BLABY BYPASS LOSES CONTROL DUE TO MECHANICAL FAILURE
MOVES FORWARD & COLLS REAR V2 STATIONARY AHEAD HELD AT ROUNDABOUT.

Car
W N Moving off Male 049 -

Car
W N Waiting to go ahead but held up Female 019 x
Casualty
Female 019 Driver or rider Slight
Female 019 Vehicle or pillion passenger
Slight
Female 019 Vehicle or pillion passenger
Slight

12/06/11 03231 Sun 1145 Daylight A426 040 Wet / Damp456895
298985
Slight A426 LEICESTER ROAD GLEN PARVA JW HILLSBOROUGH ROAD.
V1 TRAV N LEICESTER RD TURNS R TRAV E HILLSBOROUGH RD & COLLS V2
TRAV S LEICESTER RD. V1 REBOUNDS & COLLS V3 TRAV N UNDERTAKING V1.

Car
S E Turning right Male 020 -
Casualty
Female 017 Vehicle or pillion passenger
Slight

Car
N S Going ahead other Male 042 -

Car
S N Overtaking on nearside Male 060 -

29/06/11 03576 Wed 0623 Daylight A426 030 Dry 456735
298205
Slight A426 LEICESTER ROAD BLABY ROUNDABOUT JW LEICESTER RD.
V1 TRAV E BLABY BY-PASS ENTERS ROUNDABOUT DAZZLED BY SUN
TURNS L TRAV N & COLLS V2 (CYCLE) TRAV N ON ROUNDABOUT.

Car

W N Turning left Male 034 -

Pedal cycle

S N Going ahead other Male 055
Casualty
Male 055 Driver or rider Slight

19/07/11 04059 Tue 2015 Daylight A426 040 Dry 456895 298985
Slight A426 LEICESTER ROAD GLEN PARVA JW HILLSBOROUGH ROAD.
V1 TRAV W HILLSBOROUGH RD TURNS R TRAV N & COLLS V2 (CYCLE)
TRAV N LEICESTER RD TURNING R TRAV E HILLSBOROUGH RD.

Car
E N Turning right Male 048 x

Pedal cycle
S E Turning right Male 020
Casualty
Male 020 Driver or rider Slight

07/08/11 04392 Sun 1329 Daylight A426 040 Dry 456795 298525
Slight A426 LEICESTER ROAD GLEN PARVA JW LITTLE GLEN ROAD.
PED TRAV W RUNS ACROSS PED FACILTY &
COLLS FRONT V1 TRAV N LEICESTER RD.

Car
S N Going ahead other Male 065 -
Casualty
Male 028 Pedestrian Slight

12/08/11 04484 Fri 0800 Daylight A426 040 Wet / Damp 456795 298535
Slight A426 LEICESTER ROAD GLEN PARVA JW LITTLE GLEN ROAD.
V1 TRAV W LITTLE GLEN RD LOSES CONTROL TURNING R TRAV N LEICS
RD COLLS TRAFFIC SIGNAL LEAVES C/WAY N/S & COLLS BARRIER.

Car
E N Turning right Female 026 -
Casualty
Female 026 Driver or rider Slight

05/09/11 04952 Mon 1510 Daylight B582 030 Dry 456955 298500
Slight B582 LITTLE GLEN ROAD GLEN PARVA. EXACT LOCATION UNKNOWN.
V2 (CYCLE) TRAV AWAY FROM LEICS RD LEAVES FOOTWAY TO OVERTAKE
UNKNOWN V3 AHEAD & COLLS V1 TRAV TOWARDS TOWARDS LEICESTER RD.

Car
E W Going ahead other Male 049 >

Pedal cycle
W E Overtaking stationary vehicle on its offside Male 025
Casualty
Male 025 Driver or rider Slight

Goods vehicle 3.5 tonnes mgw and under
Standing still
Standing still
Parked Not Known Null >

17/09/11 05197 Sat 1435 Daylight A426 040 Dry 456790 298495
Slight A426 LEICESTER ROAD GLEN PARVA JW NEW BRIDGE ROAD.
V1 TRAV S LEICESTER RD TURNS R TRAV W NEW BRIDGE RD & COLLS V2 TRAV N LEICESTER RD.

Car
N W Turning right Male 047 -
Casualty
Male 047 Driver or rider Slight

Car
S N Going ahead other Male 074 -
Casualty
Male 074 Driver or rider Slight

04/10/11 05567 Tue 1650 Daylight A426 040 Dry 456995 299495
Serious A426 LEICESTER ROAD GLEN PARVA JW HALL CLOSE.
V1 TRAV S LEICESTER RD WAITING TO TURN R TRAV W HALL CLOSE. V1 COMMENCES R TURN & COLLS V2 (MOTORCYCLE) TRAV S OVERTAKING ON V1 O/S.

Car
N W Turning right Male 066 -

Motorcycle over 500cc
N S Overtaking moving vehicle on its offside Male 051 ^
Casualty
Male 051 Driver or rider Serious

28/10/11 06069 Fri 0855 Daylight A426 030 Wet / Damp 456950 299265
Slight A426 LEICESTER ROAD GLEN PARVA JW DOROTHY ROAD.
V1 TRAV S LEICESTER RD IN SLOW MOVING TRAFFIC QUEUE TURNS R TRAV W DOROTHY AVE & COLLS V2 (M/CYCLE) TRAV S OVERTAKING QUEUE ON O/S.

Car
N W Turning right Male 029 -
Casualty
Male 029 Driver or rider Slight

Motorcycle over 125cc and up to 500cc
N S Overtaking moving vehicle on its offside Male 021 -
Casualty
Male 021 Driver or rider Slight

24/11/11 06666 Thu 1600 Darkness: street lights present and lit
A426 040 Dry 456885 298935
Slight A426 LEICESTER ROAD GLEN PARVA. APPROX 50 M S HILLSBOROUGH ROAD.
V1 TRAV S LEICESTER RD SLOWS BUT COLLS CHILD PED AT LOW SPEED

CROSSING ON PED FACILITY WITH GREEN PED LIGHTS. PED LEAVES SCENE.

Car
N S Slowing or stopping Male 060 >
Casualty
Female 015 Pedestrian Slight

07/01/12 00116 Sat 0825 Daylight L3115 030 Dry 456575 299210
Slight CORK LANE GLEN PARVA. OUTSIDE HOUSE NO 71.
NO STATS 19 FORM RECEIVED.

Car
N S Going ahead other Male Null x
Casualty
Male Null Driver or rider Slight

15/08/12 05711 Wed 1100 Daylight B582 030 Dry 457000 298495
Slight B582 LITTLE GLEN ROAD GLEN PARVA. OUTSIDE HOUSE NO 6.
V1 TRAV E LITTLE GLEN RD LOSES CONCENTRATION LEAVES C/WAY N/S
& COLLS REAR V2 PARKED ON FOOTWAY. V1 REBOUNDS & OVERTURNS.

Car
W E Going ahead other Female 023 -
Casualty
Female 023 Driver or rider Slight

Goods vehicle 3.5 tonnes mgw and under
Standing still
Standing still
Parked Male Null >

02/09/12 05850 Sun 1215 Daylight A426 040 Dry 456920 299130
Slight A426 LUTTERWORTH RD GLEN PARVA JW CAR PARK TO CARVERS CORNER SHOPS.
V1 TRAV S LUTTERWORTH RD TURNS L TRAV E ONTO CAR PARK MOUNTS FOOTWAY
& COLLS V2 (CYCLE) STATIONARY ON FOOTWAY TRAV NK DIR. V1 HIT & RUN.

Car
N E Turning left Male 056 >

Pedal cycle
E W Waiting to go ahead but held up Female 011
Casualty
Female 011 Driver or rider Slight

30/11/12 06500 Fri 1931 Darkness: street lights present and lit
A426 040 Wet / Damp 456790 298500
Slight A426 LEICESTER ROAD GLEN PARVA JW NEW BRIDGE ROAD.
V2 TRAV S LEICESTER RD TURNS R TRAV W NEW BRIDGE
RD & COLLS FRONT V1 TRAV N LANE 1 LEICESTER RD.

Car
S N Going ahead other Male 049 -

Car
N W Turning right Male 020 -
Casualty
Male 020 Vehicle or pillion passenger
Slight

02/12/12 06551 Sun 1125 Daylight A426 030 Dry 456955
299305
Slight A426 LEICESTER ROAD GLEN PARVA JW PRIVATE DRIVE TO HOUSE NO 123.
V2 TRAV N LEICESTER RD COLLS REAR V1 STATIONARY AHEAD
HELD BEHIND NK V3 TURNING R TRAV E ONTO DRIVE.

Car
S N Waiting to go ahead but held up Male 039 >
Casualty
Male 039 Driver or rider Slight

Car
S N Going ahead other Male 045 >

Car
S E Turning right Not Known Null >

11/01/13 00067 Fri 2320 Darkness: street lights present and lit
A426 040 Wet / Damp456765
298290
Slight A426 LEICESTER ROAD BLABY. UNDER RAILWAY BRIDGE.
V1 TRAV S LEICESTER RD LOSES CONTROL DUE TO ILLNESS CROSSES
C/WAY & COLLS O/S V2 TRAV N. V1 LEAVES C/WAY O/S ONTO FOOTWAY.

Car
N S Going ahead other Male 032 -
Casualty
Male 032 Driver or rider Slight

Car
S N Going ahead other Male 065 -

11/03/13 00354 Mon 1515 Daylight A426 040 Snow 456790
298495
Slight A426 LEICESTER ROAD GLEN PARVA JW NEW BRIDGE ROAD.
V3 (ARTIC) TRAV N LANE 2 LEICS RD IN QUEUE INDICATES V2 TO PROCEED
TURNING R TRAV W NEW BRIDGE RD. V1 TRAV N LANE 1 COLLS V2. V2 COLLS V4.

Car
S N Going ahead other Male 023 x
Casualty
Male 023 Driver or rider Slight

Car
N W Turning right Female 039 x

Goods vehicle 7.5 tonnes mgw and over
S N Waiting to go ahead but held up Male 050 x

Goods vehicle 3.5 tonnes mgw and under
S N Waiting to go ahead but held up Male 040 x

07/05/13 00692 Tue 1800 Daylight A426 040 Dry 456790
298495
Slight A426 LEICESTER ROAD GLEN PARVA JW NEW BRIDGE ROAD.
V1 TRAV S LEICESTER RD TURNS R TRAV W NEW BRIDGE RD IN FRONT V2
(TAXI) TRAV N LANE 1 LEICESTER RD. V2 UNABLE TO AVOID V1 COLLS N/S.

Car
N W Turning right Male 048 x

Taxi / Private hire car
S N Going ahead other Male 044 x
Casualty
Male 051 Vehicle or pillion passenger
Slight

14/05/13 00997 Tue 0915 Daylight A426 040 Dry 456750
298185
Slight A426 LEICESTER ROAD BLABY ROUNDABOUT JW LEICESTER ROAD.
V1 TRAV N LEICESTER RD ENTERS ROUNDABOUT TRAV AHEAD &
COLLS REAR V2 (CYCLE) TURNING R TRAV W LEAVING ROUNDABOUT.

Car
S N Going ahead other Male 037 -

Pedal cycle
N W Turning right Male 043
Casualty
Male 043 Driver or rider Slight

07/07/13 01147 Sun 1135 Daylight A426 040 Dry 456900
299085
Slight A426 LEICESTER ROAD GLEN PARVA. APPROX 30 M S GRANGE DRIVE.
V1 TRAV S NEG SLIGHT L BEND CROSSES C/WAY FOR NK REASON &
COLLS FRONT V2 TRAV N/E LEICESTER RD.

Car
NE S Going ahead other Male 077 -
Casualty
Female 077 Vehicle or pillion passenger
Slight

Car
S NE Going ahead other Male 027 -
Casualty
Female 022 Vehicle or pillion passenger
Slight

28/08/13 01472 Wed 2100 Darkness: street lights present and lit
A426 040 Dry 457015
299630
Serious A426 LEICESTER ROAD GLEN PARVA JW RED HOUSE ROAD.
NK V2 TRAV N LEICESTER RD OVERTAKES V1 (CYCLE) HAVING PREVIOUSLY
TURNED R FROM RED HOUSE RD. V2 COLLS O/S V1 & RIDER FALLS OFF CYCLE.

Pedal cycle
S N Going ahead other Male 050

Casualty
Male 050 Driver or rider Serious

Car
S N Overtaking moving vehicle on its offside Not Known Null >

12/11/13 02094 Tue 1353 Daylight A426 040 Dry 456890 298985
Slight A426 LEICESTER ROAD GLEN PARVA JW HILLSBOROUGH ROAD.
V1 TRAV W HILLSBOROUGH RD TURNS R TRAV N &
COLLS V2 (M/CYCLE) TRAV N LEICESTER RD.

Car
E N Turning right Male 060 -

Motorcycle over 500cc
S N Going ahead other Male 028 -
Casualty
Male 028 Driver or rider Slight

23/11/13 02153 Sat 1620 Darkness: street lights present and lit
A426 040 Wet / Damp 456830 298745
Slight A426 LEICESTER ROAD GLEN PARVA. OUTSIDE HOUSE NO 82.
V2 TRAV S NEG SLIGHT L BEND CROSSES C/WAY & COLLS FRONT V1
TRAV N NEG R BEND LEICESTER RD. V1 LEAVES C/WAY N/S.

Car
S N Going ahead right hand bend Male 038 -
Casualty
Male 038 Driver or rider Slight
Male 023 Vehicle or pillion passenger
Slight

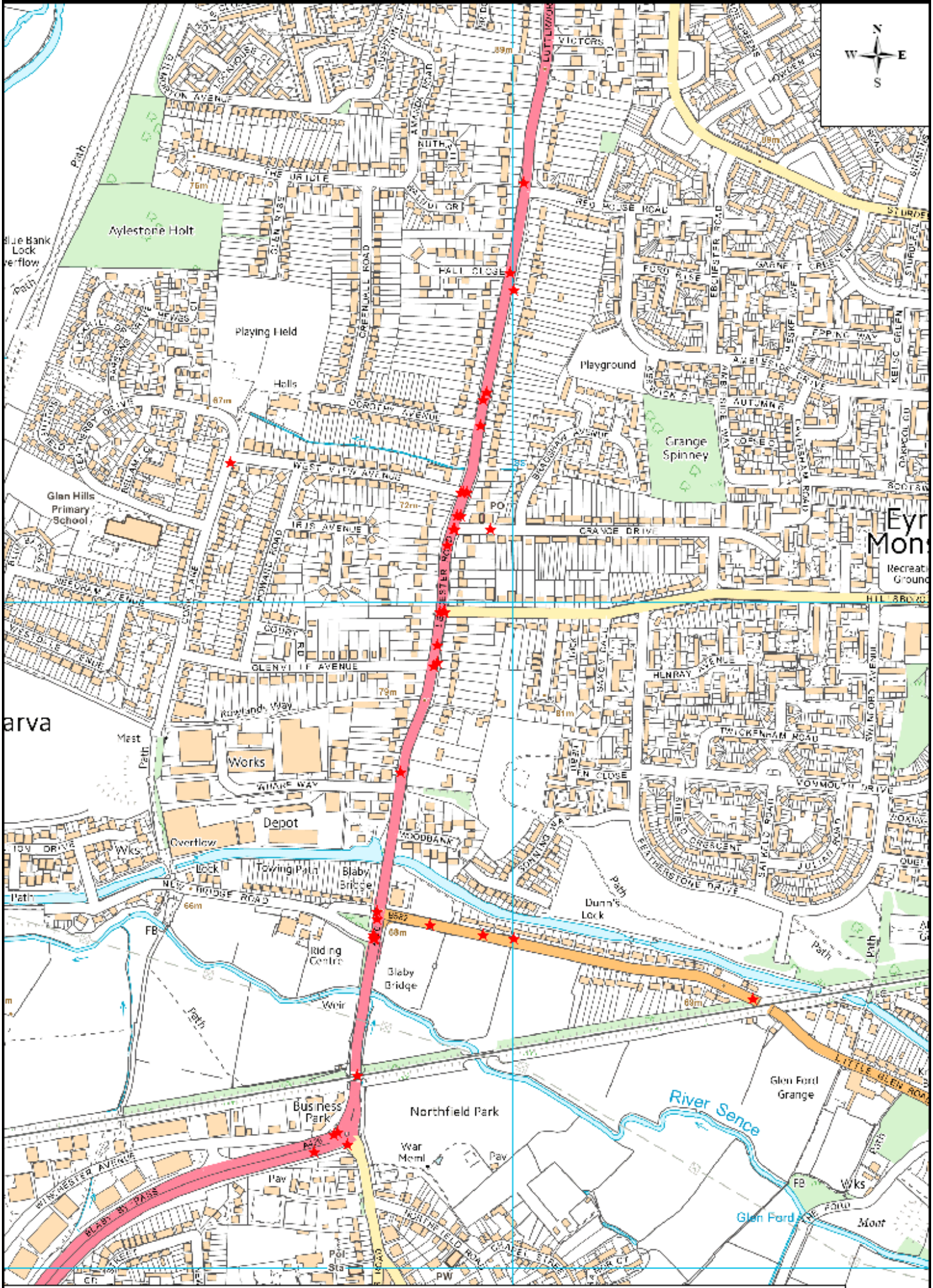
Car
N S Going ahead left hand bend Male 048 -

18/12/13 02304 Wed 0755 Daylight A426 040 Dry 456925 299165
Slight A426 LEICESTER ROAD GLEN PARVA JW WEST VIEW AVENUE.
V1 TRACV E WEST VIEW AVE TURNS R TRAV S &
COLLS N/S V2 (M/CYCLE) TRAV N LEICESTER RD.

Car
W S Turning right Male 032 -

Motorcycle over 50cc and up to 125cc
S N Going ahead other Male 019 -
Casualty
Male 019 Driver or rider Slight

Breath test + = positive - = negative * = refused
x = not requested > = not contacted ^ = Not provided (medical reasons)



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JPP CONSULTING. GLEN PARVA, 01.09.09 TO 31.12.13, 6TH JAN 2014

ACCIDENTS	**2009**	**2010**	**2011**	**2012**	**2013**	**TOTAL**
Slight Accidents	2	13	10	5	8	38
Serious Accidents	0	0	2	0	1	3
Fatal Accidents	0	0	0	0	0	0
Total Accidents	2	13	12	5	9	41
Single Vehicle	1	3	3	1	0	8
Wet or slippery	1	2	3	1	3	10
Darkness	0	3	1	1	3	8
Pedestrian	1	2	2	0	0	5
Cyclist	0	3	3	1	2	9
Motorcycle	1	3	2	0	2	8
Children	1	4	1	1	0	7
Bus	0	0	0	0	0	0
Goods	0	2	1	1	1	5
Morning 7:30-9:00	0	2	2	1	1	6
Evening 4:00-6:00	1	3	2	0	2	8
Weekend	2	2	3	3	2	12
Left Turn	1	2	1	1	0	5
Right Turn	0	3	7	2	5	17
Overtaking	0	2	4	0	1	7
Bend	1	0	0	0	1	2
Parked Vehicle	0	1	1	1	0	3
CASUALTIES						
Slight Casualties	3	15	17	5	10	50
Serious Casualties	0	0	3	0	1	4
Fatal Casualties	0	0	0	0	0	0
Total Casualties	3	15	20	5	11	54
Children KSI	0	0	0	0	0	0
Pedestrians KSI	0	0	0	0	0	0
Motorcycle KSI	0	0	1	0	0	1

Appendix H
TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	2 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	2 days
09	NORTH		
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	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:	6 to 372 (units:)
Range Selected by User:	6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 07/10/13

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

Selected survey days:

Monday	3 days
Tuesday	8 days
Wednesday	3 days
Thursday	6 days
Friday	5 days

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

Selected survey types:

Manual count	25 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	23
Neighbourhood Centre (PPS6 Local Centre)	2

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	22
No Sub Category	3

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	24 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	2 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	8 days
20,001 to 25,000	4 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	3 days
125,001 to 250,000	5 days
250,001 to 500,000	6 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	11 days
1.1 to 1.5	13 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	25 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 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

2 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

3 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

4 CW-03-A-01 TERRACED CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

5 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

6 DS-03-A-01 SEMI D./TERRACED DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

7 LN-03-A-02 MIXED HOUSES LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

9 MS-03-A-01 TERRACED MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

10 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

11 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

12 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

13 NY-03-A-01 MIXED HOUSES NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

14 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

LIST OF SITES relevant to selection parameters (Cont.)

15 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

16 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 23/10/12 Survey Type: MANUAL

17 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

18 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

19 TV-03-A-01 HOUSES & FLATS TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

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

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

21 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY 21/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 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

23 WM-03-A-02 DETACHED & SEMI DET. WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

24 WO-03-A-01 DETACHED WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 Survey Type: MANUAL

25 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.

JPP Consulting Cedar Barn Walgrave Licence No: 252601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Ranking Type: ARRIVALS Time Range: 08:00-09:00
15th Percentile = No. 21
85th Percentile = No. 5

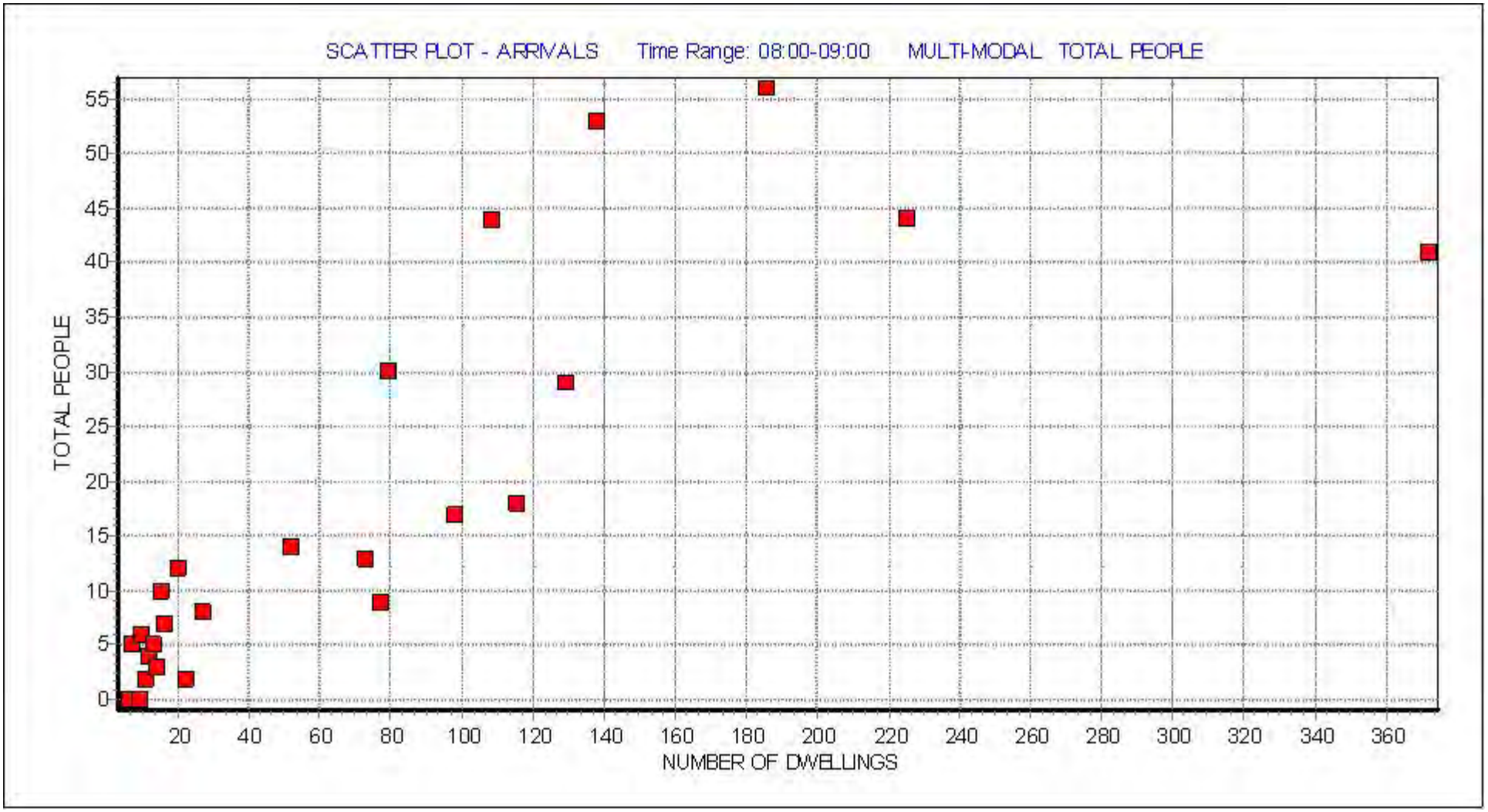
Median Values		Mean Values	
Arrivals:	0.269	Arrivals:	0.297
Departures:	1.000	Departures:	0.787
Totals:	1.269	Totals:	1.083

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Travel Plan
								Arrivals	Departures	Totals	
1	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.714	1.143	1.857	
2	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.667	1.267	1.934	
3	WO-03-A-01	DETACHED	BROMSGROVE	WORCESTERSHIRE	10	Thu	23/06/05	0.600	1.100	1.700	
4	DS-03-A-01	SEMI D./TERRAC	DRONFIELD	DERBYSHIRE	20	Thu	22/06/06	0.600	0.650	1.250	
5	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.438	0.625	1.063	
6	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.407	0.843	1.250	
7	CW-03-A-01	TERRACED	PENZANCE	CORNWALL	13	Thu	30/06/05	0.385	0.231	0.616	
8	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.384	1.058	1.442	
9	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.380	0.886	1.266	
10	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.333	0.667	1.000	
11	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.301	0.790	1.091	
12	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.296	0.556	0.852	
13	NY-03-A-01	MIXED HOUSES	NORTHALLERTON	NORTH YORKSHIRE	52	Tue	25/09/07	0.269	1.000	1.269	
14	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.225	0.457	0.682	
15	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.214	0.714	0.928	
16	TV-03-A-01	HOUSES & FLATS	HARTLEPOOL	TEES VALLEY	225	Thu	14/04/05	0.196	0.764	0.960	
17	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.182	1.182	1.364	
18	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.178	0.877	1.055	
19	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.173	0.633	0.806	
20	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.157	0.539	0.696	
21	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.117	0.805	0.922	
22	MS-03-A-01	TERRACED	RUNCORN	MERSEYSIDE	372	Thu	06/10/05	0.110	0.478	0.588	
23	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.091	0.682	0.773	
24	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	0.000	1.556	1.556	
25	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.000	0.167	0.167	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

JPP Consulting Cedar Barn Walgrave Licence No: 252601



This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	2 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	2 days
09	NORTH		
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	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:	6 to 372 (units:)
Range Selected by User:	6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 07/10/13

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

Selected survey days:

Monday	3 days
Tuesday	8 days
Wednesday	3 days
Thursday	6 days
Friday	5 days

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

Selected survey types:

Manual count	25 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	23
Neighbourhood Centre (PPS6 Local Centre)	2

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	22
No Sub Category	3

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	24 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	2 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	8 days
20,001 to 25,000	4 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	3 days
125,001 to 250,000	5 days
250,001 to 500,000	6 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	11 days
1.1 to 1.5	13 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	25 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 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

2 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

3 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

4 CW-03-A-01 TERRACED CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

5 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

6 DS-03-A-01 SEMI D./TERRACED DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

7 LN-03-A-02 MIXED HOUSES LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

9 MS-03-A-01 TERRACED MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

10 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

11 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

12 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

13 NY-03-A-01 MIXED HOUSES NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

14 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

LIST OF SITES relevant to selection parameters (Cont.)

15 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

16 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 23/10/12 Survey Type: MANUAL

17 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

18 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

19 TV-03-A-01 HOUSES & FLATS TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

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

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

21 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY 21/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 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

23 WM-03-A-02 DETACHED & SEMI DET. WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

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MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 Survey Type: MANUAL

25 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.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Ranking Type: DEPARTURES Time Range: 08:00-09:00
15th Percentile = No. 21
85th Percentile = No. 5

Median Values		Mean Values	
Arrivals:	0.196	Arrivals:	0.297
Departures:	0.764	Departures:	0.787
Totals:	0.960	Totals:	1.083

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Travel Plan
								Arrivals	Departures	Totals	
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2	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.667	1.267	1.934	
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This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

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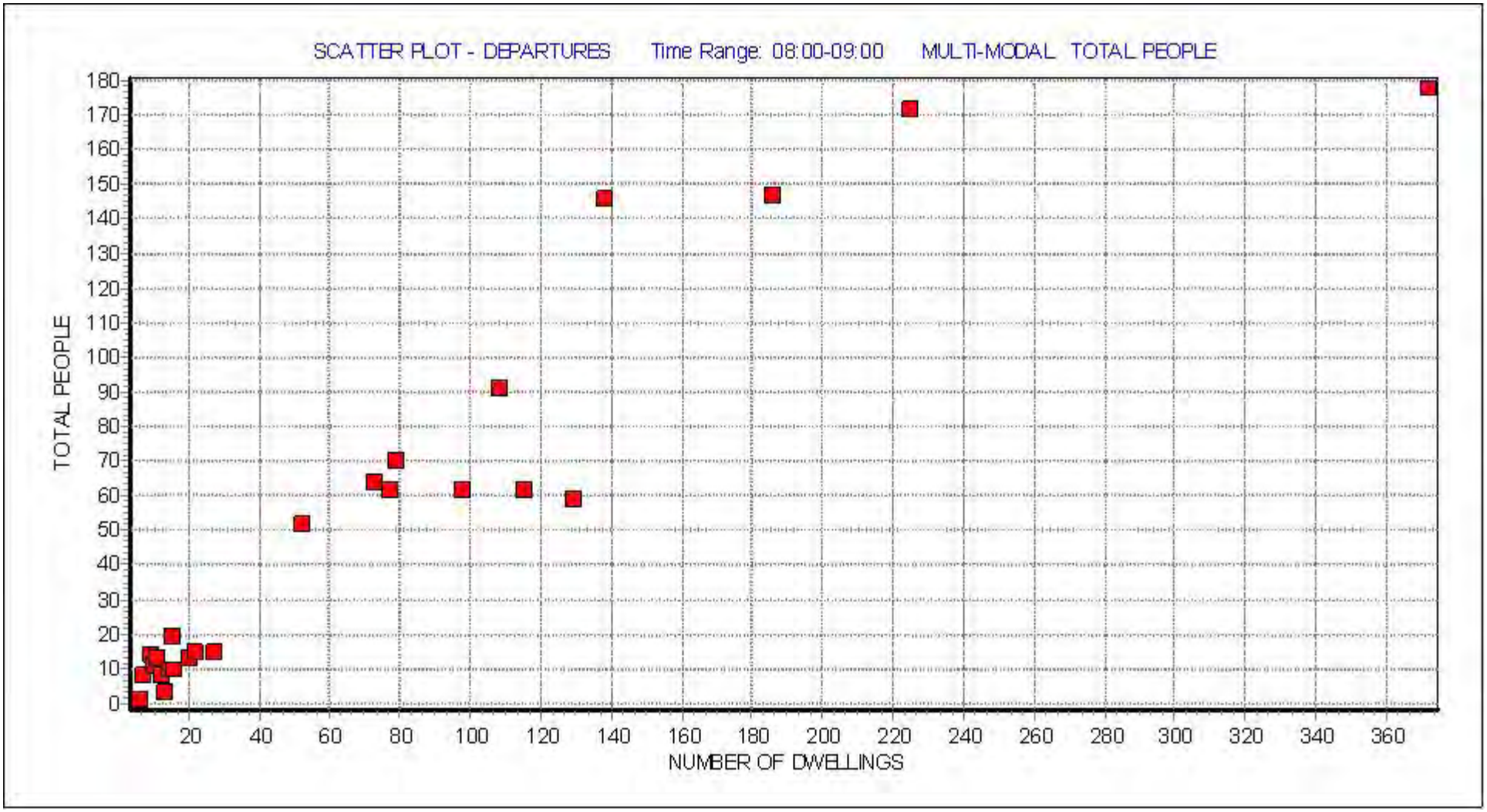


This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	2 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	2 days
09	NORTH		
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	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:	6 to 372 (units:)
Range Selected by User:	6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 07/10/13

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

Selected survey days:

Monday	3 days
Tuesday	8 days
Wednesday	3 days
Thursday	6 days
Friday	5 days

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

Selected survey types:

Manual count	25 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	23
Neighbourhood Centre (PPS6 Local Centre)	2

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	22
No Sub Category	3

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	24 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	2 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	8 days
20,001 to 25,000	4 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	3 days
125,001 to 250,000	5 days
250,001 to 500,000	6 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	11 days
1.1 to 1.5	13 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	25 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 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

2 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

3 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

4 CW-03-A-01 TERRACED CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

5 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

6 DS-03-A-01 SEMI D./TERRACED DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

7 LN-03-A-02 MIXED HOUSES LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

9 MS-03-A-01 TERRACED MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

10 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

11 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

12 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

13 NY-03-A-01 MIXED HOUSES NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

14 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

LIST OF SITES relevant to selection parameters (Cont.)

15 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

16 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 23/10/12 Survey Type: MANUAL

17 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

18 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

19 TV-03-A-01 HOUSES & FLATS TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

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

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

21 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY 21/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 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

23 WM-03-A-02 DETACHED & SEMI DET. WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

24 WO-03-A-01 DETACHED WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 Survey Type: MANUAL

25 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.

JPP Consulting Cedar Barn Walgrave Licence No: 252601

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

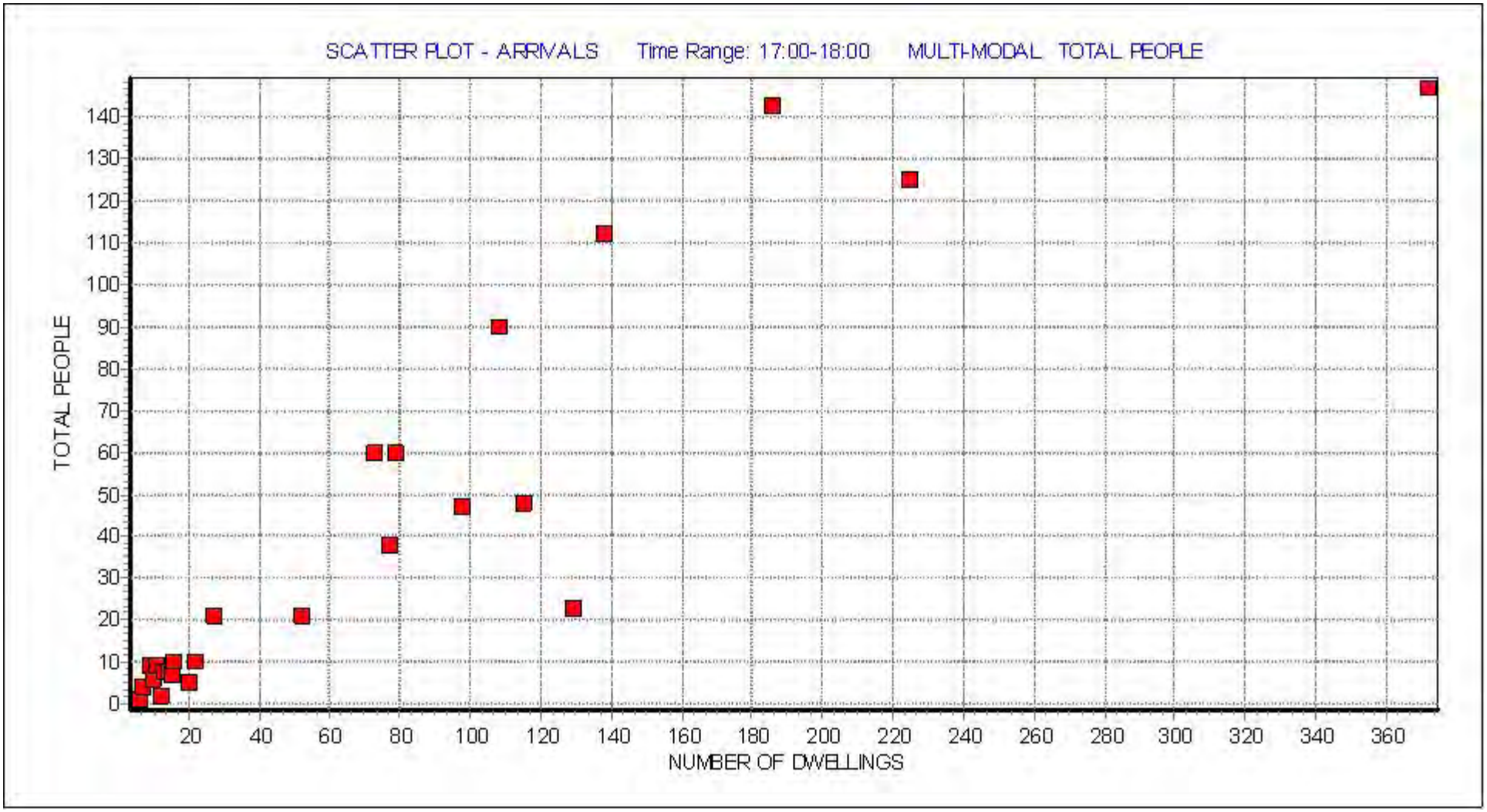
Ranking Type: ARRIVALS Time Range: 17:00-18:00
15th Percentile = No. 21
85th Percentile = No. 5

Median Values		Mean Values	
Arrivals:	0.571	Arrivals:	0.560
Departures:	0.143	Departures:	0.325
Totals:	0.714	Totals:	0.885

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Arrivals)			Travel Plan
								Arrivals	Departures	Totals	
1	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	1.000	0.222	1.222	
2	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.833	0.426	1.259	
3	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.822	0.397	1.219	
4	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.818	0.273	1.091	
5	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.812	0.399	1.211	
6	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.778	0.259	1.037	
7	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.769	0.548	1.317	
8	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.759	0.392	1.151	
9	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.625	0.250	0.875	
10	CW-03-A-01	TERRACED	PENZANCE	CORNWALL	13	Thu	30/06/05	0.615	0.308	0.923	
11	WO-03-A-01	DETACHED	BROMSGROVE	WORCESTERSHIRE	10	Thu	23/06/05	0.600	0.600	1.200	
12	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.571	0.286	0.857	
13	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.571	0.143	0.714	
14	TV-03-A-01	HOUSES & FLATS	HARTLEPOOL	TEES VALLEY	225	Thu	14/04/05	0.556	0.351	0.907	
15	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.494	0.377	0.871	
16	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.480	0.204	0.684	
17	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.467	0.267	0.734	
18	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.455	0.182	0.637	
19	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.417	0.270	0.687	
20	NY-03-A-01	MIXED HOUSES	NORTHALLERTON	NORTH YORKSHIRE	52	Tue	25/09/07	0.404	0.365	0.769	
21	MS-03-A-01	TERRACED	RUNCORN	MERSEYSIDE	372	Thu	06/10/05	0.395	0.277	0.672	
22	DS-03-A-01	SEMI D./TERRAC	DRONFIELD	DERBYSHIRE	20	Thu	22/06/06	0.250	0.350	0.600	
23	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.178	0.225	0.403	
24	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.167	0.750	0.917	
25	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.167	0.000	0.167	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.



This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	2 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	MS	MERSEYSIDE	2 days
09	NORTH		
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	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:	6 to 372 (units:)
Range Selected by User:	6 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 07/10/13

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

Selected survey days:

Monday	3 days
Tuesday	8 days
Wednesday	3 days
Thursday	6 days
Friday	5 days

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

Selected survey types:

Manual count	25 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	23
Neighbourhood Centre (PPS6 Local Centre)	2

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	22
No Sub Category	3

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	24 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	2 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	8 days
20,001 to 25,000	4 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	3 days
125,001 to 250,000	5 days
250,001 to 500,000	6 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	11 days
1.1 to 1.5	13 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	25 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 CA-03-A-04 DETACHED CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

2 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

3 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
BOUGHTON HEATH
CHESTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

4 CW-03-A-01 TERRACED CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

5 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

6 DS-03-A-01 SEMI D./TERRACED DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

7 LN-03-A-02 MIXED HOUSES LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
BOULTHAM
LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

9 MS-03-A-01 TERRACED MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

10 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
OTTERSPOOL
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY 21/06/13 Survey Type: MANUAL

11 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD

CAISTER-ON-SEA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

12 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

13 NY-03-A-01 MIXED HOUSES NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

14 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

LIST OF SITES relevant to selection parameters (Cont.)

15 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

16 SF-03-A-04 DETACHED & BUNGALOWS SUFFOLK
NORMANSTON DRIVE

LOWESTOFT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY 23/10/12 Survey Type: MANUAL

17 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

18 ST-03-A-05 TERRACED & DETACHED STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

19 TV-03-A-01 HOUSES & FLATS TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

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

GATESHEAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

21 WK-03-A-01 TERRACED/SEMI/DET. WARWICKSHIRE
ARLINGTON AVENUE

LEAMINGTON SPA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 6
Survey date: FRIDAY 21/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 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

23 WM-03-A-02 DETACHED & SEMI DET. WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

24 WO-03-A-01 DETACHED WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 Survey Type: MANUAL

25 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.

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RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE

Ranking Type: DEPARTURES Time Range: 17:00-18:00
15th Percentile = No. 21
85th Percentile = No. 5

Median Values		Mean Values	
Arrivals:	0.571	Arrivals:	0.560
Departures:	0.286	Departures:	0.325
Totals:	0.857	Totals:	0.885

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Departures)			Travel Plan
								Arrivals	Departures	Totals	
1	WM-03-A-02	DETACHED & SEM	STOURBRIDGE	WEST MIDLANDS	12	Wed	26/04/06	0.167	0.750	0.917	
2	WO-03-A-01	DETACHED	BROMSGROVE	WORCESTERSHIRE	10	Thu	23/06/05	0.600	0.600	1.200	
3	LN-03-A-02	MIXED HOUSES	LINCOLN	LINCOLNSHIRE	186	Mon	14/05/07	0.769	0.548	1.317	
4	SH-03-A-04	TERRACED	SHREWSBURY	SHROPSHIRE	108	Thu	11/06/09	0.833	0.426	1.259	
5	WO-03-A-03	DETACHED	KIDDERMINSTER	WORCESTERSHIRE	138	Fri	05/05/06	0.812	0.399	1.211	
6	CW-03-A-02	SEMI D./DETATC	TRURO	CORNWALL	73	Tue	18/09/07	0.822	0.397	1.219	
7	WM-03-A-01	TERRACED	COVENTRY	WEST MIDLANDS	79	Fri	03/02/06	0.759	0.392	1.151	
8	SF-03-A-01	SEMI DETACHED	IPSWICH	SUFFOLK	77	Wed	23/05/07	0.494	0.377	0.871	
9	NY-03-A-01	MIXED HOUSES	NORTHALLERTON	NORTH YORKSHIRE	52	Tue	25/09/07	0.404	0.365	0.769	
10	TV-03-A-01	HOUSES & FLATS	HARTLEPOOL	TEES VALLEY	225	Thu	14/04/05	0.556	0.351	0.907	
11	DS-03-A-01	SEMI D./TERRAC	DRONFIELD	DERBYSHIRE	20	Thu	22/06/06	0.250	0.350	0.600	
12	CW-03-A-01	TERRACED	PENZANCE	CORNWALL	13	Thu	30/06/05	0.615	0.308	0.923	
13	ST-03-A-05	TERRACED & DET	STOKE-ON-TRENT	STAFFORDSHIRE	14	Wed	26/11/08	0.571	0.286	0.857	
14	MS-03-A-01	TERRACED	RUNCORN	MERSEYSIDE	372	Thu	06/10/05	0.395	0.277	0.672	
15	CH-03-A-08	DETACHED	CHESTER	CHESHIRE	11	Tue	22/05/12	0.818	0.273	1.091	
16	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.417	0.270	0.687	
17	MS-03-A-03	DETACHED	LIVERPOOL	MERSEYSIDE	15	Fri	21/06/13	0.467	0.267	0.734	
18	NF-03-A-01	SEMI DET. & BU	CAISTER-ON-SEA	NORFOLK	27	Tue	16/10/12	0.778	0.259	1.037	
19	TW-03-A-02	SEMI-DETACHED	GATESHEAD	TYNE & WEAR	16	Mon	07/10/13	0.625	0.250	0.875	
20	CH-03-A-06	SEMI-DET./BUNG	CREWE	CHESHIRE	129	Tue	14/10/08	0.178	0.225	0.403	
21	CA-03-A-04	DETACHED	PETERBOROUGH	CAMBRIDGESHIRE	9	Tue	18/10/11	1.000	0.222	1.222	
22	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.480	0.204	0.684	
23	LN-03-A-03	SEMI DETACHED	LINCOLN	LINCOLNSHIRE	22	Tue	18/09/12	0.455	0.182	0.637	
24	SF-03-A-04	DETACHED & BUN	LOWESTOFT	SUFFOLK	7	Tue	23/10/12	0.571	0.143	0.714	
25	WK-03-A-01	TERRACED/SEMI/	LEAMINGTON SPA	WARWICKSHIRE	6	Fri	21/10/11	0.167	0.000	0.167	

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

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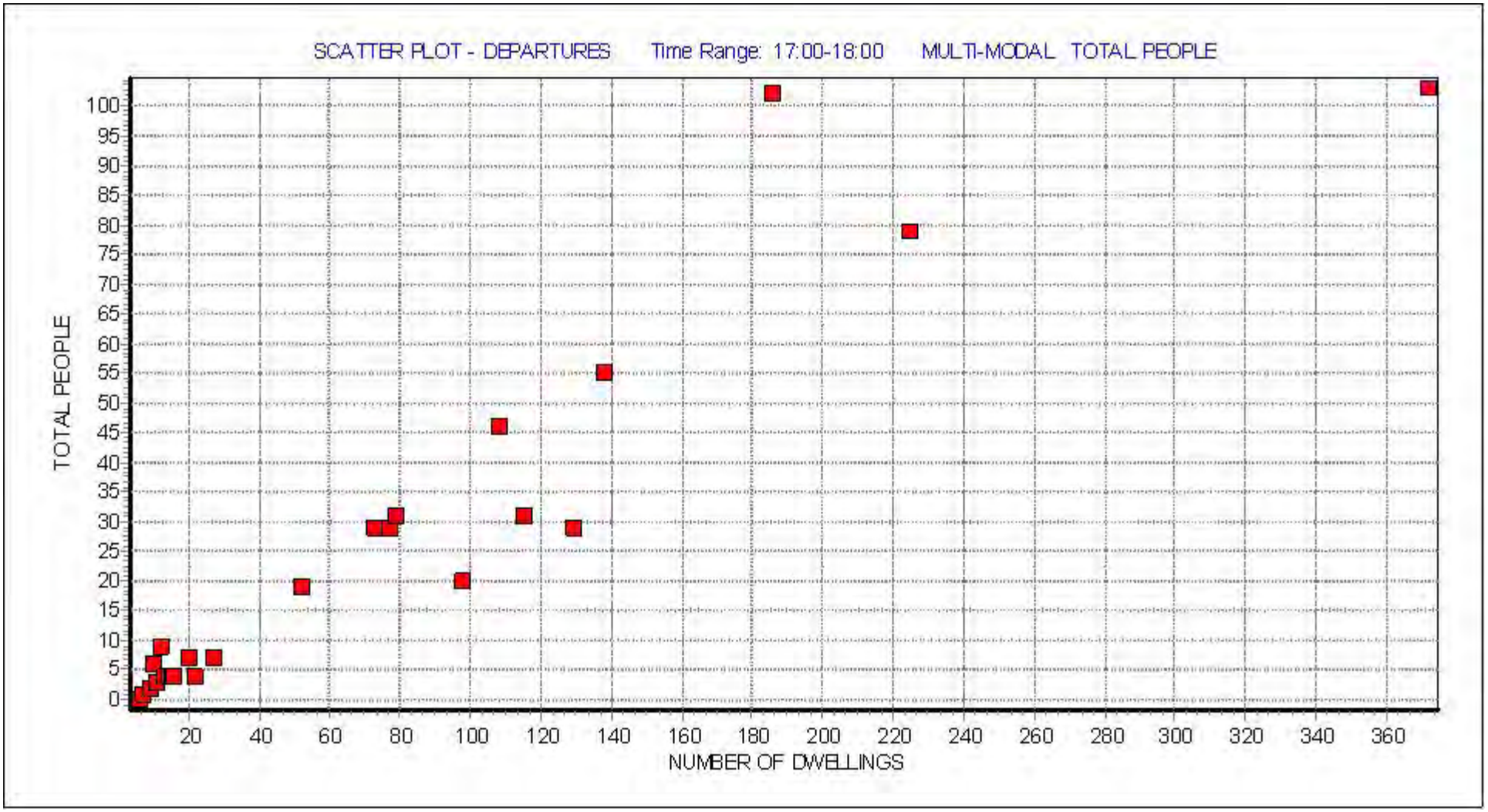

This graph is a visual representation of the correlation between the selected trip rate calculation parameter and the rank order trip rates generated by each individual survey day in the selected set. The range of the trip rate parameter is shown along the x axis, with the level of trips shown on the y axis. The selected time range used to create the rank order list from which the graph is derived is displayed at the top of the graph (unless the peak period irrespective of time range has been selected). A line of best fit is sometimes displayed in the graph, should it be selected for inclusion by the user.

Appendix I

Vehicle Trip Distribution

Including JPP drawing no. R6711PP-TA03

2001 census - UK travel flows (ward)

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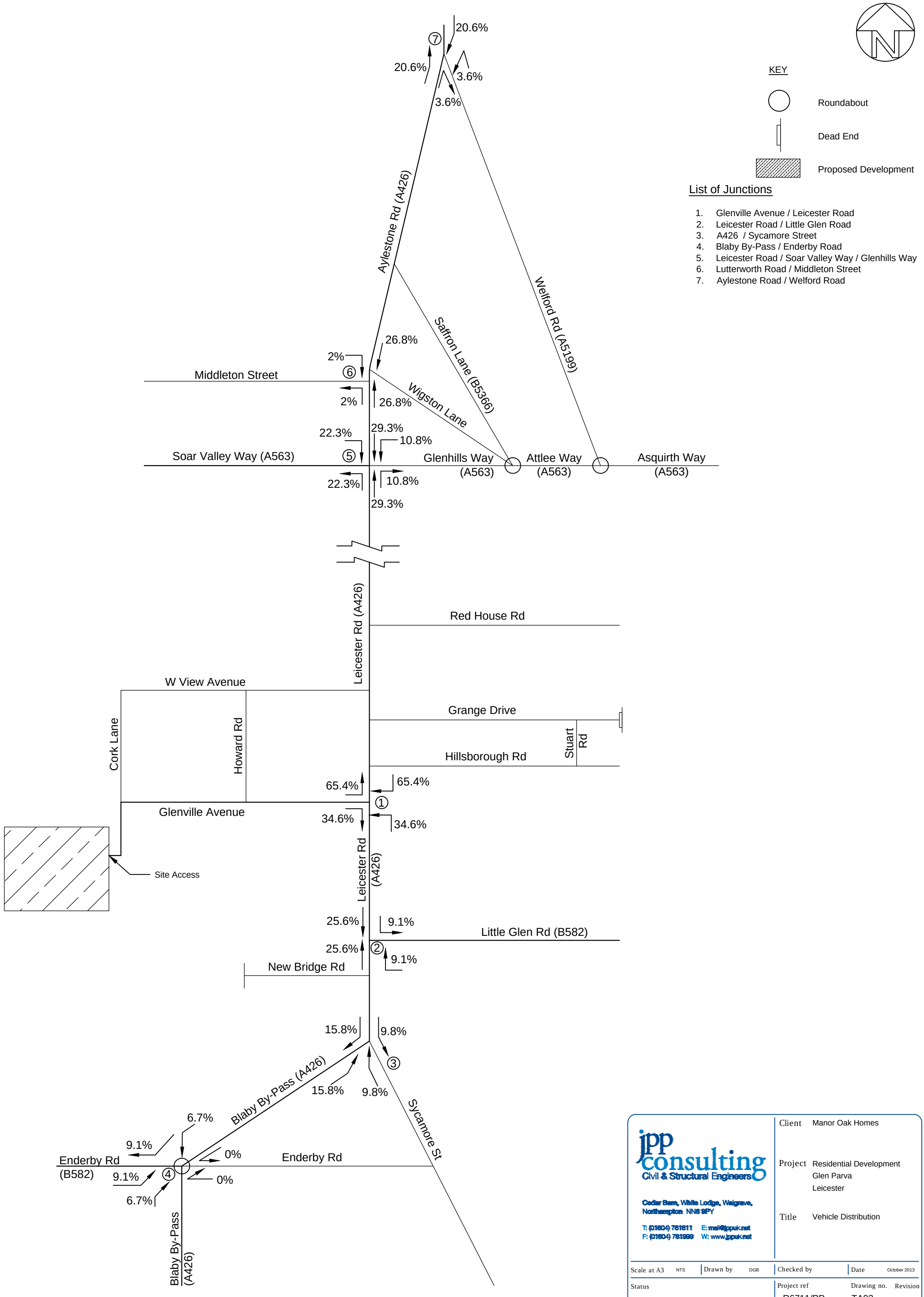
area of residence: 31UBGP : Saxondale (2003 CAS ward)

date: 2001

					Glenville Av / A426				A426 / A563						A426 / Middleton St				A426 Aylestone Rd / A594 Welford Road				A426 Leic Rd / B582 Little Glen Road				A426 Blaby By Pass / Sycamore St				A426 Blaby By Pass / B582 Enderby Road			
					N	S	N	S	W	N	E	W	N	E	N	W	N	W	N	S	N	S	S	E	S	E	W	S	W	S	W	S	W	S
							100.0%					62.5%					28.8%				24.2%				34.6%				25.6%				15.8%			
							65.4%	34.6%				22.3%	29.3%	10.8%			26.8%	2.0%			20.6%	3.6%			25.6%	9.1%			15.8%	9.8%			9.1%	6.7%		
area of workplace : 2003 CAS ward	**Local Authority**	**1,514**					989.5	524.5				338	444	164			406	30			312	55			387.45	137.05			239	148.45			138	101		
Belgrave	Leicester City	7	00FNNJ	A426 N	1		7	0		1		0	7	0	1		7	0	1		7	0												
Castle	Leicester City	194	00FNNL	A426 N	1		194	0		1		0	194	0	1		194	0	1		194	0												
Charnwood	Leicester City	6	00FNNM	A426 N - A594S	1		6	0		1		0	6	0	1		6	0		1	0	6												
Coleman	Leicester City	14	00FNNN	A426 N - A594S	1		14	0		1		0	14	0	1		14	0		1	0	14												
Freemen	Leicester City	42	00FNNS	A426 N - A563 E - B5366 N	1		42	0			1	0	0	42			0	0			0	0												
Humberstone and Hamilton	Leicester City	6	00FNNT	A426 N - A594S	1		6	0		1		0	6	0	1		6	0		1	0	6												
Latimer	Leicester City	15	00FNNW	A426 N - A594S	1		15	0		1		0	15	0	1		15	0		1	0	15												
Thurmaston	Charnwood	12	31UCHK	A426 N	1		12	0		1		0	12	0	1		12	0	1		12	0												
Abbey	Leicester City	49	00FNNF	A426 N	1		49	0		1		0	49	0	1		49	0	1		49	0												
Aylestone	Leicester City	29	00FNNG	A426 N	1		29	0		1		0	29	0	1		29	0	0	0	0	0												
Ravenhurst and Fosse	Blaby	6	31UBGN	A426 N - Braunstone Ln W	1		6	0		1		0	6	0		1	0	6			0	0												
Stoneygate	Leicester City	10	00FNPA	A426 N - A5199 S - B568 E	1		10	0		1		0	10	0	1		10	0	0	0	0	0												
Braunstone Park and Rowley Fields	Leicester City	9	00FNNK	A426 N - A5460 N	1		9	0			1	0	0	9			0	0			0	0												
Thurnby and Houghton	Harborough	4	31UDHC	A426 N - A563 E	1		4	0			1	0	0	4			0	0			0	0												
Knighton	Leicester City	15	00FNNU	A426 N - A563 E - A5199 N	1		15	0			1	0	0	15			0	0			0	0												
Wigston St Wolstan's	Oadby and Wigston	16	31UJFW	A426 N - A563 E - A5199 S	1		16	0			1	0	0	16			0	0			0	0												
Evington	Leicester City	20	00FNNP	A426 N - A563 E - A6 N	1		20	0			1	0	0	20			0	0			0	0												
Oadby Brocks Hill	Oadby and Wigston	4	31UJFL	A426 N - A563 E - A6 S	1		4	0			1	0	0	4			0	0			0	0												
Oadby Grange	Oadby and Wigston	7	31UJFM	A426 N - A563 E - A6 S	1		7	0			1	0	0	7			0	0			0	0												
Oadby St Peter's	Oadby and Wigston	15	31UJFN	A426 N - A563 E - A6 S	1		15	0			1	0	0	15			0	0			0	0												
Wigston Fields	Oadby and Wigston	32	31UJFT	A426 N - A563 E - B5418	1		32	0			1	0	0	32			0	0			0	0												
Enderby and St John's	Blaby	74	31UBGD	A426 N - A563 W - B4114	1		74	0	1			74	0	0			0	0			0	0												
Beaumont Leys	Leicester City	63	00FNNH	A426 N - A563 W - M1 N	1		63	0	1			63	0	0			0	0			0	0												
Anstey	Charnwood	5	31UCGG	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Loughborough Lemyngton	Charnwood	9	31UCGS	A426 N - A563 W - M1 N	1		9	0	1			9	0	0			0	0			0	0												
Loughborough Southfields	Charnwood	5	31UCGX	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Syston West	Charnwood	7	31UCHH	A426 N - A563 W - M1 N	1		7	0	1			7	0	0			0	0			0	0												
Groby	Hinckley and Bosworth	5	31UEGC	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Hinckley Castle	Hinckley and Bosworth	10	31UEGD	A426 N - A563 W - M1 N	1		10	0	1			10	0	0			0	0			0	0												
Hinckley Clarendon	Hinckley and Bosworth	11	31UEGE	A426 N - A563 W - M1 N	1		11	0	1			11	0	0			0	0			0	0												
Hinckley De Montfort	Hinckley and Bosworth	4	31UEGF	A426 N - A563 W - M1 N	1		4	0	1			4	0	0			0	0			0	0												
Markfield, Stanton and Fieldhead	Hinckley and Bosworth	5	31UEGH	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Ratby, Bagworth and Thornton	Hinckley and Bosworth	5	31UEGK	A426 N - A563 W - M1 N	1		5	0	1			5	0	0			0	0			0	0												
Coalville	North West Leicestershire	11	31UHGG	A426 N - A563 W - M1 N	1		11	0	1			11	0	0			0	0			0	0												
St Crispin	Northampton	4	34UFGQ	A426 N - A563 W - M1 S	1		4	0	1			4	0	0			0	0			0	0												
Brownsover South	Rugby	6	44UDGE	A426 N - A563 W - M1 S	1		6	0	1			6	0	0			0	0			0	0												
Cheylesmore	Coventry	6	00CQFC	A426 N - A563 W - M69	1		6	0	1			6	0	0			0	0			0	0												
Bickenhill	Solihull	5	00CTFA	A426 N - A563 W - M69	1		5	0	1			5	0	0			0	0			0	0												
Millfield	Blaby	6	31UBGG	A426 N - A563 W - A5460 N	1		6	0	1			6	0	0			0	0			0	0												
New Parks	Leicester City	37	00FNNX	A426 N - A563 W - A563 N	1		37	0	1			37	0	0			0	0			0	0												
Ellis	Blaby	8	31UBGC	A426 N - A563 W - A563 N	1		8	0	1			8	0	0			0	0			0	0												
Fairestone	Blaby	11	31UBGE	A426 N - A563 W - A563 N	1		11	0	1			11	0	0			0	0			0	0												
Winstanley	Blaby	41	31UBGR	A426 N - A563 W - A563 N	1		41	0	1			41	0	0			0	0			0	0												
Stanton and Flamville	Blaby	6	31UBGQ	A426 S - B582 - B4114 S		1	0	6				0	0	0			0	0			0	0	1		6	0	1		6	0	1		6	0
Narborough and Littlethorpe	Blaby	23	31UBGJ	A426 S - B582 - B4114 S		1	0	23				0	0	0			0	0			0	0	1		23	0	1		23	0	1		23	0
Pastures	Blaby	38	31UBGM	A426 S - B582		1	0	38				0	0	0			0	0			0	0	1		38	0	1		38	0	1		38	0
Fosse	Leicester City	24	00FNNR	A426 N - A594 N - A50	1		24	0		1		0	24	0	1		24	0	1		24	0												
Rushey Mead	Leicester City	26	00FNNY	A426 N - A594 N - A6	1		26	0		1		0	26	0	1		26	0	1		26	0												
Westcotes	Leicester City	20	00FNPC	A426 N - Braunstone Ln E - A5460 N	1		20	0		1		0	20	0		1	0	20			0	0												
Western Park	Leicester City	4	00FNPD	A426 N - Braunstone Ln E - A5460 N	1		4	0		1		0	4	0		1	0	4			0	0												
Eyres Monsell	Leicester City	8	00FNNQ	A426 N - Hillsborough Rd	1		8	0		1		0	8	0	0	0	0	0			0	0												
Spinney Hills	Leicester City	14	00FNNZ	A426 N - Waterloo Rd - A47	1		14	0		1		0	14	0	1	0	14	0		1	0	14												
Cosby with South Whetstone	Blaby	63	31UBFZ	A426 S		1	0	63				0	0	0			0	0			0	0	1		63	0	1		63	0		1	0	63
North Whetstone	Blaby	16	31UBGL	A426 S		1	0	16				0	0	0			0	0			0	0	1		16	0	1		16	0	1		16	0
Saxondale	Blaby	174	31UBGP	A426 S	0.25	0.75	43.5	130.5				0	0	0			0	0			0	0	0.9	0.1	117.45	13.05		1	0	117.45			0	0
Broughton Astley - Broughton	Harborough	12	31UDGG	A426 S		1	0	12				0	0	0			0	0			0	0	1		12	0	1		12	0		1	0	12
Dunton	Harborough	4	31UDGK	A426 S		1	0	4				0	0	0			0	0			0	0	1		4	0	1		4	0		1	0	4
Lutterworth Springs	Harborough	6	31UDGS	A426 S		1	0	6				0	0	0			0	0			0	0	1		6	0	1		6	0		1	0	6
Lutterworth Swift	Harborough	11	31UDGT	A426 S		1	0	11				0	0	0			0	0			0	0	1		11	0	1		11	0		1	0	11
Peatling	Harborough	5	31UDHB	A426 S		1	0	5				0	0	0			0	0			0	0	1		5	0	1		5	0		1	0	5
South Wigston	Oadby and Wigston	75	31UJFR	A426 S - B582 E		1	0	75				0	0	0			0	0			0	0		1	0	75			0	0			0	0
Wigston All Saints	Oadby and Wigston	14	31UJFS	A426 S - B582 E		1	0	14				0	0	0			0	0			0	0		1	0	14			0	0			0	0
Wigston Meadowcourt	Oadby and Wigston	6	31UJFU	A426 S - B582 E		1	0	6				0	0	0			0	0			0	0		1	0	6			0	0			0	0
Fleckney	Harborough	8	31UDGL	A426 S - B582 E - A6 S		1	0	8				0	0	0			0	0			0	0		1	0	8			0	0			0	0
Glen	Harborough	5	31UDGM	A426 S - B582 E - A6 S		1	0	5				0	0	0			0	0			0	0		1	0	5			0	0			0	0
Market Harborough - Great Bowden and Arden	Harborough	12	31UDGU	A426 S - B582 E - A6 S		1	0	12				0	0	0			0	0			0	0		1	0	12			0	0			0	0
Barwell	Hinckley and Bosworth	4	31UEFX	A426 S - B582 W		1	0	4				0	0	0			0	0			0	0		1	0	4			0	0			0	0
Earl Shilton	Hinckley and Bosworth	4	31UEGB	A426 S - B582 W		1	0	4				0	0	0			0	0			0	0	1		4	0	1		4	0	1		4	0
Newbold Verdon with Desford and Peckleton	Hinckley and Bosworth	20	31UEGJ	A426 S - B582 W		1	0	20				0	0	0			0	0			0	0	1		20	0	1		20	0	1		20	0
Ullesthorpe	Harborough	31	31UDHE	A426 S - Broughton Road		1	0	31				0	0	0			0	0			0	0	1		31	0	1		31	0	1		31	0
Blaby South	Blaby	15	31UBFY	A426 S - Winchester Rd		1	0	15				0	0	0			0	0			0	0	1		15	0		1	0	15			0	0
Countesthorpe	Blaby	16	31UBGA	A426 S - Winchester Rd		1	0	16				0	0	0			0	0			0	0	1		16	0		1	0	16			0	0



KEY

Roundabout

Dead End

Proposed Development

List of Junctions

1. Glenville Avenue / Leicester Road
2. Leicester Road / Little Glen Road
3. A426 / Sycamore Street
4. Blaby By-Pass / Enderby Road
5. Leicester Road / Soar Valley Way / Glenhills Way
6. Lutterworth Road / Middleton Street
7. Aylestone Road / Welford Road

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Client	Manor Oak Homes
Project	Residential Development Glen Parva Leicester
Title	Vehicle Distribution

Scale at A3	NTS	Drawn by	DGB	Checked by	Date: October 2013
Status		Project ref	R6711/PP	Drawing no.	TA03
				Revision	

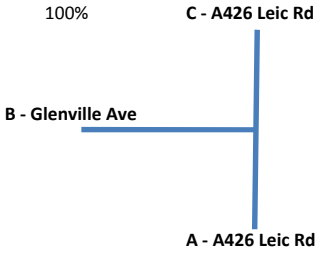
Appendix J

Vehicle Trip Data

JPP drawing no. R6711PP-TA04-05

	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
	50	140	189	100	49	149

1 - Glenvill Avenue / Leicester Road



	A	B	C
A		34.6%	
B	34.6%		65.4%
C		65.4%	

100%

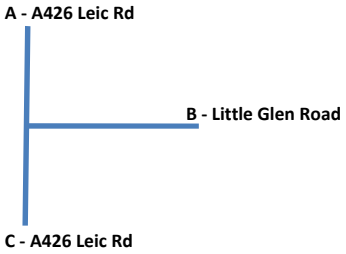
0800-0900	A	B	C
A		17	
B	48		91
C		32	

ok 189

1700-1800	A	B	C
A		35	
B	17		32
C		65	

ok 149

2 - Leicester Road / Little Glen Road



	A	B	C
A		9.1%	26%
B	9.1%		
C	26%		

34.6%

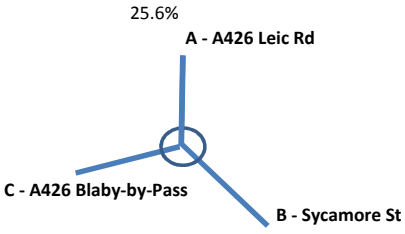
0800-0900	A	B	C
A		13	36
B	5		
C	13		

ok 66

1700-1800	A	B	C
A		4	12
B	9		
C	26		

ok 51

3 - A426 / Sycamore St



	A	B	C
A		9.8%	15.8%
B	9.8%		
C	15.8%		

25.6%

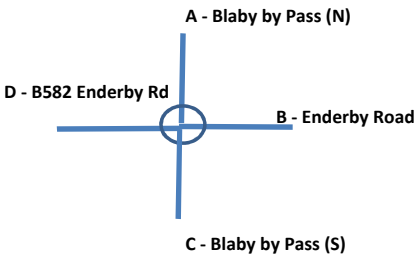
0800-0900	A	B	C
A		14	22
B	5		
C	8		

ok 48.4521

1700-1800	A	B	C
A		5	8
B	10		
C	16		

ok 38

4 - A426 Blaby by Pass / Enderby Road



	A	B	C	D
A			6.7%	9.1%
B				
C	6.7%			
D	9.1%			

15.8%

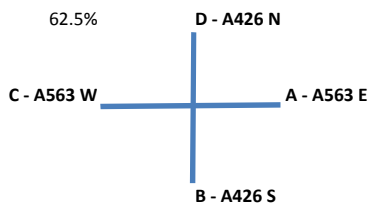
0800-0900	A	B	C	D
A			9	13
B				
C	3			
D	5			

ok 30

1700-1800	A	B	C	D
A			3	4
B				
C	7			
D	9			

ok 23

5 - Leicester Road / Soar Valley Way / Glenhills Way



	A	B	C	D
A		10.8%		
B	10.8%		22.3%	29.3%
C		22.3%		
D		29.3%		

62%

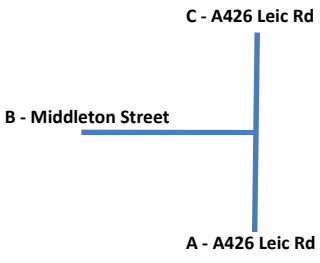
0800-0900	A	B	C	D
A		5		
B	15		31	41
C		11		
D		15		

ok 118

1700-1800	A	B	C	D
A		11		
B	5		11	14
C		22		
D		29		

ok 93

6 - Lutterworth Road / Middleton Street



	A	B	C
A		2.0%	26.8%
B	2.0%		
C	26.8%		

29%

0800-0900	A	B	C
A		3	37
B	1		
C	13		

ok 55

1700-1800	A	B	C
A		1	13
B	2		
C	27		

ok 43

7 - Aylestone Road / Welford Road

	A	B	C
A		3.6%	
B	3.6%		20.6%
C		20.6%	

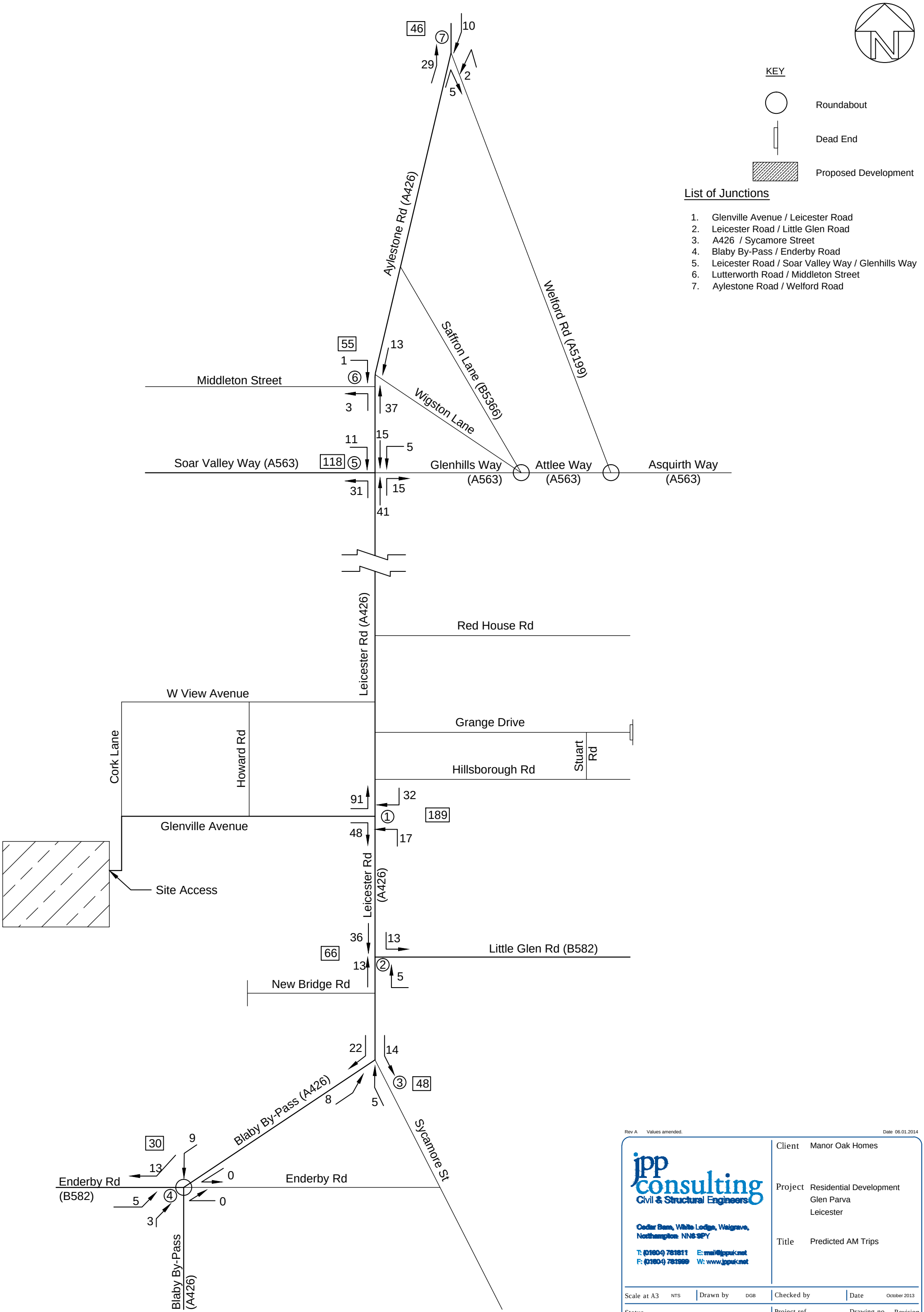
24%

0800-0900	A	B	C
A		2	
B	5		29
C		10	

ok 46

1700-1800	A	B	C
A		4	
B	2		10
C		21	

ok 36



Rev A Values amended. Date 06.01.2014

jpp consulting
Civil & Structural Engineers
Cedar Barn, White Lodge, Walgrave, Northampton NN6 9PY
T: (01604) 781811 E: mail@jppuk.net
F: (01604) 781999 W: www.jppuk.net

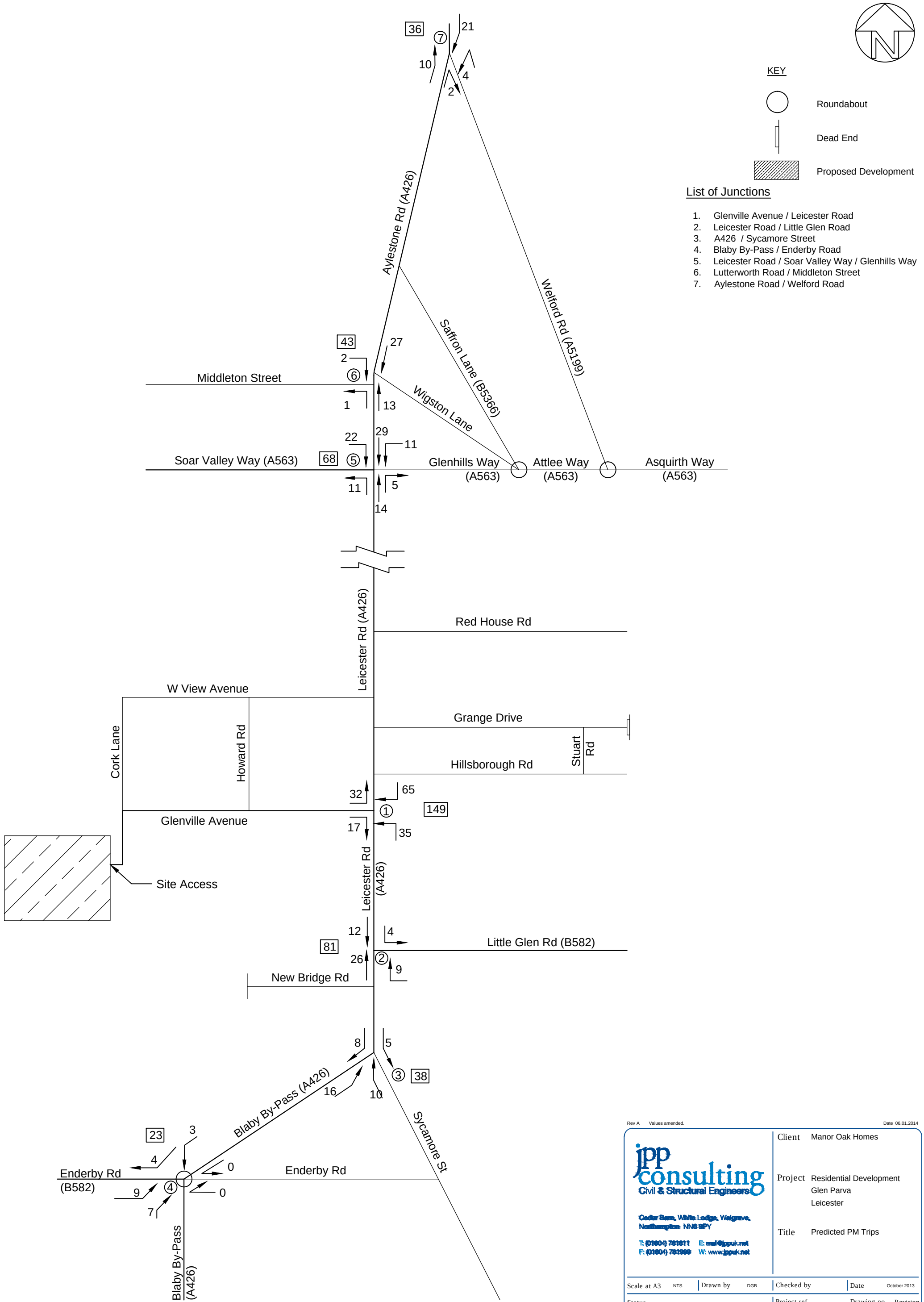
Client Manor Oak Homes

Project Residential Development
Glen Parva
Leicester

Title Predicted AM Trips

Scale at A3	Drawn by	Checked by	Date
NTS	DGB		October 2013

Status	Project ref	Drawing no.	Revision
	R6711/PP	TA04	A



Rev A Values amended. Date 06.01.2014

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Client	Manor Oak Homes
Project	Residential Development Glen Parva Leicester
Title	Predicted PM Trips

Scale at A3	Drawn by	Checked by	Date
NTS	DGB		October 2013

Status	Project ref	Drawing no.	Revision
	R6711/PP	TA05	A

Appendix K
Traffic Count Data

Midlands

Haseley Office Centre,
Firs Lane, Haseley,
Warwick,
CV35 7LS

Tel: 01926 485504
Fax: 01926 485537

JPP CONSULTING
GLEN PARVA
TRAFFIC SURVEY

SURVEY REPORT
DECEMBER 2013

PROJECT NO.	3517
CHECKED	N. TOONE
DATE	02/01/2014
CONTACT	C. WHITEHOUSE
REVISION	

email: enquiries@nationwidedatacollection.co.uk
website: www.nationwidedatacollection.co.uk

Registered Office:
Haseley Office Centre, Firs Lane,
Haseley, Warwick, CV35 7LS

CONTENTS

Introduction

General Location Plan

Automatic Traffic Count Installation Photographs

Drawings 3517-01 to 02

Appendix A – Vehicle Categories

Appendix B – Classified Count Data

Appendix C – Automatic Traffic Count Data

INTRODUCTION

Nationwide Data Collection (NDC) was instructed by JPP Consulting to undertake classified turning counts and automatic traffic counts in Glen Parva, Leicestershire. A general location plan is given in Diagram 1.

Classified Turning Counts

Classified turning counts were undertaken at the following junctions:

Site 1 – A426 Leicester Road / Glenville Avenue
Site 2 – A426 Leicester Road / Little Glen Road
Site 3 – A563 Soar Valley Way / A563 Glenhills Way / A426
Site 4 – A426 Aylestone Road / Middleton Street

All sites were surveyed using telescopically mounted video cameras from which the information was subsequently extracted. The surveys were carried out on Tuesday 3rd December 2013 and survey hours were 07:30 to 09:30 and 16:30 to 18:30. All information was collected in fifteen-minute intervals and has been tabulated with both hourly and period totals. Details of the observed movements are given in Drawings 3517-01 & 02.

Vehicles were classified into the following categories:
Cars and taxis (**CAR**), Light Goods Vehicles (**LGV**), Other Goods Vehicles type 1 (**OGV1**), Other Goods Vehicles type 2 (**OGV2**), Public Service Vehicles (**PSV**) and Motorcycles (**MCL**).

A detailed description of the vehicles included in each category is included in Appendix A.
The results of the classified counts are contained in Appendix B.

Automatic Traffic Counts

Metrocount 5600 series automatic traffic counters, attached to pneumatic tubes, were installed at the following locations:

Site 1 – Leicester Road, attached to Industrial Estate sign - OSGR: SP 56832 98740
Site 2 – Little Glen Road, attached to Direction sign - OSGR: SP 56901 98518
Site 3 – Enderby Road, attached to lamp column No.4 - OSGR: SP 56068 97862

The counters were installed for a period of 1 week commencing Tuesday 3rd December 2013. Data collection was interrupted at Site 1 and Site 2 due to tubes breaking and water in the tube. These sites were left down to count for a further week. Data collection was again interrupted from 16:00 on Tuesday 14th December 2013 to 11:00 Wednesday 15th December 2013; repairs were made at the earliest opportunity.

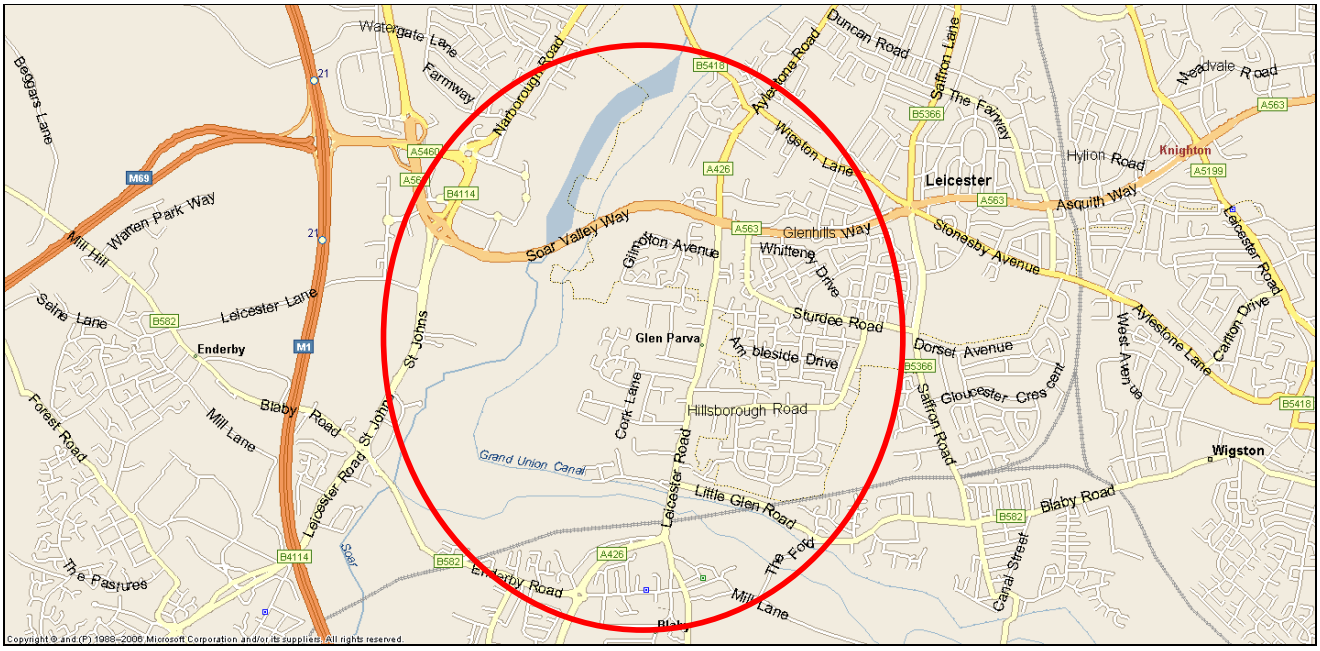
The resulting data files have been analysed to produce speed and class data at hourly intervals. Details of the vehicle categories & speed bin classifications are given in Appendix A, and a copy of the data is included in Appendix C.

Site Notes

The weather was recorded as dry, mild and overcast and there were no incidents are accidents likely to have had an affect on the results.

All data has been emailed to martin.andrews@jppuk.net.

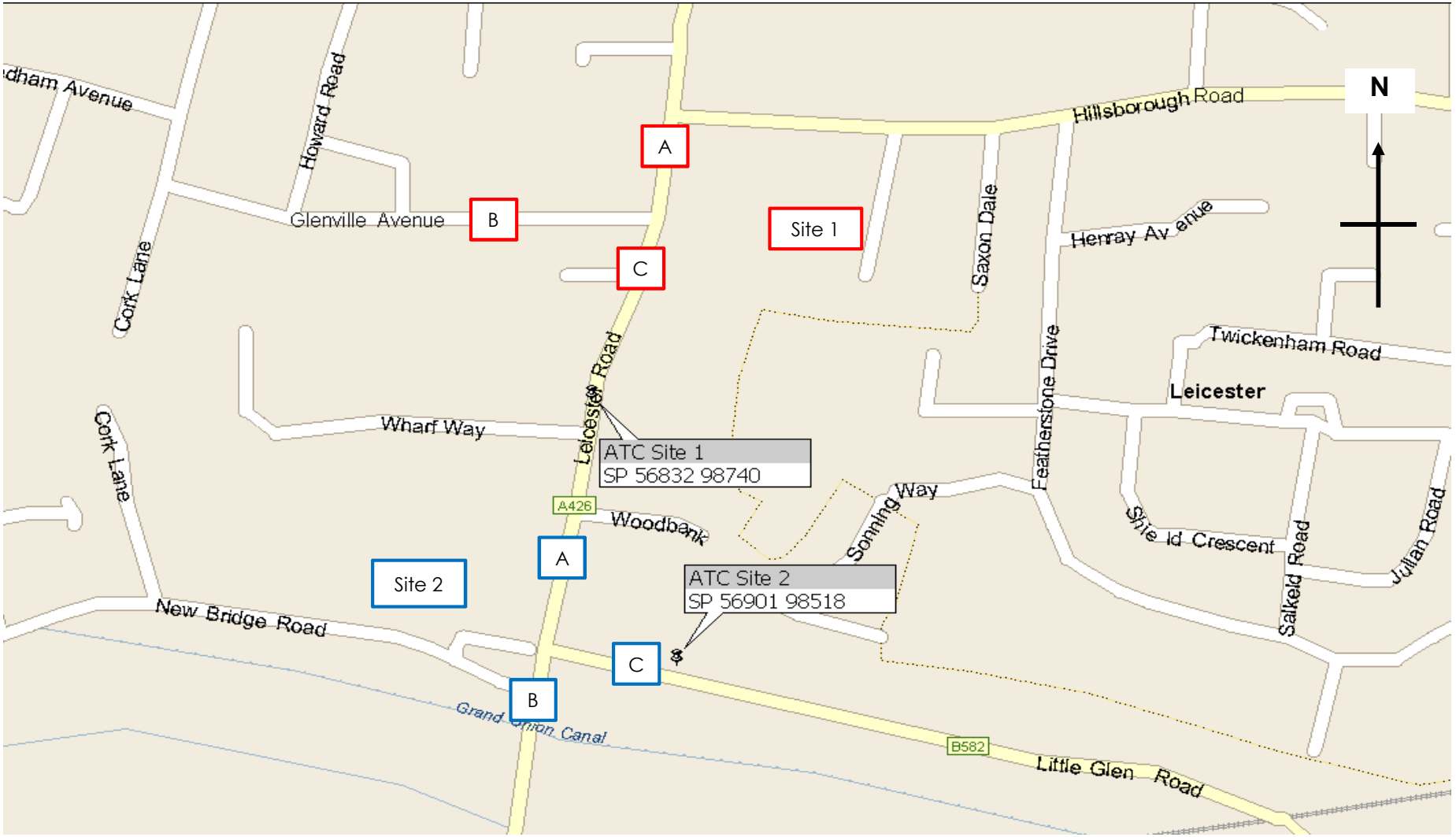
Diagram 1 – General Location Plan



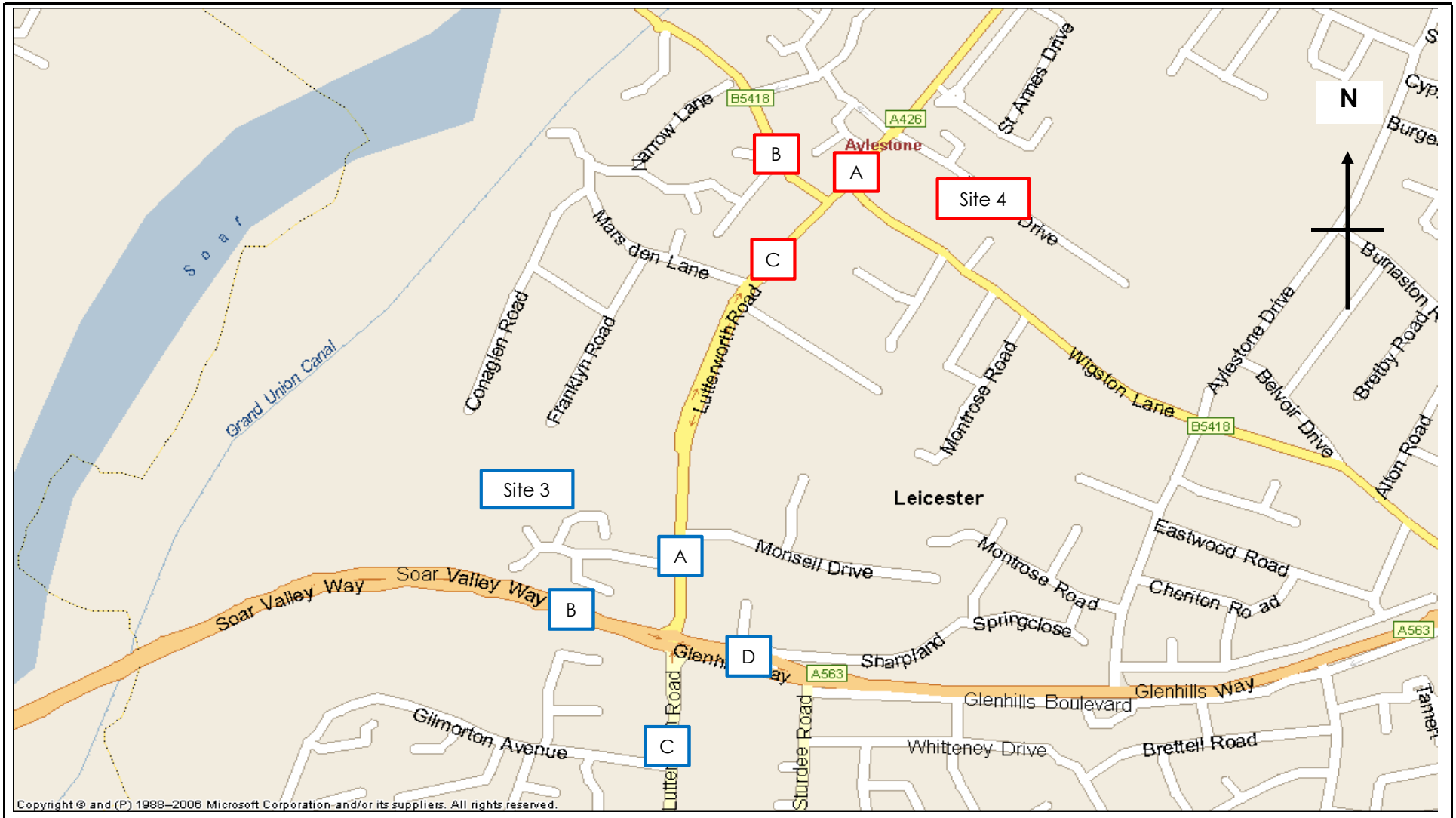
ATC Site 1 - Installation Photo

ATC Site 2 - Installation Photo

ATC Site 3 - Installation Photo



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 1 - A426 Leicester Road / Glenville Avenue and Site 2 - A426 Leicester Road / Little Glen Road	**Project No:**	3517	**Drawing No:**	3517-01	**Drawn By:**	CJW
	Survey Date:	Tuesday 3rd December 2013	**Project Name:**	Glen Parva				
	Survey Times:	07:30 to 09:30 and 16:30 to 18:30	**Drawing Title:**	Site Layout and Observed Movements				



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 3 - A563 Soar Valley Way / A563 Glenhills Way / A426 and Site 4 - A426 Aylestone Road / Middleton Street	**Project No:**	3517	**Drawing No:**	3517-02	**Drawn By:** CJW
	Survey Date:	Tuesday 3rd December 2013	**Project Name:**	Glen Parva			
	Survey Times:	07:30 to 09:30 and 16:30 to 18:30	**Drawing Title:**	Site Layout and Observed Movements			

APPENDIX A
Vehicle Categories

COBA VEHICLE CATEGORIES

CAR	SALOON ESTATE PEOPLE CARRIER CAR TOWING CARAVAN / TRAILER
LIGHT GOODS VEHICLE (LGV)	VAN <3.5 TONNES – single rear tyres PICK-UP
OTHER GOODS VEHICLE (OGV1)	> 3.5 TONNES – twin rear tyres 2-AXLES RIGID 2-AXLES RIGID 3 AXLES-RIGID
OTHER GOODS VEHICLE (OGV2)	4 OR MORE AXLES RIGID 3-AXLES ARTIC 4 OR MORE AXLES ARTIC OTHER GOODS VEHICLE WITH TRAILER
BUSES & COACHES (PSV)	DOUBLE DECK BUS SINGLE DECK BUS OR COACH

COBA VEHICLE CATEGORIES

Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. The most common categories into which the traffic is split in COBA; these are defined as:

Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

Buses and Coaches (PSV)

Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.

ATC VEHICLE CATEGORIES

Axles	Groups	Description	Class		Parameters	Dominant Vehicle	Aggregate
2	1 or 2	Very Short - Bicycle or Motorcycle	MC	1	d(1)<1.7m & axles=2		
2	1 or 2	Short - Sedan, Wagon, 4WD, Utility, Light Van	SV	2	d(1)>=1.7m, d(1)<=3.2m & axles=2		
3, 4 or 5	3	Short Towing - Trailer, Caravan, Boat, etc.	SVT	3	groups=3, d(1)>=2.1m, d(1)<=3.2m, d(2)>=2.1m & axles=3,4,5		1 (Light)
2	2	Two axle truck or Bus	TB2	4	d(1)>3.2m & axles=2		
3	2	Three axle truck or Bus	TB3	5	axles=3 & groups=2		
>3	2	Four axle truck	T4	6	axles>3 & groups=2		2 (Medium)
3	3	Three axle articulated vehicle or Rigid vehicle and trailer	ART3	7	d(1)>3.2m, axles=3 & groups=3		
4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	ART4	8	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 4 & groups>2		
5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	ART5	9	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles=5 & groups>2		
>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	ART6	10	axles=6 & groups>2 or axles>6 & groups=3		
>6	4	B-Double or Heavy truck and trailer	BD	11	groups=4 & axles>6		
>6	>=5	Double or triple road train or Heavy truck and two (or more) trailers	DRT	12	groups>=5 & axles>6		3 (Heavy)

ATC SPEED BINS & DATA HEADINGS

Heading	Description
0 - 5	Speed bin totals 0 - 5 mph
5 - 10	Speed bin totals 5 - 10 mph
10-15	Speed bin totals 10 - 15 mph
15 - 20	Speed bin totals 15 - 20 mph
20 - 25	Speed bin totals 20 - 25 mph
25 - 30	Speed bin totals 25 - 30 mph
30 - 35	Speed bin totals 30 - 35 mph
35 - 40	Speed bin totals 35 - 40 mph
40 - 45	Speed bin totals 40 - 45 mph
45 - 50	Speed bin totals 45 - 50 mph
50 - 55	Speed bin totals 50 - 55 mph
55 - 60	Speed bin totals 55 - 60 mph
60 - 65	Speed bin totals 60 - 65 mph
65 - 70	Speed bin totals 65 - 70 mph
70 - 75	Speed bin totals 70 - 75 mph
75 - 80	Speed bin totals 75 - 80 mph
80 - 85	Speed bin totals 80 - 85 mph
85 - 90	Speed bin totals 85 - 90 mph
90 - 95	Speed bin totals 90 - 95 mph
95 - 100	Speed bin totals 95 - 100 mph
100 - 105	Speed bin totals 100 - 105 mph
105 - 110	Speed bin totals 105 - 110 mph
110 - 115	Speed bin totals 110 - 115 mph
115 - 120	Speed bin totals 115 - 120 mph
120 - 125	Speed bin totals 120 - 125 mph
125 - 130	Speed bin totals 125 - 130 mph
130 - 135	Speed bin totals 130 - 135 mph
135 - 140	Speed bin totals 135 - 140 mph

Heading	Description
>PSL	Greater than the posted speed limit
>PSL%	Greater than the posted speed limit as a percentage
>SL1 ACPO	Greater than ACPO (Association of Chief Police Officers) standard. ACPO is PSL x 10%+2mph
>SL1% ACPO	Greater than ACPO displayed as a percentage
>SL2 DfT	Greater than DFT (Department For Transport) standard. DFT is PSL plus 15mph.
>SL2% DfT	Greater than DFT displayed as a percentage
Mean	Average speed
Vpp 85	85th percentile speed

APPENDIX B
Classified Count Data

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	A to C							A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	99	22	2	1	1	2	127	5	1	0	0	1	0	7
07:45	139	33	1	0	0	0	173	3	1	0	0	0	0	4
08:00	156	26	2	3	3	1	191	1	0	0	0	0	0	1
08:15	152	22	2	1	1	0	178	5	1	0	0	0	0	6
08:30	110	21	2	3	2	2	140	19	2	0	0	0	0	21
08:45	94	15	1	1	1	2	114	16	1	0	0	0	0	17
09:00	90	17	2	1	2	0	112	4	0	2	0	0	0	6
09:15	87	21	3	1	2	0	114	4	0	0	0	0	0	4
P/TOT	927	177	15	11	12	7	1149	57	6	2	0	1	0	66

	A to C							A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	147	20	2	0	0	1	170	4	2	0	0	0	0	6
16:45	132	18	2	1	3	1	157	5	3	0	0	0	0	8
17:00	132	18	3	0	2	1	156	7	1	0	0	0	0	8
17:15	128	11	0	0	0	4	143	5	0	0	0	0	0	5
17:30	128	13	2	0	4	0	147	5	0	0	0	0	0	5
17:45	114	15	0	0	1	1	131	5	0	0	0	0	0	5
18:00	126	8	0	0	3	0	137	2	1	0	0	0	0	3
18:15	110	10	0	0	2	2	124	5	0	0	0	0	0	5
P/TOT	1017	113	9	1	15	10	1165	38	7	0	0	0	0	45

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	B to A							B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	7	1	0	0	0	0	8	7	2	0	0	0	0	9
07:45	3	1	0	0	0	0	4	14	4	0	0	0	0	18
08:00	4	1	1	0	0	0	6	9	3	0	0	0	0	12
08:15	4	2	0	0	0	0	6	13	0	0	0	0	1	14
08:30	8	1	0	0	0	1	10	10	1	0	0	0	0	11
08:45	16	5	0	0	0	0	21	12	2	0	0	0	0	14
09:00	17	0	0	0	0	0	17	18	1	0	0	0	0	19
09:15	2	1	0	0	0	0	3	7	1	1	0	0	0	9
P/TOT	61	12	1	0	0	1	75	90	14	1	0	0	1	106

	B to A							B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	3	1	0	0	0	0	4	11	1	0	0	0	1	13
16:45	2	1	0	0	0	0	3	7	0	0	0	0	0	7
17:00	2	0	0	0	0	0	2	6	2	0	0	0	0	8
17:15	4	0	0	0	0	0	4	3	0	0	0	0	0	3
17:30	2	2	0	0	1	0	5	8	1	0	0	0	0	9
17:45	3	0	0	0	0	0	3	10	0	0	0	0	0	10
18:00	4	0	0	0	0	0	4	6	1	0	0	0	0	7
18:15	2	0	0	0	0	0	2	12	0	0	0	0	0	12
P/TOT	22	4	0	0	1	0	27	63	5	0	0	0	1	69

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	4	0	1	0	0	0	5	143	24	2	3	2	2	176
07:45	8	0	0	0	0	0	8	147	24	6	1	4	3	185
08:00	17	1	0	0	1	0	19	162	15	4	1	1	3	186
08:15	19	1	0	0	0	0	20	150	14	2	0	2	0	168
08:30	24	1	0	0	0	0	25	147	19	2	1	5	2	176
08:45	17	3	0	0	0	0	20	137	19	0	2	1	0	159
09:00	7	0	0	0	0	0	7	167	20	2	0	2	4	195
09:15	8	1	2	0	0	0	11	119	20	3	3	2	0	147
P/TOT	104	7	3	0	1	0	115	1172	155	21	11	19	14	1392

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	12	2	0	0	0	0	14	181	27	1	0	2	4	215
16:45	20	2	0	0	0	0	22	152	24	0	0	1	2	179
17:00	17	2	0	0	0	1	20	196	30	1	1	2	1	231
17:15	23	2	0	0	1	1	27	168	21	0	0	1	0	190
17:30	15	4	0	0	0	0	19	170	17	2	0	2	3	194
17:45	15	4	0	0	0	0	19	146	13	0	0	1	0	160
18:00	16	1	0	0	0	0	17	138	11	0	0	1	3	153
18:15	15	3	0	0	0	0	18	142	13	3	0	1	0	159
P/TOT	133	20	0	0	1	2	156	1293	156	7	1	11	13	1481

SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	150	25	2	3	2	2	184	104	23	2	1	2	2	134
07:45	150	25	6	1	4	3	189	142	34	1	0	0	0	177
08:00	166	16	5	1	1	3	192	157	26	2	3	3	1	192
08:15	154	16	2	0	2	0	174	157	23	2	1	1	0	184
08:30	155	20	2	1	5	3	186	129	23	2	3	2	2	161
08:45	153	24	0	2	1	0	180	110	16	1	1	1	2	131
09:00	184	20	2	0	2	4	212	94	17	4	1	2	0	118
09:15	121	21	3	3	2	0	150	91	21	3	1	2	0	118
P/TOT	1233	167	22	11	19	15	1467	984	183	17	11	13	7	1215

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	184	28	1	0	2	4	219	151	22	2	0	0	1	176
16:45	154	25	0	0	1	2	182	137	21	2	1	3	1	165
17:00	198	30	1	1	2	1	233	139	19	3	0	2	1	164
17:15	172	21	0	0	1	0	194	133	11	0	0	0	4	148
17:30	172	19	2	0	3	3	199	133	13	2	0	4	0	152
17:45	149	13	0	0	1	0	163	119	15	0	0	1	1	136
18:00	142	11	0	0	1	3	157	128	9	0	0	3	0	140
18:15	144	13	3	0	1	0	161	115	10	0	0	2	2	129
P/TOT	1315	160	7	1	12	13	1508	1055	120	9	1	15	10	1210

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SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	9	1	1	0	1	0	12	14	3	0	0	0	0	17
07:45	11	1	0	0	0	0	12	17	5	0	0	0	0	22
08:00	18	1	0	0	1	0	20	13	4	1	0	0	0	18
08:15	24	2	0	0	0	0	26	17	2	0	0	0	1	20
08:30	43	3	0	0	0	0	46	18	2	0	0	0	1	21
08:45	33	4	0	0	0	0	37	28	7	0	0	0	0	35
09:00	11	0	2	0	0	0	13	35	1	0	0	0	0	36
09:15	12	1	2	0	0	0	15	9	2	1	0	0	0	12
P/TOT	161	13	5	0	2	0	181	151	26	2	0	0	2	181

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	16	4	0	0	0	0	20	14	2	0	0	0	1	17
16:45	25	5	0	0	0	0	30	9	1	0	0	0	0	10
17:00	24	3	0	0	0	1	28	8	2	0	0	0	0	10
17:15	28	2	0	0	1	1	32	7	0	0	0	0	0	7
17:30	20	4	0	0	0	0	24	10	3	0	0	1	0	14
17:45	20	4	0	0	0	0	24	13	0	0	0	0	0	13
18:00	18	2	0	0	0	0	20	10	1	0	0	0	0	11
18:15	20	3	0	0	0	0	23	14	0	0	0	0	0	14
P/TOT	171	27	0	0	1	2	201	85	9	0	0	1	1	96

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DECEMBER 2013
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SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	106	24	2	1	1	2	136	147	24	3	3	2	2	181
07:45	153	37	1	0	0	0	191	155	24	6	1	4	3	193
08:00	165	29	2	3	3	1	203	179	16	4	1	2	3	205
08:15	165	22	2	1	1	1	192	169	15	2	0	2	0	188
08:30	120	22	2	3	2	2	151	171	20	2	1	5	2	201
08:45	106	17	1	1	1	2	128	154	22	0	2	1	0	179
09:00	108	18	2	1	2	0	131	174	20	2	0	2	4	202
09:15	94	22	4	1	2	0	123	127	21	5	3	2	0	158
P/TOT	1017	191	16	11	12	8	1255	1276	162	24	11	20	14	1507

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	158	21	2	0	0	2	183	193	29	1	0	2	4	229
16:45	139	18	2	1	3	1	164	172	26	0	0	1	2	201
17:00	138	20	3	0	2	1	164	213	32	1	1	2	2	251
17:15	131	11	0	0	0	4	146	191	23	0	0	2	1	217
17:30	136	14	2	0	4	0	156	185	21	2	0	2	3	213
17:45	124	15	0	0	1	1	141	161	17	0	0	1	0	179
18:00	132	9	0	0	3	0	144	154	12	0	0	1	3	170
18:15	122	10	0	0	2	2	136	157	16	3	0	1	0	177
P/TOT	1080	118	9	1	15	11	1234	1426	176	7	1	12	15	1637

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SITE: 1 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Glenville Avenue DAY: Tuesday

	JUNCTION TOTAL						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	265	50	5	4	4	4	332
07:45	314	63	7	1	4	3	392
08:00	349	46	7	4	5	4	415
08:15	343	40	4	1	3	1	392
08:30	318	45	4	4	7	5	383
08:45	292	45	1	3	2	2	345
09:00	303	38	6	1	4	4	356
09:15	227	44	9	4	4	0	288
P/TOT	2411	371	43	22	33	23	2903

PEAK HOUR CALCULATION	
07:30 to 08:30	1531
07:45 to 08:45	**1582**
08:00 to 09:00	1535
08:15 to 09:15	1476
08:30 to 09:30	1372
PEAK VALUE	**1582**

	JUNCTION TOTAL						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	358	53	3	0	2	6	422
16:45	318	48	2	1	4	3	376
17:00	360	53	4	1	4	3	425
17:15	331	34	0	0	2	5	372
17:30	328	37	4	0	7	3	379
17:45	293	32	0	0	2	1	328
18:00	292	22	0	0	4	3	321
18:15	286	26	3	0	3	2	320
P/TOT	2566	305	16	2	28	26	2943

PEAK HOUR CALCULATION	
16:30 to 17:30	**1595**
16:45 to 17:45	1552
17:00 to 18:00	1504
17:15 to 18:15	1400
17:30 to 18:30	1348
PEAK VALUE	**1595**

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CLASSIFIED TURNING COUNT

SITE: 2 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	A to C							A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	26	4	2	0	0	0	32	82	20	2	1	1	3	109
07:45	32	3	2	0	0	0	37	124	24	2	0	2	0	152
08:00	39	8	0	0	0	0	47	93	16	3	2	2	0	116
08:15	27	1	0	0	0	0	28	143	21	1	2	1	3	171
08:30	18	3	2	1	0	0	24	113	11	6	1	2	2	135
08:45	26	5	0	0	0	0	31	88	8	2	2	2	2	104
09:00	23	6	4	0	0	0	33	76	10	1	1	2	0	90
09:15	30	7	2	0	0	0	39	75	13	4	1	1	0	94
P/TOT	221	37	12	1	0	0	271	794	123	21	10	13	10	971

	A to C							A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	30	6	1	0	0	0	37	113	11	1	0	1	1	127
16:45	33	5	2	0	0	0	40	127	18	1	1	3	1	151
17:00	27	6	1	0	0	0	34	106	8	4	1	2	1	122
17:15	30	1	0	0	0	0	31	118	12	0	0	0	2	132
17:30	34	5	2	0	0	0	41	112	6	0	0	3	0	121
17:45	20	2	0	0	0	0	22	85	10	1	0	1	1	98
18:00	33	5	1	0	0	0	39	116	2	1	0	3	0	122
18:15	26	2	0	0	0	1	29	91	7	1	0	2	1	102
P/TOT	233	32	7	0	0	1	273	868	74	9	2	15	7	975

SITE: 2 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	B to A							B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	98	15	3	2	0	2	120	87	8	5	1	0	0	101
07:45	150	20	5	1	3	3	182	75	16	4	1	1	0	97
08:00	140	10	5	1	2	3	161	56	12	3	0	0	2	73
08:15	135	8	5	0	1	0	149	43	7	1	0	0	0	51
08:30	147	11	2	1	4	1	166	43	10	2	0	0	0	55
08:45	145	10	5	2	1	0	163	50	12	6	0	1	1	70
09:00	151	14	4	0	3	4	176	74	12	7	1	0	1	95
09:15	100	16	6	2	1	0	125	62	6	2	0	0	0	70
P/TOT	1066	104	35	9	15	13	1242	490	83	30	3	2	4	612

	B to A							B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	137	21	1	0	1	3	163	85	12	1	0	0	3	101
16:45	154	24	1	0	1	2	182	83	9	0	0	1	3	96
17:00	175	19	0	1	3	2	200	94	11	3	0	0	0	108
17:15	159	14	2	0	0	0	175	109	10	2	0	0	3	124
17:30	158	23	2	0	2	3	188	79	5	0	0	0	0	84
17:45	134	10	1	0	1	0	146	125	10	1	0	0	0	136
18:00	141	11	1	0	2	3	158	85	9	0	0	0	3	97
18:15	130	14	3	0	0	0	147	111	11	1	0	0	0	123
P/TOT	1188	136	11	1	10	13	1359	771	77	8	0	1	12	869

SITE: 2 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	75	11	0	0	1	4	91	34	4	1	0	0	0	39
07:45	77	21	2	0	0	1	101	19	3	1	0	0	0	23
08:00	88	14	6	2	0	0	110	34	2	0	0	0	0	36
08:15	78	9	0	0	0	0	87	46	3	1	0	0	0	50
08:30	97	6	1	1	0	0	105	33	5	1	0	0	1	40
08:45	94	12	3	1	1	1	112	17	4	2	0	0	0	23
09:00	75	13	2	0	0	0	90	19	2	0	0	0	0	21
09:15	63	16	7	0	0	0	86	24	4	0	1	0	0	29
P/TOT	647	102	21	4	2	6	782	226	27	6	1	0	1	261

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	98	13	3	0	0	2	116	40	6	2	0	0	1	49
16:45	89	16	1	1	0	0	107	22	1	1	0	0	1	25
17:00	108	10	1	0	0	2	121	29	7	1	0	0	0	37
17:15	85	15	1	0	1	1	103	28	4	0	0	0	0	32
17:30	83	6	2	0	0	0	91	20	1	2	0	0	0	23
17:45	84	8	1	0	0	0	93	18	2	1	0	0	0	21
18:00	76	8	1	0	0	0	85	22	0	0	0	0	0	22
18:15	89	8	2	0	0	2	101	19	4	0	0	0	0	23
P/TOT	712	84	12	1	1	7	817	198	25	7	0	0	2	232

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SITE: 2 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	132	19	4	2	0	2	159	108	24	4	1	1	3	141
07:45	169	23	6	1	3	3	205	156	27	4	0	2	0	189
08:00	174	12	5	1	2	3	197	132	24	3	2	2	0	163
08:15	181	11	6	0	1	0	199	170	22	1	2	1	3	199
08:30	180	16	3	1	4	2	206	131	14	8	2	2	2	159
08:45	162	14	7	2	1	0	186	114	13	2	2	2	2	135
09:00	170	16	4	0	3	4	197	99	16	5	1	2	0	123
09:15	124	20	6	3	1	0	154	105	20	6	1	1	0	133
P/TOT	1292	131	41	10	15	14	1503	1015	160	33	11	13	10	1242

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	177	27	3	0	1	4	212	143	17	2	0	1	1	164
16:45	176	25	2	0	1	3	207	160	23	3	1	3	1	191
17:00	204	26	1	1	3	2	237	133	14	5	1	2	1	156
17:15	187	18	2	0	0	0	207	148	13	0	0	0	2	163
17:30	178	24	4	0	2	3	211	146	11	2	0	3	0	162
17:45	152	12	2	0	1	0	167	105	12	1	0	1	1	120
18:00	163	11	1	0	2	3	180	149	7	2	0	3	0	161
18:15	149	18	3	0	0	0	170	117	9	1	0	2	2	131
P/TOT	1386	161	18	1	10	15	1591	1101	106	16	2	15	8	1248

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SITE: 2 DATE: 03/12/2013

LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	157	31	2	1	2	7	200	185	23	8	3	0	2	221
07:45	201	45	4	0	2	1	253	225	36	9	2	4	3	279
08:00	181	30	9	4	2	0	226	196	22	8	1	2	5	234
08:15	221	30	1	2	1	3	258	178	15	6	0	1	0	200
08:30	210	17	7	2	2	2	240	190	21	4	1	4	1	221
08:45	182	20	5	3	3	3	216	195	22	11	2	2	1	233
09:00	151	23	3	1	2	0	180	225	26	11	1	3	5	271
09:15	138	29	11	1	1	0	180	162	22	8	2	1	0	195
P/TOT	1441	225	42	14	15	16	1753	1556	187	65	12	17	17	1854

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	211	24	4	0	1	3	243	222	33	2	0	1	6	264
16:45	216	34	2	2	3	1	258	237	33	1	0	2	5	278
17:00	214	18	5	1	2	3	243	269	30	3	1	3	2	308
17:15	203	27	1	0	1	3	235	268	24	4	0	0	3	299
17:30	195	12	2	0	3	0	212	237	28	2	0	2	3	272
17:45	169	18	2	0	1	1	191	259	20	2	0	1	0	282
18:00	192	10	2	0	3	0	207	226	20	1	0	2	6	255
18:15	180	15	3	0	2	3	203	241	25	4	0	0	0	270
P/TOT	1580	158	21	3	16	14	1792	1959	213	19	1	11	25	2228

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LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	113	12	7	1	0	0	133	109	15	1	0	1	4	130
07:45	107	19	6	1	1	0	134	96	24	3	0	0	1	124
08:00	95	20	3	0	0	2	120	122	16	6	2	0	0	146
08:15	70	8	1	0	0	0	79	124	12	1	0	0	0	137
08:30	61	13	4	1	0	0	79	130	11	2	1	0	1	145
08:45	76	17	6	0	1	1	101	111	16	5	1	1	1	135
09:00	97	18	11	1	0	1	128	94	15	2	0	0	0	111
09:15	92	13	4	0	0	0	109	87	20	7	1	0	0	115
P/TOT	711	120	42	4	2	4	883	873	129	27	5	2	7	1043

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	115	18	2	0	0	3	138	138	19	5	0	0	3	165
16:45	116	14	2	0	1	3	136	111	17	2	1	0	1	132
17:00	121	17	4	0	0	0	142	137	17	2	0	0	2	158
17:15	139	11	2	0	0	3	155	113	19	1	0	1	1	135
17:30	113	10	2	0	0	0	125	103	7	4	0	0	0	114
17:45	145	12	1	0	0	0	158	102	10	2	0	0	0	114
18:00	118	14	1	0	0	3	136	98	8	1	0	0	0	107
18:15	137	13	1	0	0	1	152	108	12	2	0	0	2	124
P/TOT	1004	109	15	0	1	13	1142	910	109	19	1	1	9	1049

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LOCATION: A426 Leicester Road / Little Glen Road DAY: Tuesday

	JUNCTION TOTAL						
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	TOT
07:30	402	62	13	4	2	9	492
07:45	477	87	16	2	6	4	592
08:00	450	62	17	5	4	5	543
08:15	472	49	8	2	2	3	536
08:30	451	46	14	4	6	4	525
08:45	420	51	18	5	5	4	503
09:00	418	57	18	2	5	5	505
09:15	354	62	21	4	2	0	443
P/TOT	3444	476	125	28	32	34	4139

PEAK HOUR CALCULATION	
07:30 to 08:30	2163
07:45 to 08:45	**2196**
08:00 to 09:00	2107
08:15 to 09:15	2069
08:30 to 09:30	1976
PEAK VALUE	**2196**

	JUNCTION TOTAL						
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	TOT
16:30	503	69	9	0	2	10	593
16:45	508	73	6	2	5	7	601
17:00	539	61	10	2	5	5	622
17:15	529	56	5	0	1	6	597
17:30	486	46	8	0	5	3	548
17:45	466	42	5	0	2	1	516
18:00	473	35	4	0	5	6	523
18:15	466	46	7	0	2	4	525
P/TOT	3970	428	54	4	27	42	4525

PEAK HOUR CALCULATION	
16:30 to 17:30	**2413**
16:45 to 17:45	2368
17:00 to 18:00	2283
17:15 to 18:15	2184
17:30 to 18:30	2112
PEAK VALUE	**2413**

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SITE: 3 DATE: 03/12/2013

LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	A to D							A to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	9	1	1	0	0	0	11	51	4	1	0	1	0	57
07:45	8	3	0	0	0	0	11	50	10	0	0	2	0	62
08:00	12	2	0	0	0	0	14	37	5	0	1	3	1	47
08:15	9	0	1	0	0	0	10	45	3	1	0	1	1	51
08:30	7	1	1	0	0	0	9	35	11	5	2	3	3	59
08:45	9	2	0	0	0	0	11	38	9	0	0	1	2	50
09:00	7	1	1	0	0	0	9	41	7	1	0	2	0	51
09:15	2	2	2	0	0	1	7	37	10	3	1	5	0	56
P/TOT	63	12	6	0	0	1	82	334	59	11	4	18	7	433

	A to D							A to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	6	0	0	0	0	0	6	79	9	3	0	1	1	93
16:45	13	1	0	0	0	0	14	68	5	1	0	2	2	78
17:00	9	1	0	0	0	0	10	80	10	0	0	3	1	94
17:15	8	0	0	0	0	1	9	70	9	0	0	1	3	83
17:30	11	3	0	0	0	0	14	67	6	0	0	3	1	77
17:45	9	2	1	0	0	0	12	76	8	0	0	0	1	85
18:00	10	1	0	0	0	0	11	84	3	0	0	4	0	91
18:15	25	4	0	0	0	0	29	71	3	0	0	1	4	79
P/TOT	91	12	1	0	0	1	105	595	53	4	0	15	13	680

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LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	56	12	3	1	1	2	75
07:45	85	10	0	1	0	1	97
08:00	70	6	4	2	0	0	82
08:15	79	7	3	0	0	0	89
08:30	66	10	4	1	1	0	82
08:45	69	8	3	2	0	1	83
09:00	51	6	1	2	0	0	60
09:15	55	8	2	2	0	0	67
P/TOT	531	67	20	11	2	4	635

	A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	64	8	2	0	0	1	75
16:45	72	9	3	1	0	0	85
17:00	64	10	1	0	0	0	75
17:15	65	6	2	1	0	1	75
17:30	71	5	4	1	0	1	82
17:45	89	5	1	1	1	0	97
18:00	82	3	0	0	0	0	85
18:15	57	4	2	0	0	0	63
P/TOT	564	50	15	4	1	3	637

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SITE: 3 DATE: 03/12/2013

LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	B to A							B to D						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	72	14	0	2	1	0	89	260	46	11	5	2	1	325
07:45	77	15	2	2	0	0	96	263	40	11	6	0	3	323
08:00	78	14	4	1	1	0	98	241	51	18	4	0	4	318
08:15	50	5	2	1	0	0	58	183	26	8	3	1	0	221
08:30	41	11	2	1	0	0	55	197	38	12	5	1	1	254
08:45	48	8	3	2	1	0	62	157	46	17	4	1	0	225
09:00	64	4	6	0	0	0	74	213	37	19	4	0	0	273
09:15	62	13	2	1	0	0	78	167	30	12	10	0	0	219
P/TOT	492	84	21	10	3	0	610	1681	314	108	41	5	9	2158

	B to A							B to D						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	93	11	3	0	0	0	107	261	47	10	1	0	1	320
16:45	107	10	0	0	0	0	117	279	45	5	3	0	1	333
17:00	113	9	2	0	0	1	125	278	26	3	3	1	2	313
17:15	87	8	1	0	1	0	97	292	21	4	0	0	8	325
17:30	93	2	1	0	0	0	96	308	25	4	0	0	2	339
17:45	104	6	0	0	0	0	110	289	25	2	0	1	1	318
18:00	79	8	1	0	1	0	89	296	18	2	3	0	3	322
18:15	96	9	0	0	0	1	106	289	24	4	1	0	0	318
P/TOT	772	63	8	0	2	2	847	2292	231	34	11	2	18	2588

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	B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	27	9	1	1	0	0	38
07:45	30	12	0	0	0	0	42
08:00	32	12	3	1	0	0	48
08:15	22	6	4	1	0	0	33
08:30	21	5	2	2	0	0	30
08:45	16	5	0	0	0	0	21
09:00	29	5	5	0	0	0	39
09:15	27	10	4	0	0	0	41
P/TOT	204	64	19	5	0	0	292

	B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	64	10	1	0	0	0	75
16:45	62	4	3	1	0	0	70
17:00	57	17	1	0	0	1	76
17:15	43	2	0	0	0	0	45
17:30	53	8	2	0	1	0	64
17:45	54	7	0	0	0	0	61
18:00	56	4	1	0	0	1	62
18:15	66	6	0	0	0	1	73
P/TOT	455	58	8	1	1	3	526

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LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	50	7	0	0	1	0	58	65	13	1	1	1	1	82
07:45	60	4	3	1	0	2	70	60	11	0	0	1	1	73
08:00	58	6	2	0	0	0	66	48	7	1	1	2	1	60
08:15	63	6	1	1	0	0	71	80	6	2	0	1	1	90
08:30	56	8	2	1	0	0	67	75	6	1	0	3	2	87
08:45	67	8	0	1	0	0	76	74	7	3	0	2	2	88
09:00	55	7	0	0	0	0	62	66	5	4	0	2	0	77
09:15	64	7	0	0	0	0	71	68	9	4	1	1	0	83
P/TOT	473	53	8	4	1	2	541	536	64	16	3	13	8	640

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	62	2	1	0	0	1	66	61	9	2	0	2	2	76
16:45	48	12	2	0	0	0	62	58	5	0	0	1	2	66
17:00	48	6	1	0	0	0	55	54	8	0	0	1	0	63
17:15	48	9	1	0	0	0	58	83	3	0	0	3	0	89
17:30	51	4	1	0	0	1	57	69	10	2	0	2	3	86
17:45	35	3	1	0	0	0	39	59	4	0	0	1	0	64
18:00	43	6	1	0	0	2	52	80	3	2	0	1	0	86
18:15	36	2	1	0	0	0	39	67	4	2	0	3	0	76
P/TOT	371	44	9	0	0	4	428	531	46	8	0	14	7	606

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	C to D						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	25	5	0	0	0	0	30
07:45	31	2	0	1	1	0	35
08:00	32	3	1	0	0	0	36
08:15	38	3	2	0	0	0	43
08:30	24	2	2	0	1	1	30
08:45	38	6	0	1	1	1	47
09:00	27	3	0	0	0	0	30
09:15	26	5	1	2	0	3	37
P/TOT	241	29	6	4	3	5	288

	C to D						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	25	3	0	0	0	1	29
16:45	22	6	1	0	0	1	30
17:00	28	0	1	1	0	0	30
17:15	33	1	0	0	0	0	34
17:30	33	6	0	0	0	0	39
17:45	20	2	0	0	0	0	22
18:00	25	0	0	0	0	0	25
18:15	26	1	0	0	0	0	27
P/TOT	212	19	2	1	0	2	236

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LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	D to C							D to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	11	0	1	0	1	0	13	340	44	10	3	1	1	399
07:45	17	1	0	0	0	0	18	360	41	6	2	1	0	410
08:00	19	0	1	0	0	0	20	348	26	10	4	1	2	391
08:15	11	1	1	0	0	0	13	334	21	7	4	0	0	366
08:30	13	1	1	0	0	0	15	377	15	7	7	1	5	412
08:45	18	1	1	0	0	0	20	296	26	12	8	3	1	346
09:00	13	0	1	1	2	0	17	301	33	14	4	0	0	352
09:15	17	2	0	1	2	0	22	264	21	9	4	5	1	304
P/TOT	119	6	6	2	5	0	138	2620	227	75	36	12	10	2980

	D to C							D to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	18	2	0	1	0	0	21	271	43	8	6	0	0	328
16:45	25	3	2	0	0	0	30	299	31	5	6	0	1	342
17:00	23	0	0	1	0	0	24	268	31	5	2	0	2	308
17:15	29	3	0	0	0	0	32	279	31	6	1	1	1	319
17:30	20	0	0	0	0	0	20	195	25	4	2	0	0	226
17:45	22	0	1	0	0	0	23	220	26	3	3	0	1	253
18:00	27	2	0	0	0	0	29	166	13	3	2	0	0	184
18:15	16	2	0	0	0	0	18	211	25	8	2	0	2	248
P/TOT	180	12	3	2	0	0	197	1909	225	42	24	1	7	2208

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	D to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	10	2	0	0	0	0	12
07:45	14	3	1	0	0	0	18
08:00	8	3	0	0	0	0	11
08:15	4	1	0	0	0	0	5
08:30	7	0	1	0	0	0	8
08:45	12	2	0	0	0	0	14
09:00	17	1	0	0	0	0	18
09:15	10	0	0	1	0	0	11
P/TOT	82	12	2	1	0	0	97

	D to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	9	1	0	0	0	0	10
16:45	16	2	0	0	0	0	18
17:00	16	2	0	0	0	1	19
17:15	14	2	0	0	0	0	16
17:30	10	0	0	0	0	0	10
17:45	13	1	0	0	0	0	14
18:00	3	0	0	0	0	0	3
18:15	13	1	0	0	0	0	14
P/TOT	94	9	0	0	0	1	104

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SITE: 3 DATE: 03/12/2013

LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	147	29	1	3	2	1	183	116	17	5	1	2	2	143
07:45	151	29	3	2	1	1	187	143	23	0	1	2	1	170
08:00	134	24	5	2	3	1	169	119	13	4	3	3	1	143
08:15	134	12	4	1	1	1	153	133	10	5	0	1	1	150
08:30	123	17	4	1	3	2	150	108	22	10	3	4	3	150
08:45	134	17	6	2	3	2	164	116	19	3	2	1	3	144
09:00	147	10	10	0	2	0	169	99	14	3	2	2	0	120
09:15	140	22	6	3	1	0	172	94	20	7	3	5	1	130
P/TOT	1110	160	39	14	16	8	1347	928	138	37	15	20	12	1150

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	163	21	5	0	2	2	193	149	17	5	0	1	2	174
16:45	181	17	0	0	1	2	201	153	15	4	1	2	2	177
17:00	183	19	2	0	1	2	207	153	21	1	0	3	1	179
17:15	184	13	1	0	4	0	202	143	15	2	1	1	5	167
17:30	172	12	3	0	2	3	192	149	14	4	1	3	2	173
17:45	176	11	0	0	1	0	188	174	15	2	1	1	1	194
18:00	162	11	3	0	2	0	178	176	7	0	0	4	0	187
18:15	176	14	2	0	3	1	196	153	11	2	0	1	4	171
P/TOT	1397	118	16	0	16	10	1557	1250	115	20	4	16	17	1422

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LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	446	63	13	4	3	3	532	359	69	12	8	3	1	452
07:45	505	55	9	4	1	3	577	370	67	13	8	0	3	461
08:00	476	38	16	6	1	2	539	351	77	25	6	1	4	464
08:15	476	34	11	5	0	0	526	255	37	14	5	1	0	312
08:30	499	33	13	9	2	5	561	259	54	16	8	1	1	339
08:45	432	42	15	11	3	2	505	221	59	20	6	2	0	308
09:00	407	46	15	6	0	0	474	306	46	30	4	0	0	386
09:15	383	36	11	6	5	1	442	256	53	18	11	0	0	338
P/TOT	3624	347	103	51	15	16	4156	2377	462	148	56	8	9	3060

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	397	53	11	6	0	2	469	418	68	14	1	0	1	502
16:45	419	52	10	7	0	1	489	448	59	8	4	0	1	520
17:00	380	47	7	2	0	2	438	448	52	6	3	1	4	514
17:15	392	46	9	2	1	2	452	422	31	5	0	1	8	467
17:30	317	34	9	3	0	2	365	454	35	7	0	1	2	499
17:45	344	34	5	4	1	1	389	447	38	2	0	1	1	489
18:00	291	22	4	2	0	2	321	431	30	4	3	1	4	473
18:15	304	31	11	2	0	2	350	451	39	4	1	0	2	497
P/TOT	2844	319	66	28	2	14	3273	3519	352	50	12	5	23	3961

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	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	89	13	3	1	2	0	108	140	25	1	1	2	1	170
07:45	97	23	0	0	2	0	122	151	17	3	2	2	3	178
08:00	88	17	4	2	3	1	115	138	16	4	1	2	1	162
08:15	78	10	6	1	1	1	97	181	15	5	1	1	1	204
08:30	69	17	8	4	3	3	104	155	16	5	1	4	3	184
08:45	72	15	1	0	1	2	91	179	21	3	2	3	3	211
09:00	83	12	7	1	4	0	107	148	15	4	0	2	0	169
09:15	81	22	7	2	7	0	119	158	21	5	3	1	3	191
P/TOT	657	129	36	11	23	7	863	1250	146	30	11	17	15	1469

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	161	21	4	1	1	1	189	148	14	3	0	2	4	171
16:45	155	12	6	1	2	2	178	128	23	3	0	1	3	158
17:00	160	27	1	1	3	2	194	130	14	2	1	1	0	148
17:15	142	14	0	0	1	3	160	164	13	1	0	3	0	181
17:30	140	14	2	0	4	1	161	153	20	3	0	2	4	182
17:45	152	15	1	0	0	1	169	114	9	1	0	1	0	125
18:00	167	9	1	0	4	1	182	148	9	3	0	1	2	163
18:15	153	11	0	0	1	5	170	129	7	3	0	3	0	142
P/TOT	1230	123	15	3	16	16	1403	1114	109	19	1	14	13	1270

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 3 DATE: 03/12/2013

LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	TO ARM D							FROM ARM D						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	294	52	12	5	2	1	366	361	46	11	3	2	1	424
07:45	302	45	11	7	1	3	369	391	45	7	2	1	0	446
08:00	285	56	19	4	0	4	368	375	29	11	4	1	2	422
08:15	230	29	11	3	1	0	274	349	23	8	4	0	0	384
08:30	228	41	15	5	2	2	293	397	16	9	7	1	5	435
08:45	204	54	17	5	2	1	283	326	29	13	8	3	1	380
09:00	247	41	20	4	0	0	312	331	34	15	5	2	0	387
09:15	195	37	15	12	0	4	263	291	23	9	6	7	1	337
P/TOT	1985	355	120	45	8	15	2528	2821	245	83	39	17	10	3215

	TO ARM D							FROM ARM D						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	292	50	10	1	0	2	355	298	46	8	7	0	0	359
16:45	314	52	6	3	0	2	377	340	36	7	6	0	1	390
17:00	315	27	4	4	1	2	353	307	33	5	3	0	3	351
17:15	333	22	4	0	0	9	368	322	36	6	1	1	1	367
17:30	352	34	4	0	0	2	392	225	25	4	2	0	0	256
17:45	318	29	3	0	1	1	352	255	27	4	3	0	1	290
18:00	331	19	2	3	0	3	358	196	15	3	2	0	0	216
18:15	340	29	4	1	0	0	374	240	28	8	2	0	2	280
P/TOT	2595	262	37	12	2	21	2929	2183	246	45	26	1	8	2509

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 3 DATE: 03/12/2013

LOCATION: A563 Soar Valley Way / A563 Glenhills Way / A426 DAY: Tuesday

	JUNCTION TOTAL						
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	TOT
07:30	976	157	29	13	9	5	1189
07:45	1055	152	23	13	5	7	1255
08:00	983	135	44	14	7	8	1191
08:15	918	85	32	10	3	2	1050
08:30	919	108	40	19	10	12	1108
08:45	842	128	39	18	9	7	1043
09:00	884	109	52	11	6	0	1062
09:15	799	117	39	23	13	5	996
P/TOT	7376	991	298	121	62	46	8894

PEAK HOUR CALCULATION	
07:30 to 08:30	**4685**
07:45 to 08:45	4604
08:00 to 09:00	4392
08:15 to 09:15	4263
08:30 to 09:30	4209
PEAK VALUE	**4685**

	JUNCTION TOTAL						
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	TOT
16:30	1013	145	30	8	3	7	1206
16:45	1069	133	22	11	3	7	1245
17:00	1038	120	14	7	5	8	1192
17:15	1051	95	14	2	6	14	1182
17:30	981	94	18	3	6	8	1110
17:45	990	89	9	4	3	3	1098
18:00	951	61	10	5	6	6	1039
18:15	973	85	17	3	4	8	1090
P/TOT	8066	822	134	43	36	61	9162

PEAK HOUR CALCULATION	
16:30 to 17:30	**4825**
16:45 to 17:45	4729
17:00 to 18:00	4582
17:15 to 18:15	4429
17:30 to 18:30	4337
PEAK VALUE	**4825**

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	A to C							A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	112	13	3	2	2	1	133	65	16	0	0	2	0	83
07:45	100	17	1	0	2	1	121	64	19	6	0	0	0	89
08:00	104	14	4	3	3	1	129	70	17	0	0	0	0	87
08:15	99	9	6	0	1	1	116	69	13	2	0	0	0	84
08:30	87	19	8	3	4	1	122	69	11	1	0	2	2	85
08:45	105	12	2	2	1	3	125	63	8	4	0	1	1	77
09:00	103	11	3	1	2	0	120	62	15	2	0	0	0	79
09:15	87	17	3	2	3	0	112	59	7	3	0	0	0	69
P/TOT	797	112	30	13	18	8	978	521	106	18	0	5	3	653

	A to C							A to B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	141	22	2	0	3	1	169	89	18	4	0	1	1	113
16:45	148	14	3	1	1	1	168	105	15	1	0	0	0	121
17:00	128	17	2	0	3	1	151	89	11	0	1	0	0	101
17:15	134	11	4	1	2	5	157	103	17	1	0	0	1	122
17:30	138	15	3	1	2	2	161	95	9	2	0	0	0	106
17:45	154	14	2	0	1	0	171	71	7	0	0	0	2	80
18:00	152	6	0	0	4	0	162	94	3	2	0	0	0	99
18:15	131	9	2	0	2	2	146	73	4	0	0	0	1	78
P/TOT	1126	108	18	3	18	12	1285	719	84	10	1	1	5	820

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	B to A							B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	71	16	2	1	0	0	90	5	1	1	0	0	0	7
07:45	87	17	1	0	1	1	107	11	3	1	0	0	0	15
08:00	66	12	3	0	2	1	84	3	1	0	0	0	0	4
08:15	87	21	2	0	0	0	110	12	0	1	0	0	0	13
08:30	81	8	1	0	0	0	90	4	2	0	0	0	1	7
08:45	81	11	3	1	0	1	97	18	5	1	0	0	0	24
09:00	65	5	3	0	0	1	74	8	2	2	1	0	0	13
09:15	51	7	4	1	0	0	63	8	7	0	0	0	0	15
P/TOT	589	97	19	3	3	4	715	69	21	6	1	0	1	98

	B to A							B to C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	66	18	3	0	0	0	87	8	2	1	0	0	0	11
16:45	74	16	1	0	0	0	91	12	1	1	0	0	0	14
17:00	58	17	3	0	0	1	79	20	1	1	0	0	0	22
17:15	78	14	4	0	0	1	97	13	1	1	0	0	0	15
17:30	86	7	1	0	0	2	96	16	3	0	0	0	0	19
17:45	88	6	0	0	0	1	95	13	1	0	1	0	1	16
18:00	78	9	1	0	0	0	88	18	3	0	0	0	0	21
18:15	93	9	0	0	0	1	103	21	2	0	0	0	2	25
P/TOT	621	96	13	0	0	6	736	121	14	4	1	0	3	143

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	7	4	0	0	0	0	11	145	27	4	1	3	0	180
07:45	5	2	0	0	0	0	7	130	20	1	2	1	0	154
08:00	5	2	2	0	0	0	9	149	18	2	3	2	3	177
08:15	6	3	0	0	0	0	9	136	14	6	0	3	1	160
08:30	13	4	2	0	0	0	19	142	16	2	2	3	2	167
08:45	14	1	1	0	0	2	18	117	15	3	2	3	0	140
09:00	11	1	1	0	0	0	13	138	12	10	0	0	0	160
09:15	14	1	2	0	0	0	17	130	19	7	3	3	0	162
P/TOT	75	18	8	0	0	2	103	1087	141	35	13	18	6	1300

	C to B							C to A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	20	2	2	0	0	0	24	128	23	3	0	2	2	158
16:45	17	1	0	0	0	0	18	132	14	1	0	1	1	149
17:00	16	4	0	0	0	2	22	145	17	2	0	1	1	166
17:15	11	0	0	0	0	0	11	148	7	1	0	4	1	161
17:30	9	3	2	0	0	0	14	148	12	4	0	1	1	166
17:45	13	0	0	0	0	0	13	146	9	1	0	2	1	159
18:00	13	0	0	0	0	0	13	144	8	1	0	2	0	155
18:15	7	1	0	0	0	0	8	134	7	1	1	3	0	146
P/TOT	106	11	4	0	0	2	123	1125	97	14	1	16	7	1260

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	216	43	6	2	3	0	270	177	29	3	2	4	1	216
07:45	217	37	2	2	2	1	261	164	36	7	0	2	1	210
08:00	215	30	5	3	4	4	261	174	31	4	3	3	1	216
08:15	223	35	8	0	3	1	270	168	22	8	0	1	1	200
08:30	223	24	3	2	3	2	257	156	30	9	3	6	3	207
08:45	198	26	6	3	3	1	237	168	20	6	2	2	4	202
09:00	203	17	13	0	0	1	234	165	26	5	1	2	0	199
09:15	181	26	11	4	3	0	225	146	24	6	2	3	0	181
P/TOT	1676	238	54	16	21	10	2015	1318	218	48	13	23	11	1631

	TO ARM A							FROM ARM A						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	194	41	6	0	2	2	245	230	40	6	0	4	2	282
16:45	206	30	2	0	1	1	240	253	29	4	1	1	1	289
17:00	203	34	5	0	1	2	245	217	28	2	1	3	1	252
17:15	226	21	5	0	4	2	258	237	28	5	1	2	6	279
17:30	234	19	5	0	1	3	262	233	24	5	1	2	2	267
17:45	234	15	1	0	2	2	254	225	21	2	0	1	2	251
18:00	222	17	2	0	2	0	243	246	9	2	0	4	0	261
18:15	227	16	1	1	3	1	249	204	13	2	0	2	3	224
P/TOT	1746	193	27	1	16	13	1996	1845	192	28	4	19	17	2105

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	72	20	0	0	2	0	94	76	17	3	1	0	0	97
07:45	69	21	6	0	0	0	96	98	20	2	0	1	1	122
08:00	75	19	2	0	0	0	96	69	13	3	0	2	1	88
08:15	75	16	2	0	0	0	93	99	21	3	0	0	0	123
08:30	82	15	3	0	2	2	104	85	10	1	0	0	1	97
08:45	77	9	5	0	1	3	95	99	16	4	1	0	1	121
09:00	73	16	3	0	0	0	92	73	7	5	1	0	1	87
09:15	73	8	5	0	0	0	86	59	14	4	1	0	0	78
P/TOT	596	124	26	0	5	5	756	658	118	25	4	3	5	813

	TO ARM B							FROM ARM B						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	109	20	6	0	1	1	137	74	20	4	0	0	0	98
16:45	122	16	1	0	0	0	139	86	17	2	0	0	0	105
17:00	105	15	0	1	0	2	123	78	18	4	0	0	1	101
17:15	114	17	1	0	0	1	133	91	15	5	0	0	1	112
17:30	104	12	4	0	0	0	120	102	10	1	0	0	2	115
17:45	84	7	0	0	0	2	93	101	7	0	1	0	2	111
18:00	107	3	2	0	0	0	112	96	12	1	0	0	0	109
18:15	80	5	0	0	0	1	86	114	11	0	0	0	3	128
P/TOT	825	95	14	1	1	7	943	742	110	17	1	0	9	879

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	117	14	4	2	2	1	140	152	31	4	1	3	0	191
07:45	111	20	2	0	2	1	136	135	22	1	2	1	0	161
08:00	107	15	4	3	3	1	133	154	20	4	3	2	3	186
08:15	111	9	7	0	1	1	129	142	17	6	0	3	1	169
08:30	91	21	8	3	4	2	129	155	20	4	2	3	2	186
08:45	123	17	3	2	1	3	149	131	16	4	2	3	2	158
09:00	111	13	5	2	2	0	133	149	13	11	0	0	0	173
09:15	95	24	3	2	3	0	127	144	20	9	3	3	0	179
P/TOT	866	133	36	14	18	9	1076	1162	159	43	13	18	8	1403

	TO ARM C							FROM ARM C						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	149	24	3	0	3	1	180	148	25	5	0	2	2	182
16:45	160	15	4	1	1	1	182	149	15	1	0	1	1	167
17:00	148	18	3	0	3	1	173	161	21	2	0	1	3	188
17:15	147	12	5	1	2	5	172	159	7	1	0	4	1	172
17:30	154	18	3	1	2	2	180	157	15	6	0	1	1	180
17:45	167	15	2	1	1	1	187	159	9	1	0	2	1	172
18:00	170	9	0	0	4	0	183	157	8	1	0	2	0	168
18:15	152	11	2	0	2	4	171	141	8	1	1	3	0	154
P/TOT	1247	122	22	4	18	15	1428	1231	108	18	1	16	9	1383

3517 / GLEN PARVA
DECEMBER 2013
CLASSIFIED TURNING COUNT

SITE: 4 DATE: 03/12/2013

LOCATION: A426 Aylestone Road / Middleton Street DAY: Tuesday

	JUNCTION TOTAL						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
07:30	405	77	10	4	7	1	504
07:45	397	78	10	2	4	2	493
08:00	397	64	11	6	7	5	490
08:15	409	60	17	0	4	2	492
08:30	396	60	14	5	9	6	490
08:45	398	52	14	5	5	7	481
09:00	387	46	21	2	2	1	459
09:15	349	58	19	6	6	0	438
P/TOT	3138	495	116	30	44	24	3847

PEAK HOUR CALCULATION	
07:30 to 08:30	**1979**
07:45 to 08:45	1965
08:00 to 09:00	1953
08:15 to 09:15	1922
08:30 to 09:30	1868
PEAK VALUE	**1979**

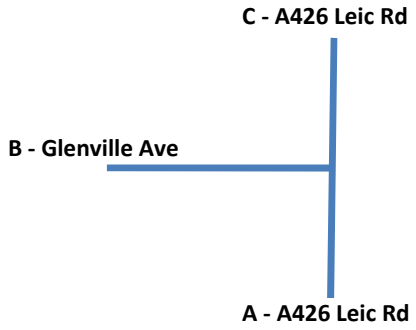
	JUNCTION TOTAL						
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**TOT**
16:30	452	85	15	0	6	4	562
16:45	488	61	7	1	2	2	561
17:00	456	67	8	1	4	5	541
17:15	487	50	11	1	6	8	563
17:30	492	49	12	1	3	5	562
17:45	485	37	3	1	3	5	534
18:00	499	29	4	0	6	0	538
18:15	459	32	3	1	5	6	506
P/TOT	3818	410	63	6	35	35	4367

PEAK HOUR CALCULATION	
16:30 to 17:30	**2227**
16:45 to 17:45	**2227**
17:00 to 18:00	2200
17:15 to 18:15	2197
17:30 to 18:30	2140
PEAK VALUE	**2227**

Appendix L

J1 - Glenville Road / Leicester Road – Junction Assessment Data

J1 Glenvill Road / Leicester Road



0800-0900

Background 2013

	A	B	C
A	0	84	689
B	51	0	43
C	623	45	0

Tempro 2013-18

	A	B	C
A	1.072	1.072	1.072
B	1.072	1.072	1.072
C	1.072	1.072	1.072

Background 2018

	A	B	C
A	0	90	739
B	55	0	46
C	668	48	0

Development

	A	B	C
A	0	17	0
B	48	0	91
C	0	32	0

Back + Dev

	A	B	C
A	0	107	739
B	103	0	137
C	668	81	0

1700-1800

Background 2013

	A	B	C
A	0	85	775
B	30	0	14
C	577	23	0

Tempro 2013-18

	A	B	C
A	1.0693	1.0693	1.0693
B	1.0693	1.0693	1.0693
C	1.0693	1.0693	1.0693

Background 2018

	A	B	C
A	0	91	829
B	32	0	15
C	617	25	0

Development

	A	B	C
A	0	35	0
B	17	0	32
C	0	65	0

Back + Dev

	A	B	C
A	0	126	829
B	49	0	47
C	617	90	0

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: J1 - Glenville _ Leics.arc8
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 24/01/2014 15:36:55

» (Default Analysis Set) - 2018 Back, AM
» (Default Analysis Set) - 2018 Back + Dev, AM
» (Default Analysis Set) - 2018 Back, PM
» (Default Analysis Set) - 2018 Back + Dev, PM

Summary of junction performance

	AM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
A1 - 2018 Back					
Stream B-C	0.12	8.80	0.11	A	10.57
Stream B-A	0.46	28.06	0.32	D	
Stream C-AB	0.73	4.66	0.21	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D1 - 2018 Back, AM " model duration: 07:45 - 09:15
"D2 - 2018 Back + Dev, AM" model duration: 07:45 - 09:15
"D3 - 2018 Back, PM" model duration: 16:45 - 18:15
"D4 - 2018 Back + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 24/01/2014 15:36:53

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	03/01/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
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) - 2018 Back, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Back, AM	2018 Back	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C		10.57	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	(untitled)		Major
B	(untitled)		Minor
C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	150.00	✓	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 plus flare				10.00	3.50	3.00	3.00	3.00	✓	1.00	31	31

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	528.044	0.096	0.243	0.153	0.347
1	B-C	772.293	0.118	0.299	-	-
1	C-B	660.830	0.256	0.256	-	-

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	✓	829.00	100.000
B	ONE HOUR	✓	101.00	100.000
C	ONE HOUR	✓	716.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	90.000	739.000
	B	55.000	0.000	46.000
	C	668.000	48.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.11	0.89
	B	0.54	0.00	0.46
	C	0.93	0.07	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.11	8.80	0.12	A	42.21	63.32	8.07	7.65	0.09	8.08	7.65
B-A	0.32	28.06	0.46	D	50.47	75.70	25.43	20.15	0.28	25.43	20.16
C-AB	0.21	4.66	0.73	A	136.74	205.11	38.62	11.30	0.43	38.62	11.30
C-A	-	-	-	-	520.27	780.41	-	-	-	-	-
A-B	-	-	-	-	82.59	123.88	-	-	-	-	-
A-C	-	-	-	-	678.12	1017.18	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	34.63	8.66	34.38	0.00	575.55	0.060	0.00	0.06	6.649	A
B-A	41.41	10.35	40.77	0.00	296.68	0.140	0.00	0.16	14.035	B
C-AB	84.02	21.01	83.22	0.00	858.21	0.098	0.00	0.20	4.645	A
C-A	455.02	113.75	455.02	0.00	-	-	-	-	-	-
A-B	67.76	16.94	67.76	0.00	-	-	-	-	-	-
A-C	556.36	139.09	556.36	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	41.35	10.34	41.27	0.00	532.14	0.078	0.06	0.08	7.334	A
B-A	49.44	12.36	49.12	0.00	251.48	0.197	0.16	0.24	17.762	C
C-AB	124.50	31.12	123.91	0.00	910.37	0.137	0.20	0.35	4.582	A
C-A	519.17	129.79	519.17	0.00	-	-	-	-	-	-
A-B	80.91	20.23	80.91	0.00	-	-	-	-	-	-
A-C	664.35	166.09	664.35	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	50.65	12.66	50.49	0.00	460.87	0.110	0.08	0.12	8.770	A
B-A	60.56	15.14	59.70	0.00	188.95	0.320	0.24	0.45	27.670	D
C-AB	200.48	50.12	199.02	0.00	979.37	0.205	0.35	0.71	4.627	A
C-A	587.85	146.96	587.85	0.00	-	-	-	-	-	-
A-B	99.09	24.77	99.09	0.00	-	-	-	-	-	-
A-C	813.65	203.41	813.65	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	50.65	12.66	50.64	0.00	459.58	0.110	0.12	0.12	8.803	A
B-A	60.56	15.14	60.52	0.00	188.66	0.321	0.45	0.46	28.063	D
C-AB	201.35	50.34	201.30	0.00	980.22	0.205	0.71	0.73	4.644	A
C-A	586.98	146.74	586.98	0.00	-	-	-	-	-	-
A-B	99.09	24.77	99.09	0.00	-	-	-	-	-	-
A-C	813.65	203.41	813.65	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	41.35	10.34	41.50	0.00	531.13	0.078	0.12	0.09	7.356	A
B-A	49.44	12.36	50.29	0.00	251.07	0.197	0.46	0.25	18.002	C
C-AB	125.37	31.34	126.82	0.00	911.57	0.138	0.73	0.36	4.604	A
C-A	518.30	129.58	518.30	0.00	-	-	-	-	-	-
A-B	80.91	20.23	80.91	0.00	-	-	-	-	-	-
A-C	664.35	166.09	664.35	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	34.63	8.66	34.71	0.00	574.92	0.060	0.09	0.06	6.664	A
B-A	41.41	10.35	41.75	0.00	296.36	0.140	0.25	0.17	14.157	B
C-AB	84.71	21.18	85.33	0.00	858.86	0.099	0.36	0.21	4.663	A
C-A	454.33	113.58	454.33	0.00	-	-	-	-	-	-
A-B	67.76	16.94	67.76	0.00	-	-	-	-	-	-
A-C	556.36	139.09	556.36	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.92	0.06	6.649	A	A
B-A	2.26	0.15	14.035	B	B
C-AB	2.97	0.20	4.645	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.23	0.08	7.334	A	A
B-A	3.43	0.23	17.762	C	B
C-AB	5.22	0.35	4.582	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.78	0.12	8.770	A	A
B-A	6.29	0.42	27.670	D	C
C-AB	10.67	0.71	4.627	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.84	0.12	8.803	A	A
B-A	6.87	0.46	28.063	D	C
C-AB	11.02	0.73	4.644	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.31	0.09	7.356	A	A
B-A	4.00	0.27	18.002	C	B
C-AB	5.56	0.37	4.604	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.99	0.07	6.664	A	A
B-A	2.59	0.17	14.157	B	B
C-AB	3.17	0.21	4.663	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2018 Back + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Back + Dev, AM	2018 Back + Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C		20.30	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	(untitled)		Major
B	(untitled)		Minor
C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	150.00	✓	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 plus flare				10.00	3.50	3.00	3.00	3.00	✓	1.00	31	31

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	603.562	0.110	0.278	0.175	0.397
1	B-C	675.662	0.104	0.262	-	-
1	C-B	660.830	0.256	0.256	-	-

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	✓	846.00	100.000
B	ONE HOUR	✓	240.00	100.000
C	ONE HOUR	✓	749.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	107.000	739.000
	B	103.000	0.000	137.000
	C	668.000	81.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.13	0.87
	B	0.43	0.00	0.57
	C	0.89	0.11	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.50	23.40	0.95	C	125.71	188.57	46.60	14.83	0.52	46.61	14.83
B-A	0.63	52.41	1.56	F	94.51	141.77	67.32	28.49	0.75	67.33	28.49
C-AB	0.36	5.74	1.36	A	235.23	352.85	74.50	12.67	0.83	74.51	12.67
C-A	-	-	-	-	452.06	678.09	-	-	-	-	-
A-B	-	-	-	-	98.19	147.28	-	-	-	-	-
A-C	-	-	-	-	678.12	1017.18	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	103.14	25.79	102.07	0.00	483.93	0.213	0.00	0.27	9.401	A
B-A	77.54	19.39	76.31	0.00	324.35	0.239	0.00	0.31	14.445	B
C-AB	142.33	35.58	140.66	0.00	855.84	0.166	0.00	0.42	5.035	A
C-A	421.56	105.39	421.56	0.00	-	-	-	-	-	-
A-B	80.56	20.14	80.56	0.00	-	-	-	-	-	-
A-C	556.36	139.09	556.36	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	123.16	30.79	122.66	0.00	431.21	0.286	0.27	0.39	11.649	B
B-A	92.59	23.15	91.77	0.00	266.73	0.347	0.31	0.51	20.477	C
C-AB	211.54	52.89	210.50	0.00	908.11	0.233	0.42	0.68	5.176	A
C-A	461.79	115.45	461.79	0.00	-	-	-	-	-	-
A-B	96.19	24.05	96.19	0.00	-	-	-	-	-	-
A-C	664.35	166.09	664.35	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	150.84	37.71	148.86	0.00	313.35	0.481	0.39	0.89	21.630	C
B-A	113.41	28.35	109.68	0.00	182.37	0.622	0.51	1.45	47.348	E
C-AB	349.50	87.38	346.87	0.00	982.75	0.356	0.68	1.33	5.693	A
C-A	475.16	118.79	475.16	0.00	-	-	-	-	-	-
A-B	117.81	29.45	117.81	0.00	-	-	-	-	-	-
A-C	813.65	203.41	813.65	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	150.84	37.71	150.59	0.00	304.01	0.496	0.89	0.95	23.396	C
B-A	113.41	28.35	112.95	0.00	180.63	0.628	1.45	1.56	52.410	F
C-AB	351.22	87.80	351.12	0.00	984.37	0.357	1.33	1.36	5.742	A
C-A	473.45	118.36	473.45	0.00	-	-	-	-	-	-
A-B	117.81	29.45	117.81	0.00	-	-	-	-	-	-
A-C	813.65	203.41	813.65	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	123.16	30.79	125.31	0.00	425.86	0.289	0.95	0.41	12.061	B
B-A	92.59	23.15	96.62	0.00	265.18	0.349	1.56	0.56	21.822	C
C-AB	213.09	53.27	215.69	0.00	910.32	0.234	1.36	0.71	5.227	A
C-A	460.24	115.06	460.24	0.00	-	-	-	-	-	-
A-B	96.19	24.05	96.19	0.00	-	-	-	-	-	-
A-C	664.35	166.09	664.35	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	103.14	25.79	103.70	0.00	482.38	0.214	0.41	0.28	9.522	A
B-A	77.54	19.39	78.48	0.00	323.42	0.240	0.56	0.32	14.751	B
C-AB	143.71	35.93	144.81	0.00	857.11	0.168	0.71	0.44	5.076	A
C-A	420.18	105.04	420.18	0.00	-	-	-	-	-	-
A-B	80.56	20.14	80.56	0.00	-	-	-	-	-	-
A-C	556.36	139.09	556.36	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.83	0.26	9.401	A	A
B-A	4.34	0.29	14.445	B	B
C-AB	6.13	0.41	5.035	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.68	0.38	11.649	B	B
B-A	7.26	0.48	20.477	C	C
C-AB	10.20	0.68	5.176	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	12.27	0.82	21.630	C	C
B-A	18.61	1.24	47.348	E	D
C-AB	20.01	1.33	5.693	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	13.96	0.93	23.396	C	C
B-A	22.73	1.52	52.410	F	D
C-AB	20.69	1.38	5.742	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	6.59	0.44	12.061	B	B
B-A	9.29	0.62	21.822	C	C
C-AB	10.89	0.73	5.227	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.28	0.29	9.522	A	A
B-A	5.09	0.34	14.751	B	B
C-AB	6.58	0.44	5.076	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2018 Back, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Back, PM	2018 Back	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C		10.38	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	(untitled)		Major
B	(untitled)		Minor
C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	150.00	✓	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 plus flare				10.00	3.50	3.00	3.00	3.00	✓	1.00	31	31

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	528.044	0.096	0.243	0.153	0.347
1	B-C	772.293	0.118	0.299	-	-
1	C-B	660.830	0.256	0.256	-	-

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	✓	920.00	100.000
B	ONE HOUR	✓	47.00	100.000
C	ONE HOUR	✓	642.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	91.000	829.000
	B	32.000	0.000	15.000
	C	617.000	25.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.10	0.90
	B	0.68	0.00	0.32
	C	0.96	0.04	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.04	8.12	0.04	A	13.76	20.65	2.50	7.27	0.03	2.50	7.27
B-A	0.19	24.38	0.23	C	29.36	44.05	13.44	18.31	0.15	13.44	18.31
C-AB	0.10	4.64	0.23	A	66.12	99.18	12.91	7.81	0.14	12.91	7.81
C-A	-	-	-	-	522.99	784.48	-	-	-	-	-
A-B	-	-	-	-	83.50	125.25	-	-	-	-	-
A-C	-	-	-	-	760.70	1141.06	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	11.29	2.82	11.21	0.00	565.25	0.020	0.00	0.02	6.497	A
B-A	24.09	6.02	23.74	0.00	292.15	0.082	0.00	0.09	13.394	B
C-AB	42.23	10.56	41.91	0.00	818.88	0.052	0.00	0.08	4.633	A
C-A	441.10	110.28	441.10	0.00	-	-	-	-	-	-
A-B	68.51	17.13	68.51	0.00	-	-	-	-	-	-
A-C	624.11	156.03	624.11	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	13.48	3.37	13.46	0.00	522.89	0.026	0.02	0.03	7.066	A
B-A	28.77	7.19	28.60	0.00	246.28	0.117	0.09	0.13	16.538	C
C-AB	60.41	15.10	60.23	0.00	856.98	0.070	0.08	0.12	4.520	A
C-A	516.74	129.18	516.74	0.00	-	-	-	-	-	-
A-B	81.81	20.45	81.81	0.00	-	-	-	-	-	-
A-C	745.25	186.31	745.25	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	16.52	4.13	16.47	0.00	460.42	0.036	0.03	0.04	8.109	A
B-A	35.23	8.81	34.83	0.00	182.92	0.193	0.13	0.23	24.242	C
C-AB	95.41	23.85	95.01	0.00	911.47	0.105	0.12	0.22	4.411	A
C-A	611.44	152.86	611.44	0.00	-	-	-	-	-	-
A-B	100.19	25.05	100.19	0.00	-	-	-	-	-	-
A-C	912.75	228.19	912.75	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	16.52	4.13	16.51	0.00	460.03	0.036	0.04	0.04	8.116	A
B-A	35.23	8.81	35.22	0.00	182.84	0.193	0.23	0.23	24.384	C
C-AB	95.61	23.90	95.60	0.00	911.69	0.105	0.22	0.23	4.417	A
C-A	611.25	152.81	611.25	0.00	-	-	-	-	-	-
A-B	100.19	25.05	100.19	0.00	-	-	-	-	-	-
A-C	912.75	228.19	912.75	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	13.48	3.37	13.53	0.00	522.52	0.026	0.04	0.03	7.072	A
B-A	28.77	7.19	29.17	0.00	246.17	0.117	0.23	0.14	16.620	C
C-AB	60.62	15.15	61.02	0.00	857.30	0.071	0.23	0.13	4.526	A
C-A	516.53	129.13	516.53	0.00	-	-	-	-	-	-
A-B	81.81	20.45	81.81	0.00	-	-	-	-	-	-
A-C	745.25	186.31	745.25	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	11.29	2.82	11.32	0.00	564.96	0.020	0.03	0.02	6.504	A
B-A	24.09	6.02	24.27	0.00	292.04	0.082	0.14	0.09	13.452	B
C-AB	42.46	10.62	42.64	0.00	819.10	0.052	0.13	0.08	4.638	A
C-A	440.87	110.22	440.87	0.00	-	-	-	-	-	-
A-B	68.51	17.13	68.51	0.00	-	-	-	-	-	-
A-C	624.11	156.03	624.11	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.29	0.02	6.497	A	A
B-A	1.26	0.08	13.394	B	B
C-AB	1.17	0.08	4.633	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.39	0.03	7.066	A	A
B-A	1.87	0.12	16.538	C	B
C-AB	1.84	0.12	4.520	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.54	0.04	8.109	A	A
B-A	3.26	0.22	24.242	C	C
C-AB	3.36	0.22	4.411	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.55	0.04	8.116	A	A
B-A	3.50	0.23	24.384	C	C
C-AB	3.41	0.23	4.417	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.41	0.03	7.072	A	A
B-A	2.13	0.14	16.620	C	B
C-AB	1.90	0.13	4.526	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.31	0.02	6.504	A	A
B-A	1.42	0.09	13.452	B	B
C-AB	1.22	0.08	4.638	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2018 Back + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Back + Dev, PM	2018 Back + Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C		10.99	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	(untitled)		Major
B	(untitled)		Minor
C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	150.00	✓	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 plus flare				10.00	3.50	3.00	3.00	3.00	✓	1.00	31	31

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	528.044	0.096	0.243	0.153	0.347
1	B-C	772.293	0.118	0.299	-	-
1	C-B	660.830	0.256	0.256	-	-

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	✓	955.00	100.000
B	ONE HOUR	✓	96.00	100.000
C	ONE HOUR	✓	707.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	126.000	829.000
	B	49.000	0.000	47.000
	C	617.000	90.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.13	0.87
	B	0.51	0.00	0.49
	C	0.87	0.13	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.12	9.78	0.14	A	43.13	64.69	8.89	8.24	0.10	8.89	8.24
B-A	0.35	36.44	0.53	E	44.96	67.44	27.10	24.11	0.30	27.10	24.11
C-AB	0.41	6.67	1.63	A	252.55	378.82	87.00	13.78	0.97	87.01	13.78
C-A	-	-	-	-	396.21	594.31	-	-	-	-	-
A-B	-	-	-	-	115.62	173.43	-	-	-	-	-
A-C	-	-	-	-	760.70	1141.06	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	35.38	8.85	35.11	0.00	553.65	0.064	0.00	0.07	6.940	A
B-A	36.89	9.22	36.28	0.00	272.50	0.135	0.00	0.15	15.199	C
C-AB	153.22	38.31	151.37	0.00	813.85	0.188	0.00	0.46	5.433	A
C-A	379.05	94.76	379.05	0.00	-	-	-	-	-	-
A-B	94.86	23.71	94.86	0.00	-	-	-	-	-	-
A-C	624.11	156.03	624.11	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	42.25	10.56	42.16	0.00	505.35	0.084	0.07	0.09	7.769	A
B-A	44.05	11.01	43.70	0.00	222.34	0.198	0.15	0.24	20.112	C
C-AB	226.81	56.70	225.60	0.00	857.92	0.264	0.46	0.77	5.711	A
C-A	408.77	102.19	408.77	0.00	-	-	-	-	-	-
A-B	113.27	28.32	113.27	0.00	-	-	-	-	-	-
A-C	745.25	186.31	745.25	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	51.75	12.94	51.56	0.00	422.07	0.123	0.09	0.14	9.711	A
B-A	53.95	13.49	52.86	0.00	153.15	0.352	0.24	0.51	35.517	E
C-AB	374.73	93.68	371.42	0.00	922.11	0.406	0.77	1.60	6.586	A
C-A	403.69	100.92	403.69	0.00	-	-	-	-	-	-
A-B	138.73	34.68	138.73	0.00	-	-	-	-	-	-
A-C	912.75	228.19	912.75	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	51.75	12.94	51.74	0.00	419.78	0.123	0.14	0.14	9.781	A
B-A	53.95	13.49	53.88	0.00	152.51	0.354	0.51	0.53	36.439	E
C-AB	376.97	94.24	376.83	0.00	924.18	0.408	1.60	1.63	6.666	A
C-A	401.45	100.36	401.45	0.00	-	-	-	-	-	-
A-B	138.73	34.68	138.73	0.00	-	-	-	-	-	-
A-C	912.75	228.19	912.75	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	42.25	10.56	42.44	0.00	503.92	0.084	0.14	0.09	7.804	A
B-A	44.05	11.01	45.15	0.00	221.43	0.199	0.53	0.26	20.543	C
C-AB	228.79	57.20	232.07	0.00	860.69	0.266	1.63	0.81	5.790	A
C-A	406.79	101.70	406.79	0.00	-	-	-	-	-	-
A-B	113.27	28.32	113.27	0.00	-	-	-	-	-	-
A-C	745.25	186.31	745.25	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	35.38	8.85	35.48	0.00	552.94	0.064	0.09	0.07	6.960	A
B-A	36.89	9.22	37.27	0.00	271.77	0.136	0.26	0.16	15.376	C
C-AB	154.76	38.69	156.07	0.00	815.32	0.190	0.81	0.49	5.489	A
C-A	377.50	94.38	377.50	0.00	-	-	-	-	-	-
A-B	94.86	23.71	94.86	0.00	-	-	-	-	-	-
A-C	624.11	156.03	624.11	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.98	0.07	6.940	A	A
B-A	2.17	0.14	15.199	C	B
C-AB	6.81	0.45	5.433	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.33	0.09	7.769	A	A
B-A	3.43	0.23	20.112	C	C
C-AB	11.57	0.77	5.711	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.01	0.13	9.711	A	A
B-A	7.01	0.47	35.517	E	D
C-AB	23.89	1.59	6.586	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.09	0.14	9.781	A	A
B-A	7.86	0.52	36.439	E	D
C-AB	24.90	1.66	6.666	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.43	0.10	7.804	A	A
B-A	4.11	0.27	20.543	C	C
C-AB	12.50	0.83	5.790	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

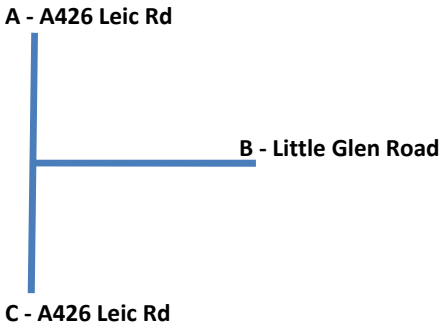
Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.06	0.07	6.960	A	A
B-A	2.52	0.17	15.376	C	B
C-AB	7.34	0.49	5.489	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Appendix M

J2 - Leicester Road / Little Glen Road – Junction Assessment Data

J2 Leicester Road / Little Glen



0800-0900

Background 2013

	A	B	C
A	0	130	526
B	149	0	414
C	639	249	0

Tempro 2013-18

	A	B	C
A	1.072	1.072	1.072
B	1.072	1.072	1.072
C	1.072	1.072	1.072

Background 2018

	A	B	C
A	0	139	564
B	160	0	444
C	685	267	0

Development

	A	B	C
A	0	12	34
B	5	0	0
C	14	0	0

Back + Dev

	A	B	C
A	0	152	598
B	165	0	444
C	699	267	0

1700-1800

Background 2013

	A	B	C
A	0	128	473
B	113	0	408
C	709	452	0

Tempro 2013-18

	A	B	C
A	1.0693	1.0693	1.0693
B	1.0693	1.0693	1.0693
C	1.0693	1.0693	1.0693

Background 2018

	A	B	C
A	0	137	506
B	121	0	436
C	758	483	0

Development

	A	B	C
A	0	4	12
B	9	0	0
C	25	0	0

Back + Dev

	A	B	C
A	0	141	518
B	130	0	436
C	784	483	0

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 28/01/2014 08:55:05
Analysis Set used for last run: A1 - (untitled)

Filename: J2 Leics_Little Glen.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 28/01/2014 09:36:39

» Network Diagrams
« A1 - (untitled) : D1 - 2018 - AM - Back *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

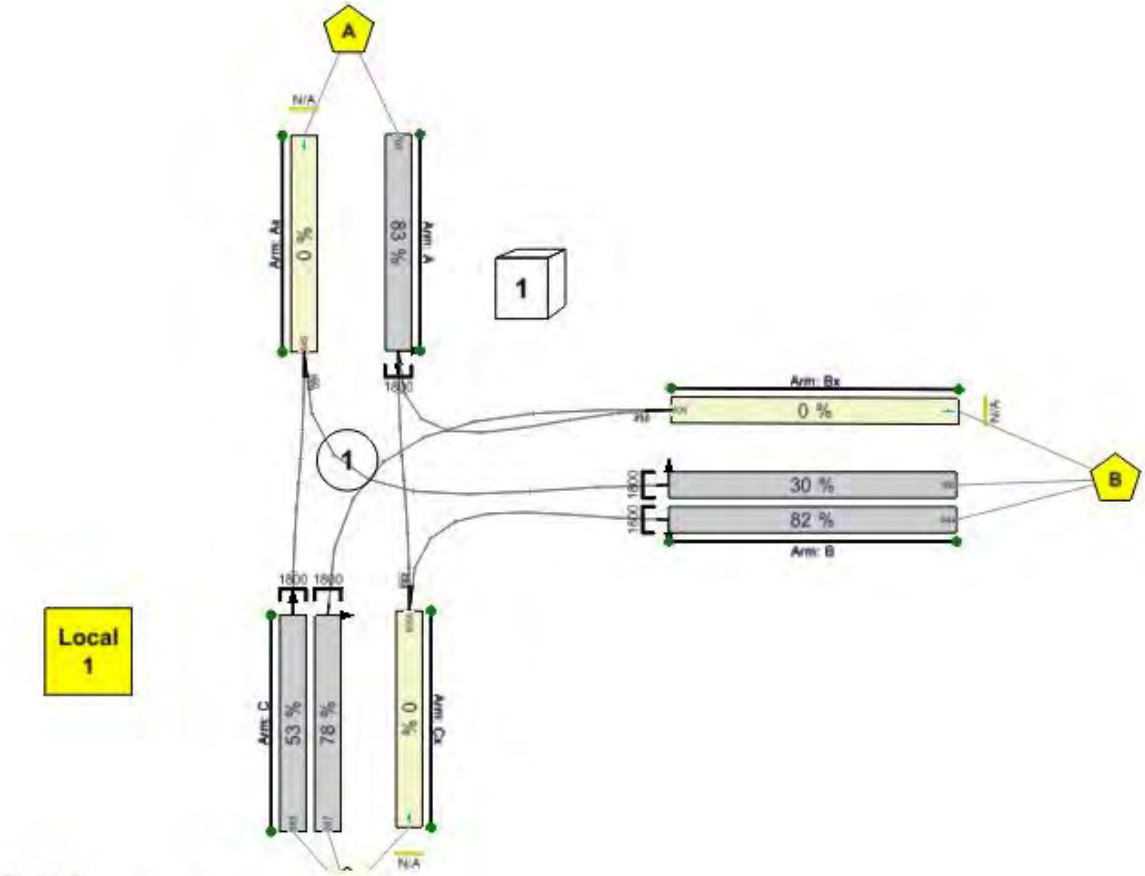
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018 - AM - Back *

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Local Matrix - Location	Local Matrix 1 - Location A	Local Matrix: 1, Location: A, missing A/2 Traffic Stream: Entry

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 -	28/01/2014	28/01/2014	08:00	100	19.21	83.10	A/1	0	0	A/1	Ax/1	A/1	✓

(untitled)	08:55:05	08:55:05											

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 - AM - Back				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
C	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	703	703	0	0	100	1.00
B	1	444	444	0	0	100	1.00
B	2	160	160	0	0	100	1.00
C	1	685	685	0	0	100	1.00
C	2	267	267	0	0	100	1.00
Ax	1	845	845	0	0	100	1.00
Bx	1	406	406	0	0	100	1.00
Cx	1	1008	1008	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	160	160	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	685	685	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	139	139	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	267	267	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	564	564	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	444	444	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	139	564
	B	160	0	444
	C	685	267	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	703	703	0	0	845	845	0	0
1	B	(untitled)	B/1,B/2	Bx/1	604	604	0	0	406	406	0	0
1	C	(untitled)	C/1,C/2	Cx/1	952	952	0	0	1008	1008	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/1,Cx/1	564
1	2		A/1,Bx/1	139
1	3		C/1,Ax/1	685
1	4		C/2,Bx/1	267
1	5		B/1,Cx/1	444
1	6		B/2,Ax/1	160

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	564
1	2	✓	Normal	N/A	N/A	139
1	3	✓	Normal	N/A	N/A	685
1	4	✓	Normal	N/A	N/A	267
1	5	✓	Normal	N/A	N/A	444
1	6	✓	Normal	N/A	N/A	160

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,D	1
1	2	C,D	1
1	3	B	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	48,66,95		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,D	2	48	46	1	7
1	2	✓	2	C,D	48	66	18	1	7
1	3	✓	3	B	66	95	29	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	2	48	46
1	B	1	✓	66	95	29
1	C	1	✓	48	66	18
1	D	1	✓	95	66	71

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

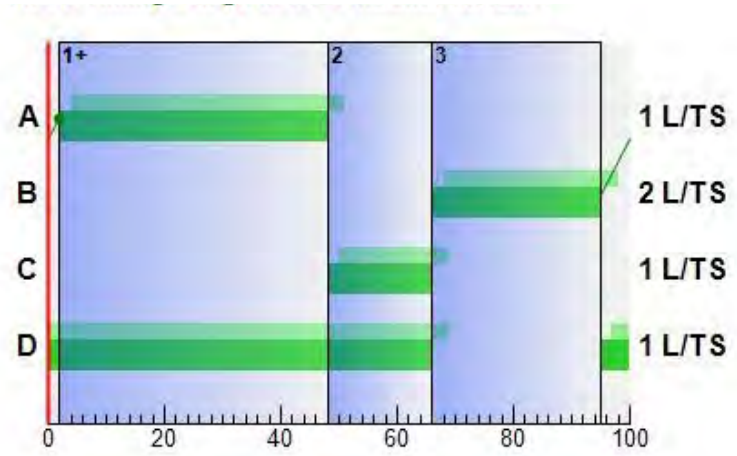
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

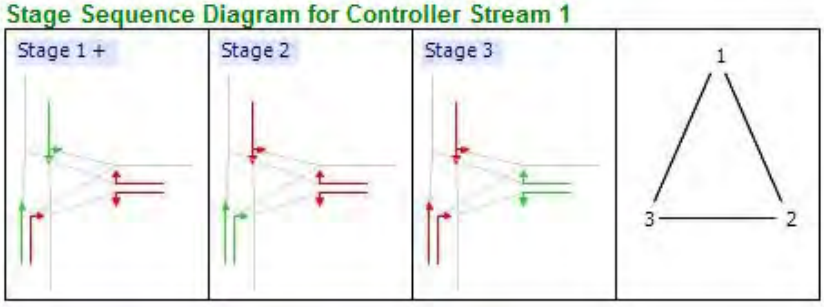
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	95	7	14
1	2	✓	2	C,D	48	0	7
1	3	✓	3	B	66	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	95	7	14
1	2	✓	2	C,D	48	0	7
1	3	✓	3	B	66	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	2	3	0	0
1	D	1	1	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	95	48	66

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	2	48	46									
B	1	1	1	B	0	66	95	29									
B	2	1	1	B	0	66	95	29									
C	1	1	1	D	0	95	66	71									
C	2	1	1	C	0	48	66	18									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
08:00-09:00	A	1	(untitled)	A	N/A	703	1800	46.00	0.00	846	83	8	18.76	12.32	33.11
08:00-09:00	B	1	(untitled)	B	N/A	444	1800	29.00	0.00	540	82	9	13.15	10.44	47.14
08:00-09:00	B	2	(untitled)	B	N/A	160	1800	29.00	0.00	540	30	204	3.44	3.17	28.30
08:00-09:00	C	1	(untitled)	D	N/A	685	1800	71.00	0.00	1296	53	70	8.86	5.62	7.88
08:00-09:00	C	2	(untitled)	C	N/A	267	1800	18.00	0.00	342	78	15	8.36	7.32	56.27
08:00-09:00	Ax	1	(untitled)	N/A	N/A	845	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Bx	1	(untitled)	N/A	N/A	406	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Cx	1	(untitled)	N/A	N/A	1008	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	2	48	46	7	0	0
1	B	1	66	95	29	7	0	0
1	C	1	48	66	18	7	0	0
1	D	1	95	66	71	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
08:00-09:00	A	1	703	703	0		1800	846	83		8	46.00	47.00	0
08:00-09:00	B	1	444	444	0		1800	540	82		9	29.00	30.00	0
08:00-09:00	B	2	160	160	0		1800	540	30		204	29.00	30.00	0
08:00-09:00	C	1	685	685	0		1800	1296	53		70	71.00	72.00	0
08:00-09:00	C	2	267	267	0		1800	342	78		15	18.00	19.00	0
08:00-09:00	Ax	1	845	845	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Bx	1	406	406	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Cx	1	1008	1008	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	A	1	12.00	C	33.11	4.50	1.97	91.82	91.82	93.95	591.44	69.01	8.28	8.28
08:00-09:00	B	1	12.00	D	47.14	4.01	1.80	82.56	82.56	104.66	402.11	62.59	5.83	5.83
08:00-09:00	B	2	1.00	C	28.30	1.20	0.06	17.86	17.86	76.27	119.79	2.23	1.41	1.41
08:00-09:00	C	1	6.96	A	7.88	1.20	0.30	21.30	21.30	44.01	290.88	10.60	3.78	3.78
08:00-09:00	C	2	12.00	E	56.27	2.86	1.32	59.26	59.26	110.11	248.64	45.34	3.69	3.69
08:00-09:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	A	1	0.00	18.76	17.39	0.05	0.00	0.00	1.97	12.32	0.00	0.00	0.00	
08:00-09:00	B	1	0.00	13.15	17.39	0.00	0.00	0.00	1.80	10.44	0.00	0.00	0.00	
08:00-09:00	B	2	0.00	3.44	1.39	0.48	0.00	0.00	0.06	3.17	0.00	0.00	0.00	
08:00-09:00	C	1	0.00	8.86	10.09	0.00	0.00	0.00	0.30	5.62	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	8.36	17.39	0.00	0.00	0.00	1.32	7.32	0.00	0.00	0.00	
08:00-09:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	A	1	70.30	8.81	7.98	45.11
08:00-09:00	B	1	44.40	7.29	6.09	59.14
08:00-09:00	B	2	1.28	1.30	0.98	29.30
08:00-09:00	C	1	39.73	2.82	14.07	14.84
08:00-09:00	C	2	26.70	5.06	5.27	68.27
08:00-09:00	Ax	1	84.50	2.82	30.00	12.00
08:00-09:00	Bx	1	40.60	1.35	30.00	12.00
08:00-09:00	Cx	1	100.80	3.36	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
08:00-09:00	A1 - (untitled)	28/01/2014 08:55:05	28/01/2014 08:55:05	08:00	100	19.21	83.10	A/1	0	0	A/1	Ax/1	A/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
08:00-09:00	4518	4518	0		0	0	83		8	493.00	498.00	0.00	295.78	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	10.85	C	15.31	13.77	5.44	272.80	272.80	40.78	1652.87	189.78	22.98	22.98

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	0.00	0.00	115.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	408.31	32.82	12.44	26.15

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	57.11	57.11
	B	41.30	0.00	71.14
	C	26.84	80.27	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	57.11	57.11	0.00	0.00
2	57.11	57.11	0.00	0.00
3	26.84	26.84	0.00	0.00
4	80.27	80.27	0.00	0.00
5	71.14	71.14	0.00	0.00
6	41.30	41.30	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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Last run: 28/01/2014 09:39:21
Analysis Set used for last run: A1 - (untitled)

Filename: J2 Leics_Little Glen-AM+Back+Dev.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 28/01/2014 09:39:34

» Network Diagrams
« A1 - (untitled) : D1 - 2018 - AM - Back+Dev *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

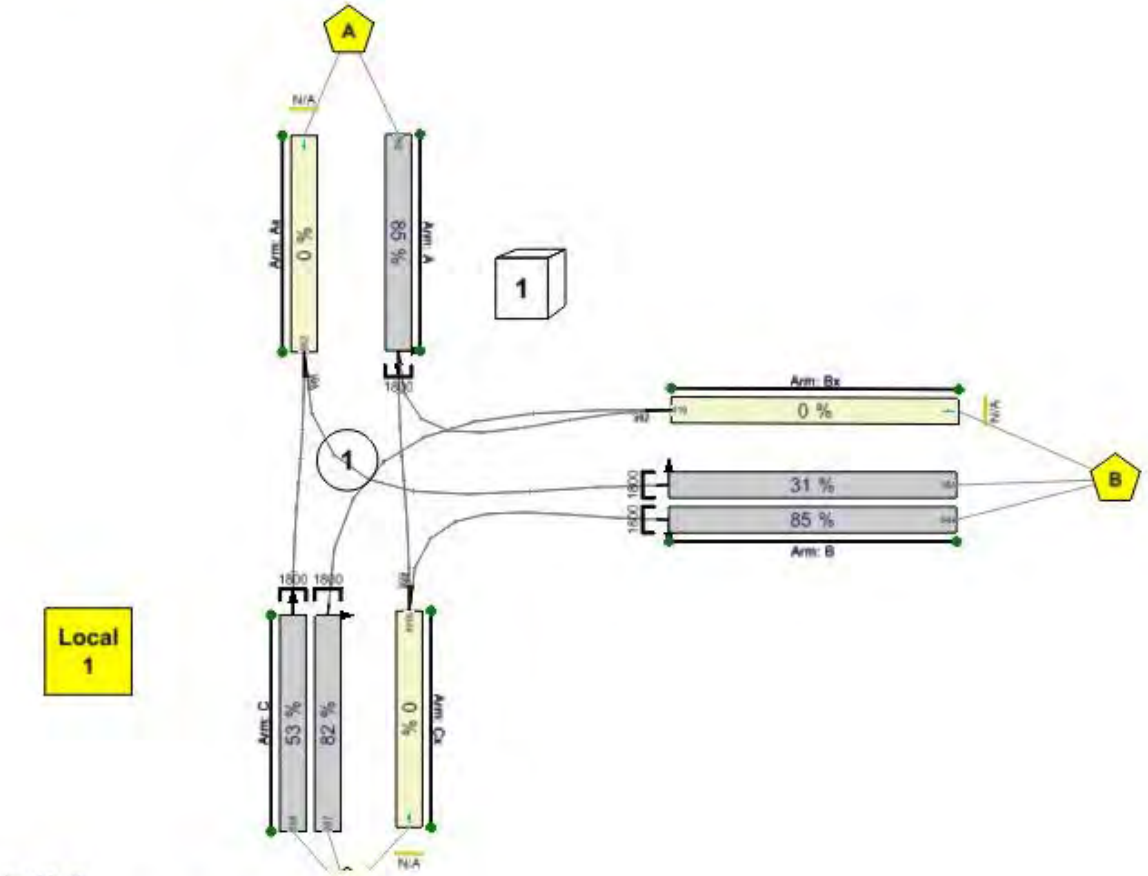
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018 - AM - Back+Dev *

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Local Matrix - Location	Local Matrix 1 - Location A	Local Matrix: 1, Location: A, missing A/2 Traffic Stream: Entry

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 -	28/01/2014	28/01/2014	08:00	100	20.87	85.26	A/1	0	0	A/1	Ax/1	A/1	✓

(untitled)	09:39:21	09:39:21											

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 - AM - Back+Dev				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
C	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	752	752	0	0	100	1.00
B	1	444	444	0	0	100	1.00
B	2	164	164	0	0	100	1.00
C	1	698	698	0	0	100	1.00
C	2	267	267	0	0	100	1.00
Ax	1	862	862	0	0	100	1.00
Bx	1	419	419	0	0	100	1.00
Cx	1	1044	1044	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	164	164	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	698	698	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	152	152	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	267	267	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	600	600	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	444	444	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	152	600
	B	164	0	444
	C	698	267	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	752	752	0	0	862	862	0	0
1	B	(untitled)	B/1,B/2	Bx/1	608	608	0	0	419	419	0	0
1	C	(untitled)	C/1,C/2	Cx/1	965	965	0	0	1044	1044	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/1,Cx/1	600
1	2		A/1,Bx/1	152
1	3		C/1,Ax/1	698
1	4		C/2,Bx/1	267
1	5		B/1,Cx/1	444
1	6		B/2,Ax/1	164

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	600
1	2	✓	Normal	N/A	N/A	152
1	3	✓	Normal	N/A	N/A	698
1	4	✓	Normal	N/A	N/A	267
1	5	✓	Normal	N/A	N/A	444
1	6	✓	Normal	N/A	N/A	164

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,D	1
1	2	C,D	1
1	3	B	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	49,66,94		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,D	1	49	48	1	7
1	2	✓	2	C,D	49	66	17	1	7
1	3	✓	3	B	66	94	28	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	1	49	48
1	B	1	✓	66	94	28
1	C	1	✓	49	66	17
1	D	1	✓	94	66	72

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

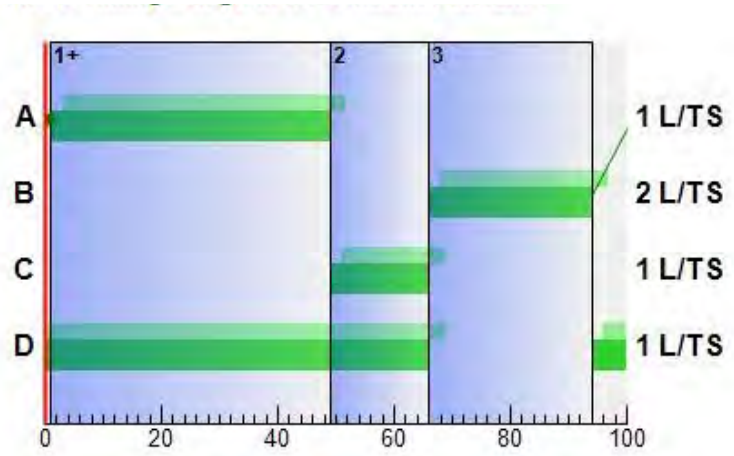
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

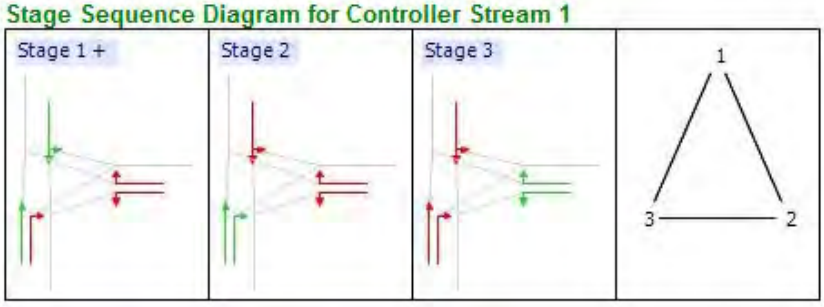
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	94	7	14
1	2	✓	2	C,D	49	0	7
1	3	✓	3	B	66	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	94	7	14
1	2	✓	2	C,D	49	0	7
1	3	✓	3	B	66	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	2	3	0	0
1	D	1	1	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	94	49	66

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	1	49	48									
B	1	1	1	B	0	66	94	28									
B	2	1	1	B	0	66	94	28									
C	1	1	1	D	0	94	66	72									
C	2	1	1	C	0	49	66	17									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
08:00-09:00	A	1	(untitled)	A	N/A	752	1800	48.00	0.00	882	85	6	20.52	13.00	33.59
08:00-09:00	B	1	(untitled)	B	N/A	444	1800	28.00	0.00	522	85	6	13.84	11.00	51.65
08:00-09:00	B	2	(untitled)	B	N/A	164	1800	28.00	0.00	522	31	186	3.63	3.31	29.31
08:00-09:00	C	1	(untitled)	D	N/A	698	1800	72.00	0.00	1314	53	69	8.83	5.54	7.50
08:00-09:00	C	2	(untitled)	C	N/A	267	1800	17.00	0.00	324	82	9	8.89	7.85	63.34
08:00-09:00	Ax	1	(untitled)	N/A	N/A	862	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Bx	1	(untitled)	N/A	N/A	419	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Cx	1	(untitled)	N/A	N/A	1044	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	1	49	48	7	0	0
1	B	1	66	94	28	7	0	0
1	C	1	49	66	17	7	0	0
1	D	1	94	66	72	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
08:00-09:00	A	1	752	752	0		1800	882	85		6	48.00	49.00	0
08:00-09:00	B	1	444	444	0		1800	522	85		6	28.00	29.00	0
08:00-09:00	B	2	164	164	0		1800	522	31		186	28.00	29.00	0
08:00-09:00	C	1	698	698	0		1800	1314	53		69	72.00	73.00	0
08:00-09:00	C	2	267	267	0		1800	324	82		9	17.00	18.00	0
08:00-09:00	Ax	1	862	862	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Bx	1	419	419	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Cx	1	1044	1044	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	A	1	12.00	C	33.59	4.67	2.35	99.64	99.64	95.69	637.32	82.27	9.02	9.02
08:00-09:00	B	1	12.00	D	51.65	4.13	2.24	90.45	90.45	109.46	408.83	77.19	6.09	6.09
08:00-09:00	B	2	1.00	C	29.31	1.26	0.07	18.96	18.96	78.02	125.39	2.57	1.48	1.48
08:00-09:00	C	1	6.96	A	7.50	1.15	0.30	20.66	20.66	42.84	288.25	10.76	3.75	3.75
08:00-09:00	C	2	12.00	E	63.34	2.93	1.77	66.71	66.71	116.94	252.19	60.05	3.91	3.91
08:00-09:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	A	1	0.00	20.52	17.39	0.25	0.00	0.00	2.35	13.00	0.00	0.00	0.00	
08:00-09:00	B	1	0.00	13.84	17.39	0.00	0.00	0.00	2.24	11.00	0.00	0.00	0.00	
08:00-09:00	B	2	0.00	3.63	1.39	0.56	0.00	0.00	0.07	3.31	0.00	0.00	0.00	
08:00-09:00	C	1	0.00	8.83	10.09	0.00	0.00	0.00	0.30	5.54	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	8.89	17.39	0.00	0.00	0.00	1.77	7.85	0.00	0.00	0.00	
08:00-09:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	A	1	75.20	9.52	7.90	45.59
08:00-09:00	B	1	44.40	7.85	5.66	63.65
08:00-09:00	B	2	1.31	1.38	0.95	30.31
08:00-09:00	C	1	40.48	2.80	14.44	14.46
08:00-09:00	C	2	26.70	5.59	4.78	75.34
08:00-09:00	Ax	1	86.20	2.87	30.00	12.00
08:00-09:00	Bx	1	41.90	1.40	30.00	12.00
08:00-09:00	Cx	1	104.40	3.48	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
08:00-09:00	A1 - (untitled)	28/01/2014 09:39:21	28/01/2014 09:39:21	08:00	100	20.87	85.26	A/1	0	0	A/1	Ax/1	A/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
08:00-09:00	4650	4650	0		0	0	85		6	493.00	498.00	0.00	320.67	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	10.86	C	16.16	14.14	6.73	296.41	296.41	41.82	1711.97	232.85	24.26	24.26

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	0.00	0.00	115.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	420.60	34.90	12.05	27.02

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	57.59	57.59
	B	42.31	0.00	75.65
	C	26.46	87.34	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	57.59	57.59	0.00	0.00
2	57.59	57.59	0.00	0.00
3	26.46	26.46	0.00	0.00
4	87.34	87.34	0.00	0.00
5	75.65	75.65	0.00	0.00
6	42.31	42.31	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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Last run: 28/01/2014 09:43:02
Analysis Set used for last run: A1 - (untitled)

Filename: J2 Leics_Little Glen-PM+Back.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 28/01/2014 09:44:52

» Network Diagrams
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File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

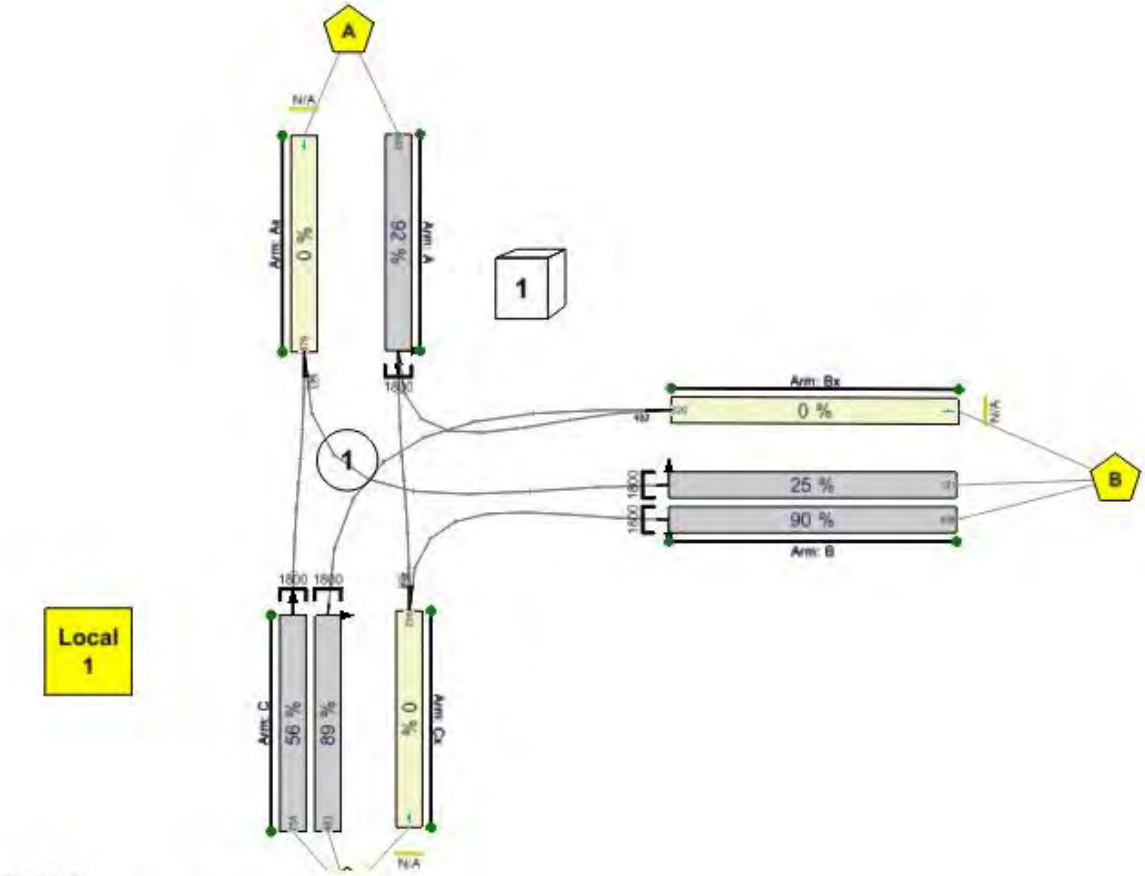
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018 - PM - Back *

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Local Matrix - Location	Local Matrix 1 - Location A	Local Matrix: 1, Location: A, missing A/2 Traffic Stream: Entry

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 -	28/01/2014	28/01/2014	17:00	100	27.32	91.60	A/1	1	12	A/1	Ax/1	A/1	

(untitled)	09:43:02	09:43:02											

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 - PM - Back				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
C	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	643	643	0	0	100	1.00
B	1	436	436	0	0	100	1.00
B	2	121	121	0	0	100	1.00
C	1	758	758	0	0	100	1.00
C	2	483	483	0	0	100	1.00
Ax	1	879	879	0	0	100	1.00
Bx	1	620	620	0	0	100	1.00
Cx	1	942	942	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	121	121	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	758	758	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	137	137	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	483	483	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	506	506	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	436	436	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	137	506
	B	121	0	436
	C	758	483	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	643	643	0	0	879	879	0	0
1	B	(untitled)	B/1,B/2	Bx/1	557	557	0	0	620	620	0	0
1	C	(untitled)	C/1,C/2	Cx/1	1241	1241	0	0	942	942	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/1,Cx/1	506
1	2		A/1,Bx/1	137
1	3		C/1,Ax/1	758
1	4		C/2,Bx/1	483
1	5		B/1,Cx/1	436
1	6		B/2,Ax/1	121

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	506
1	2	✓	Normal	N/A	N/A	137
1	3	✓	Normal	N/A	N/A	758
1	4	✓	Normal	N/A	N/A	483
1	5	✓	Normal	N/A	N/A	436
1	6	✓	Normal	N/A	N/A	121

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,D	1
1	2	C,D	1
1	3	B	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	39,68,94		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,D	1	39	38	1	7
1	2	✓	2	C,D	39	68	29	1	7
1	3	✓	3	B	68	94	26	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	1	39	38
1	B	1	✓	68	94	26
1	C	1	✓	39	68	29
1	D	1	✓	94	68	74

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

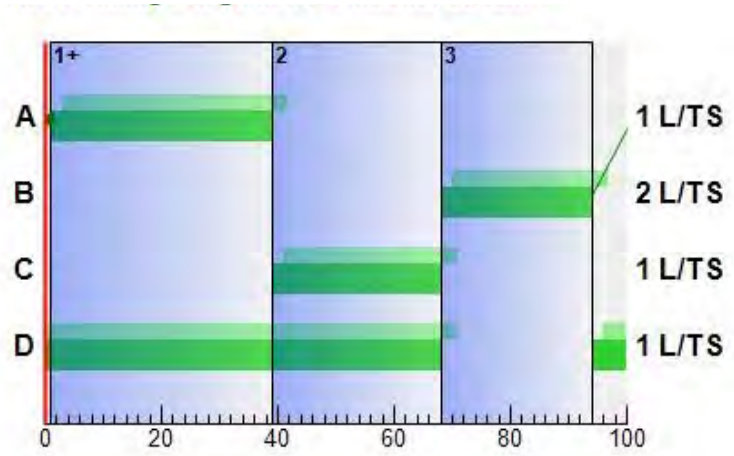
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

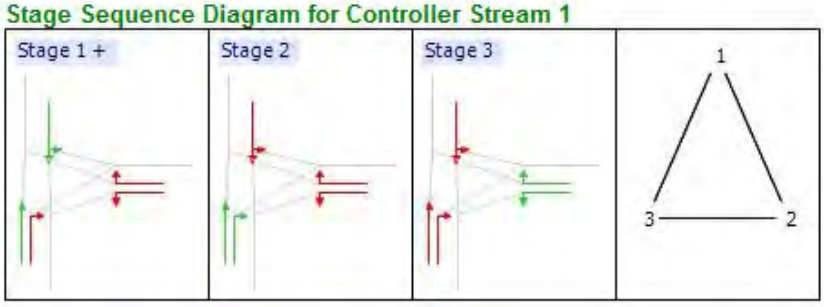
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	94	7	14
1	2	✓	2	C,D	39	0	7
1	3	✓	3	B	68	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	94	7	14
1	2	✓	2	C,D	39	0	7
1	3	✓	3	B	68	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	2	3	0	0
1	D	1	1	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	94	39	68

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	1	39	38									
B	1	1	1	B	0	68	94	26									
B	2	1	1	B	0	68	94	26									
C	1	1	1	D	0	94	68	74									
C	2	1	1	C	0	39	68	29									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
17:00-18:00	A	1	(untitled)	A	N/A	643	1800	38.00	0.00	702	92	-2	21.04	15.14	52.73
17:00-18:00	B	1	(untitled)	B	N/A	436	1800	26.00	0.00	486	90	0	14.97	12.19	62.78
17:00-18:00	B	2	(untitled)	B	N/A	121	1800	26.00	0.00	486	25	261	2.66	2.49	29.80
17:00-18:00	C	1	(untitled)	D	N/A	758	1800	74.00	0.00	1350	56	60	9.41	5.62	7.10
17:00-18:00	C	2	(untitled)	C	N/A	483	1800	29.00	0.00	540	89	1	16.05	12.70	58.11
17:00-18:00	Ax	1	(untitled)	N/A	N/A	879	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Bx	1	(untitled)	N/A	N/A	620	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Cx	1	(untitled)	N/A	N/A	942	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	1	39	38	7	0	0
1	B	1	68	94	26	7	0	0
1	C	1	39	68	29	7	0	0
1	D	1	94	68	74	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
17:00-18:00	A	1	643	643	0		1800	702	92	✓	-2	38.00	39.00	0
17:00-18:00	B	1	436	436	0		1800	486	90		0	26.00	27.00	0
17:00-18:00	B	2	121	121	0		1800	486	25		261	26.00	27.00	0
17:00-18:00	C	1	758	758	0		1800	1350	56		60	74.00	75.00	0
17:00-18:00	C	2	483	483	0		1800	540	89		1	29.00	30.00	0
17:00-18:00	Ax	1	879	879	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Bx	1	620	620	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Cx	1	942	942	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	A	1	12.00	D	52.73	5.17	4.25	133.74	133.74	114.65	593.00	144.20	9.24	9.24
17:00-18:00	B	1	12.00	E	62.78	4.26	3.34	107.97	107.97	120.04	410.92	112.47	6.56	6.56
17:00-18:00	B	2	1.00	C	29.80	0.96	0.04	14.23	14.23	77.96	92.85	1.48	1.09	1.09
17:00-18:00	C	1	6.96	A	7.10	1.14	0.36	21.23	21.23	41.95	305.12	12.85	3.99	3.99
17:00-18:00	C	2	12.00	E	58.11	4.49	3.30	110.71	110.71	116.56	451.09	111.90	7.06	7.06
17:00-18:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	A	1	0.00	21.04	17.39	0.39	0.00	0.00	4.25	15.14	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	14.97	17.39	0.00	0.00	0.00	3.34	12.19	0.00	0.00	0.00	
17:00-18:00	B	2	0.00	2.66	1.39	0.25	0.00	0.00	0.04	2.49	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	9.41	10.09	0.00	0.00	0.00	0.36	5.62	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	16.05	17.39	0.00	0.00	0.00	3.30	12.70	0.00	0.00	0.00	
17:00-18:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	64.30	11.56	5.56	64.73
17:00-18:00	B	1	43.60	9.06	4.81	74.78
17:00-18:00	B	2	0.97	1.04	0.93	30.80
17:00-18:00	C	1	43.96	2.96	14.85	14.06
17:00-18:00	C	2	48.30	9.41	5.13	70.11
17:00-18:00	Ax	1	87.90	2.93	30.00	12.00
17:00-18:00	Bx	1	62.00	2.07	30.00	12.00
17:00-18:00	Cx	1	94.20	3.14	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
17:00-18:00	A1 - (untitled)	28/01/2014 09:43:02	28/01/2014 09:43:02	17:00	100	27.32	91.60	A/1	1	12	A/1	Ax/1	A/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
17:00-18:00	4882	4882	0		0	0	92	✓	-2	493.00	498.00	0.00	415.83	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	10.94	D	20.14	16.02	11.30	387.88	387.88	45.80	1852.98	382.89	27.94	27.94

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	0.00	0.00	115.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	445.23	42.16	10.56	31.09

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	76.73	76.73
	B	42.80	0.00	86.78
	C	26.06	82.11	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	76.73	76.73	0.00	0.00
2	76.73	76.73	0.00	0.00
3	26.06	26.06	0.00	0.00
4	82.11	82.11	0.00	0.00
5	86.78	86.78	0.00	0.00
6	42.80	42.80	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 28/01/2014 09:40:52
Analysis Set used for last run: A1 - (untitled)

Filename: J2 Leics_Little Glen-PM+Back+Dev.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 28/01/2014 09:42:05

» Network Diagrams
« A1 - (untitled) : D1 - 2018 - PM - Back+Dev *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

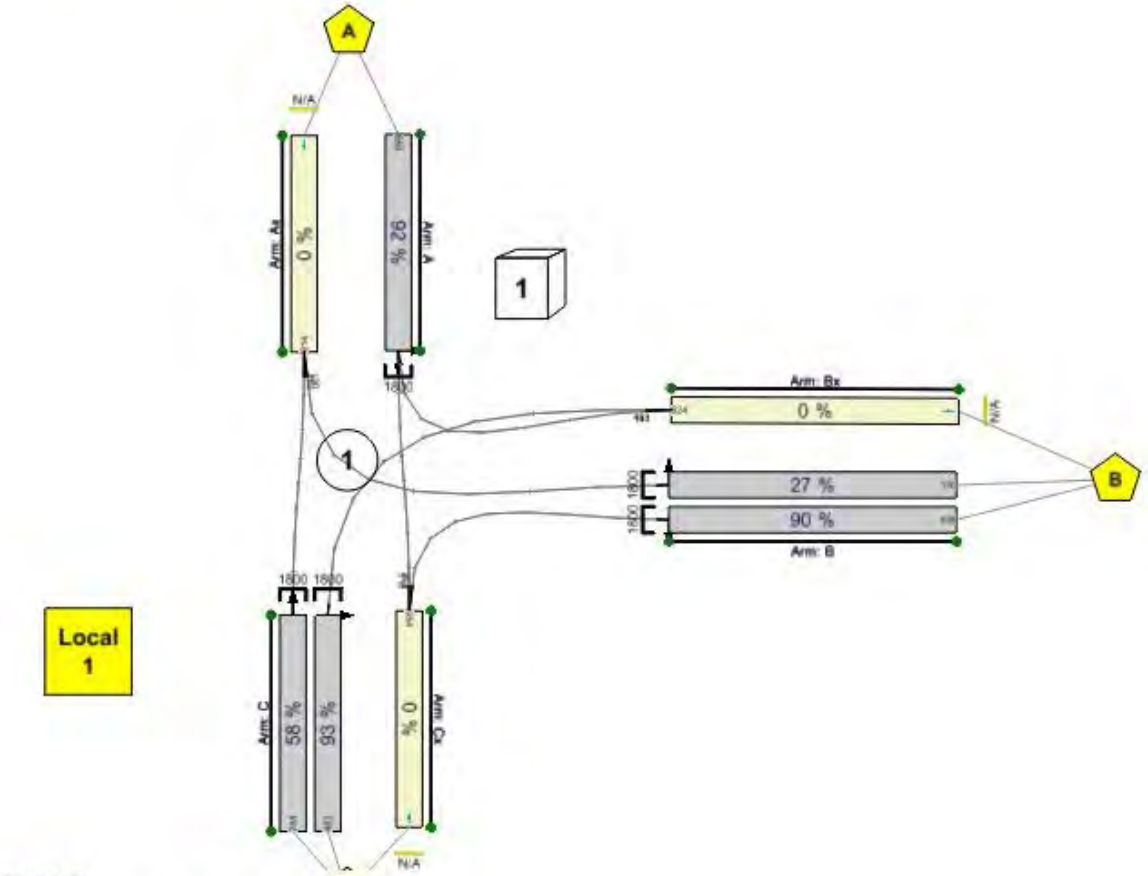
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018 - PM - Back+Dev *

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Local Matrix - Location	Local Matrix 1 - Location A	Local Matrix: 1, Location: A, missing A/2 Traffic Stream: Entry

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 -	28/01/2014	28/01/2014	17:00	100	28.83	92.53	C/2	2	25	C/2	Ax/1	C/2	

(untitled)	09:40:52	09:40:52											

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 - PM - Back+Dev				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
C	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	659	659	0	0	100	1.00
B	1	436	436	0	0	100	1.00
B	2	130	130	0	0	100	1.00
C	1	784	784	0	0	100	1.00
C	2	483	483	0	0	100	1.00
Ax	1	914	914	0	0	100	1.00
Bx	1	624	624	0	0	100	1.00
Cx	1	954	954	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	130	130	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	784	784	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	141	141	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	483	483	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	518	518	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	436	436	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	141	518
	B	130	0	436
	C	784	483	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	659	659	0	0	914	914	0	0
1	B	(untitled)	B/1,B/2	Bx/1	566	566	0	0	624	624	0	0
1	C	(untitled)	C/1,C/2	Cx/1	1267	1267	0	0	954	954	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/1,Cx/1	518
1	2		A/1,Bx/1	141
1	3		C/1,Ax/1	784
1	4		C/2,Bx/1	483
1	5		B/1,Cx/1	436
1	6		B/2,Ax/1	130

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	518
1	2	✓	Normal	N/A	N/A	141
1	3	✓	Normal	N/A	N/A	784
1	4	✓	Normal	N/A	N/A	483
1	5	✓	Normal	N/A	N/A	436
1	6	✓	Normal	N/A	N/A	130

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,D	1
1	2	C,D	1
1	3	B	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	40,68,94		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,D	1	40	39	1	7
1	2	✓	2	C,D	40	68	28	1	7
1	3	✓	3	B	68	94	26	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	1	40	39
1	B	1	✓	68	94	26
1	C	1	✓	40	68	28
1	D	1	✓	94	68	74

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

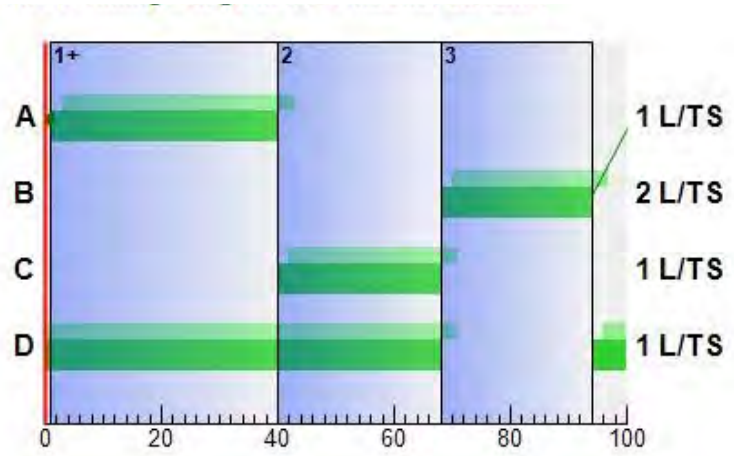
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

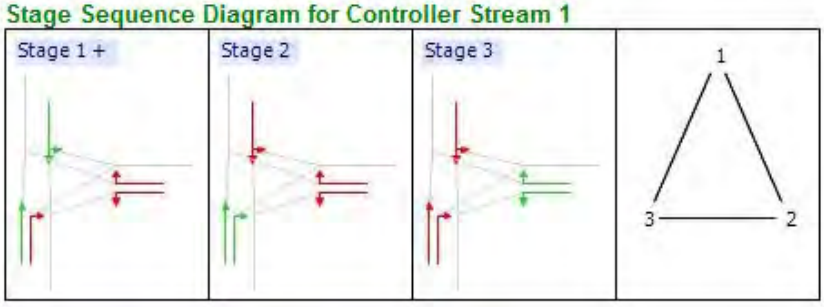
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	94	7	14
1	2	✓	2	C,D	40	0	7
1	3	✓	3	B	68	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,D	94	7	14
1	2	✓	2	C,D	40	0	7
1	3	✓	3	B	68	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	2	3	0	0
1	D	1	1	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	94	40	68

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	1	40	39									
B	1	1	1	B	0	68	94	26									
B	2	1	1	B	0	68	94	26									
C	1	1	1	D	0	94	68	74									
C	2	1	1	C	0	40	68	28									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
17:00-18:00	A	1	(untitled)	A	N/A	659	1800	39.00	0.00	720	92	-2	21.44	15.21	51.51
17:00-18:00	B	1	(untitled)	B	N/A	436	1800	26.00	0.00	486	90	0	14.97	12.19	62.78
17:00-18:00	B	2	(untitled)	B	N/A	130	1800	26.00	0.00	486	27	236	2.87	2.68	30.08
17:00-18:00	C	1	(untitled)	D	N/A	784	1800	74.00	0.00	1350	58	55	9.98	5.85	7.38
17:00-18:00	C	2	(untitled)	C	N/A	483	1800	28.00	0.00	522	93	-3	17.50	14.01	67.89
17:00-18:00	Ax	1	(untitled)	N/A	N/A	914	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Bx	1	(untitled)	N/A	N/A	624	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Cx	1	(untitled)	N/A	N/A	954	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	1	40	39	7	0	0
1	B	1	68	94	26	7	0	0
1	C	1	40	68	28	7	0	0
1	D	1	94	68	74	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
17:00-18:00	A	1	659	659	0		1800	720	92	✓	-2	39.00	40.00	0
17:00-18:00	B	1	436	436	0		1800	486	90		0	26.00	27.00	0
17:00-18:00	B	2	130	130	0		1800	486	27		236	26.00	27.00	0
17:00-18:00	C	1	784	784	0		1800	1350	58		55	74.00	75.00	0
17:00-18:00	C	2	483	483	0		1800	522	93	✓	-3	28.00	29.00	0
17:00-18:00	Ax	1	914	914	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Bx	1	624	624	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Cx	1	954	954	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	A	1	12.00	D	51.51	5.20	4.23	133.90	133.90	113.88	606.65	143.84	9.41	9.41
17:00-18:00	B	1	12.00	E	62.78	4.26	3.34	107.97	107.97	120.04	410.92	112.47	6.56	6.56
17:00-18:00	B	2	1.00	C	30.08	1.04	0.05	15.43	15.43	78.22	99.93	1.75	1.17	1.17
17:00-18:00	C	1	6.96	A	7.38	1.21	0.40	22.82	22.82	43.14	323.83	14.36	4.24	4.24
17:00-18:00	C	2	12.00	E	67.89	4.62	4.49	129.34	129.34	125.41	456.98	148.73	7.59	7.59
17:00-18:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	A	1	0.00	21.44	17.39	0.47	0.00	0.00	4.23	15.21	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	14.97	17.39	0.00	0.00	0.00	3.34	12.19	0.00	0.00	0.00	
17:00-18:00	B	2	0.00	2.87	1.39	0.31	0.00	0.00	0.05	2.68	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	9.98	10.09	0.00	0.00	0.00	0.40	5.85	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	17.50	17.39	0.00	0.00	0.00	4.49	14.01	0.00	0.00	0.00	
17:00-18:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	65.90	11.63	5.67	63.51
17:00-18:00	B	1	43.60	9.06	4.81	74.78
17:00-18:00	B	2	1.04	1.12	0.93	31.08
17:00-18:00	C	1	45.47	3.12	14.56	14.34
17:00-18:00	C	2	48.30	10.72	4.51	79.89
17:00-18:00	Ax	1	91.40	3.05	30.00	12.00
17:00-18:00	Bx	1	62.40	2.08	30.00	12.00
17:00-18:00	Cx	1	95.40	3.18	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
17:00-18:00	A1 - (untitled)	28/01/2014 09:40:52	28/01/2014 09:40:52	17:00	100	28.83	92.53	C/2	2	25	C/2	Ax/1	C/2

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
17:00-18:00	4984	4984	0		0	0	93	✓	-3	493.00	498.00	0.00	438.44	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	10.92	D	20.83	16.32	12.51	409.45	409.45	46.54	1898.31	421.16	28.98	28.98

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	0.00	0.00	115.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	453.51	43.95	10.32	31.75

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	75.51	75.51
	B	43.08	0.00	86.78
	C	26.34	91.89	0.00

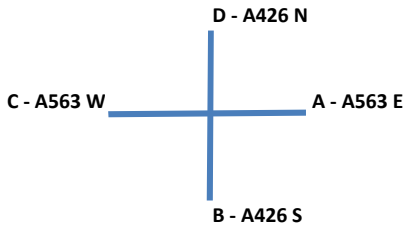
Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	75.51	75.51	0.00	0.00
2	75.51	75.51	0.00	0.00
3	26.34	26.34	0.00	0.00
4	91.89	91.89	0.00	0.00
5	86.78	86.78	0.00	0.00
6	43.08	43.08	0.00	0.00

Appendix N

J3 - Leicester Road / Soar Valley Way / Glenhills Way – Junction Assessment Data

J3 Leicester Road / Soar Valley Way / Glenhills Way



0800-0900

Background 2013	A	B	C	D
A	0	68	1515	38
B	156	0	280	325
C	1018	132	0	273
D	44	207	336	0

Tempro 2013-18	A	B	C	D
A	1.072	1.072	1.072	1.072
B	1.072	1.072	1.072	1.072
C	1.072	1.072	1.072	1.072
D	1.072	1.072	1.072	1.072

Background 2018	A	B	C	D
A	0	73	1624	41
B	167	0	300	348
C	1091	142	0	293
D	47	222	360	0

Development	A	B	C	D
A	0	5	0	0
B	15	0	31	41
C	0	11	0	0
D	0	15	0	0

Back + Dev	A	B	C	D
A	0	78	1624	41
B	182	0	331	389
C	1091	153	0	293
D	47	236	360	0

1700-1800

Background 2013	A	B	C	D
A	0	99	1106	59
B	125	0	209	302
C	1295	246	0	428
D	45	339	329	0

Tempro 2013-18	A	B	C	D
A	1.0693	1.0693	1.0693	1.0693
B	1.0693	1.0693	1.0693	1.0693
C	1.0693	1.0693	1.0693	1.0693
D	1.0693	1.0693	1.0693	1.0693

Background 2018	A	B	C	D
A	0	106	1183	63
B	134	0	223	323
C	1385	263	0	458
D	48	362	352	0

Development	A	B	C	D
A	0	11	0	0
B	5	0	11	14
C	0	22	0	0
D	0	29	0	0

Back + Dev	A	B	C	D
A	0	117	1183	63
B	139	0	234	337
C	1385	285	0	458
D	48	392	352	0

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 27/01/2014 13:48:59
Analysis Set used for last run: A1 - (untitled)

Filename: J3- Soar Valley_Leicester Rd-AM.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 27/01/2014 13:51:31

» Network Diagrams
« A1 - (untitled) : D1 - 2018 Back *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

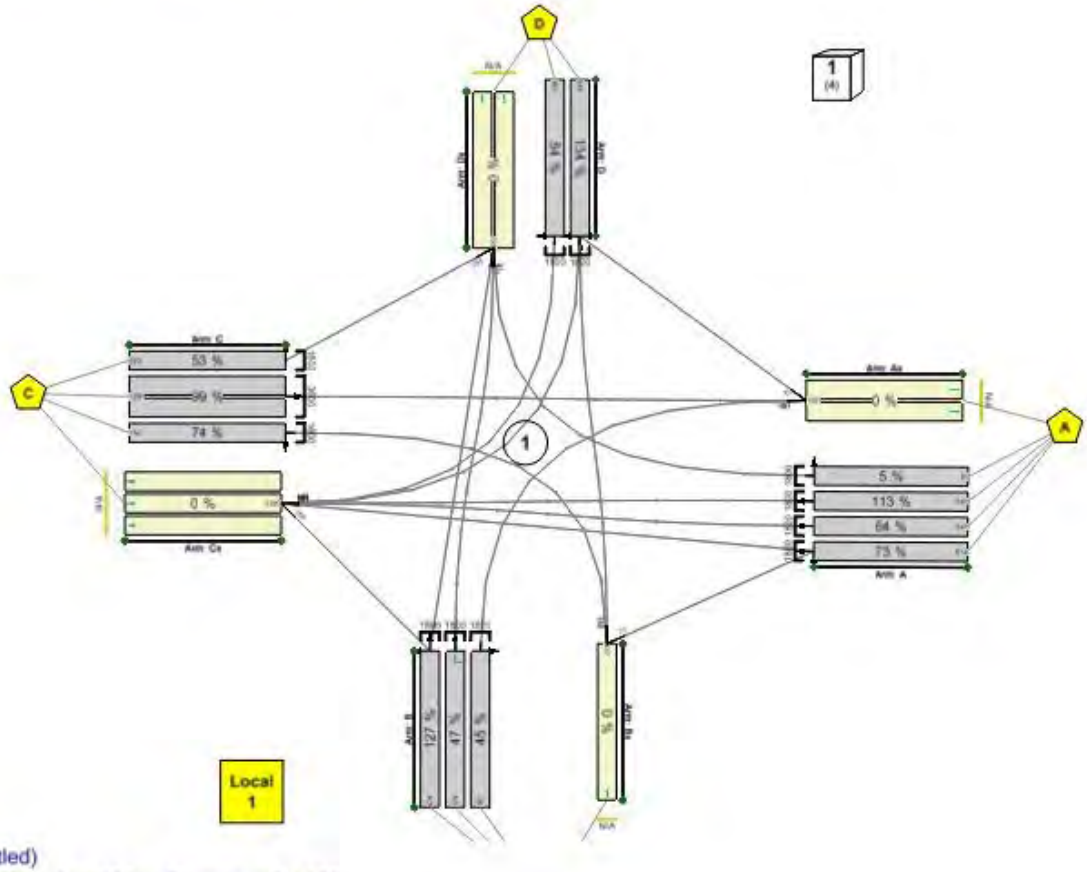
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 150s , Timesteps 0 / 150
D1 - 2018 Back *
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018 Back *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	27/01/2014 13:48:17	27/01/2014 13:48:59	08:00	150	220.19	133.63	D/1	4	25	D/1	Dx/1	D/1	

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 Back				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
150	1	150	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Shotgun Number Of Runs	Random Seed	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Shotgun Hill Climb (Medium)	Extended - Offsets And Green Splits	15,40,-1,15,40,1,-1,1,-15,-5,-1,15,1	10	1	✓	1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	3	(untitled)		150.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	F			Normal
A	4	(untitled)		35.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
B	1	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	4	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	3600	✓	1	C			Normal
C	3	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
D	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
D	3	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Dx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
A	3	1	(untitled)			1800
A	4	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
B	4	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
C	2	2	(untitled)			1800
C	3	1	(untitled)			1800
D	1	1	(untitled)			1800
D	3	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Ax	1	2	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800
Cx	1	2	(untitled)			1800
Cx	1	3	(untitled)			1800
Dx	1	1	(untitled)			1800
Dx	1	2	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		

A	2	100	100		0.00		
A	3	100	100		0.00		
A	4	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
B	4	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
C	3	100	100		0.00		
D	1	100	100		0.00		
D	3	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		
Dx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Dx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	614	614	0	0	100	1.00
A	2	541	541	0	0	100	1.00

A	3	541	541	0	0	100	1.00
A	4	41	41	0	0	100	1.00
B	1	474	474	0	0	100	1.00
B	2	174	174	0	0	100	1.00
B	4	167	167	0	0	100	1.00
C	1	293	293	0	0	100	1.00
C	2	1091	1091	0	0	100	1.00
C	3	142	142	0	0	100	1.00
D	1	449	449	0	0	100	1.00
D	3	180	180	0	0	100	1.00
Ax	1	1305	1305	0	0	100	1.00
Bx	1	437	437	0	0	100	1.00
Cx	1	2283	2283	0	0	100	1.00
Dx	1	682	682	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
B	1	100	100
B	2	100	100
B	4	100	100
C	1	100	100
C	2	100	100
C	3	100	100
D	1	100	100
D	3	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100
Dx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	3	18.00	30.00	Buses Not Permittted	Trams Not Permitted
A	4	4.20	30.00	Buses Not Permittted	Trams Not Permitted
B	1	4.44	30.00	Buses Not Permittted	Trams Not Permitted
B	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
B	4	4.44	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	3	12.00	30.00	Buses Not Permittted	Trams Not Permitted
D	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
D	3	24.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)

Ax	1	1	TrafficStream	D/1	47	47	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	B/4	167	167	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	3	TrafficStream	C/2	1091	1091	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	73	73	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/3	142	142	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	3	TrafficStream	D/1	222	222	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	300	300	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	3	TrafficStream	D/3	180	180	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	4	TrafficStream	D/1	180	180	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	5	TrafficStream	A/2	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	6	TrafficStream	A/3	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	1	TrafficStream	C/1	293	293	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	2	TrafficStream	B/1	174	174	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	3	TrafficStream	B/2	174	174	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	4	TrafficStream	A/4	41	41	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To			
		A	B	C	D
From	A	0	73	1624	41
	B	167	0	300	348
	C	1091	142	0	293
	D	47	222	360	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/2,A/1,A/3,A/4	Ax/1	1737	1737	0	0	1305	1305	0	0
1	B	(untitled)	B/1,B/2,B/4	Bx/1	815	815	0	0	437	437	0	0
1	C	(untitled)	C/1,C/2,C/3	Cx/1,Cx/1	1526	1526	0	0	2283	2283	0	0
1	D	(untitled)	D/1,D/3	Dx/1	629	629	0	0	682	682	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/2,Cx/1	541
1	2		A/1,Bx/1	73
1	3		A/1,Cx/1	541
1	4		A/3,Cx/1	541
1	5		A/4,Dx/1	41
1	6		B/1,Dx/1	174
1	7		B/1,Cx/1	300
1	8		B/2,Dx/1	174
1	9		B/4,Ax/1	167
1	10		C/1,Dx/1	293
1	11		C/2,Ax/1	1091
1	12		C/3,Bx/1	142
1	13		D/1,Ax/1	47
1	14		D/1,Bx/1	222
1	15		D/1,Cx/1	180
1	16		D/3,Cx/1	180

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	541
1	2	✓	Normal	N/A	N/A	73
1	3	✓	Normal	N/A	N/A	541
1	4	✓	Normal	N/A	N/A	541
1	5	✓	Normal	N/A	N/A	41
1	6	✓	Normal	N/A	N/A	174
1	7	✓	Normal	N/A	N/A	300
1	8	✓	Normal	N/A	N/A	174
1	9	✓	Normal	N/A	N/A	167
1	10	✓	Normal	N/A	N/A	293
1	11	✓	Normal	N/A	N/A	1091
1	12	✓	Normal	N/A	N/A	142
1	13	✓	Normal	N/A	N/A	47
1	14	✓	Normal	N/A	N/A	222
1	15	✓	Normal	N/A	N/A	180
1	16	✓	Normal	N/A	N/A	180

Signal Timings

150s cycle time; 150 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	
1	E	(untitled)	7	300	0	0	
1	F	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B	1
1	3	C,D	1
1	4	C,E	1
1	5	E,F	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3,4,5	101,131,149,29,68		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	71	101	30	1	7
1	2	✓	2	B	104	131	27	1	7
1	3	✓	3	C,D	134	149	15	1	7
1	4	✓	4	C,E	149	29	30	1	1
1	5	✓	5	E,F	29	68	39	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	71	101	30
1	B	1	✓	104	131	27
1	C	1	✓	134	29	45
1	D	1	✓	134	149	15
1	E	1	✓	149	68	69
1	F	1	✓	29	68	39

Intergreen Matrix for Controller Stream 1

		To					
		A	B	C	D	E	F
From	A	-	3			3	3
	B	3	-	3	3		
	C		3	-			
	D		3		-		
	E	3				-	
	F	3					-

Interstage Matrix for Controller Stream 1

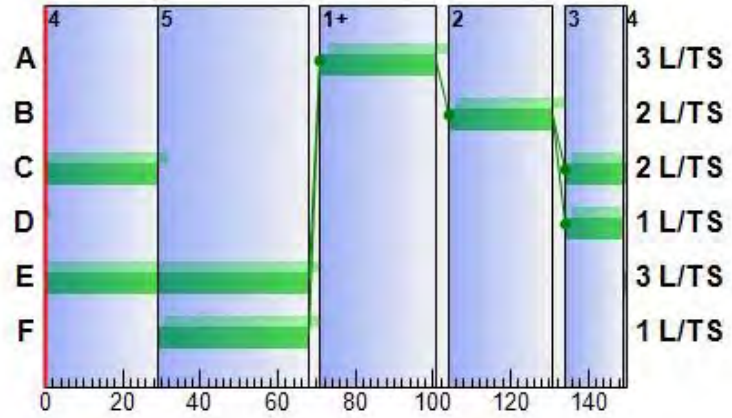
		To				
		1	2	3	4	5
From	1	-	3	0	3	3
	2	3	-	3	3	0
	3	0	3	-	0	0
	4	3	3	0	-	0
	5	3	0	0	0	-

Banned Stage transitions for Controller Stream 1

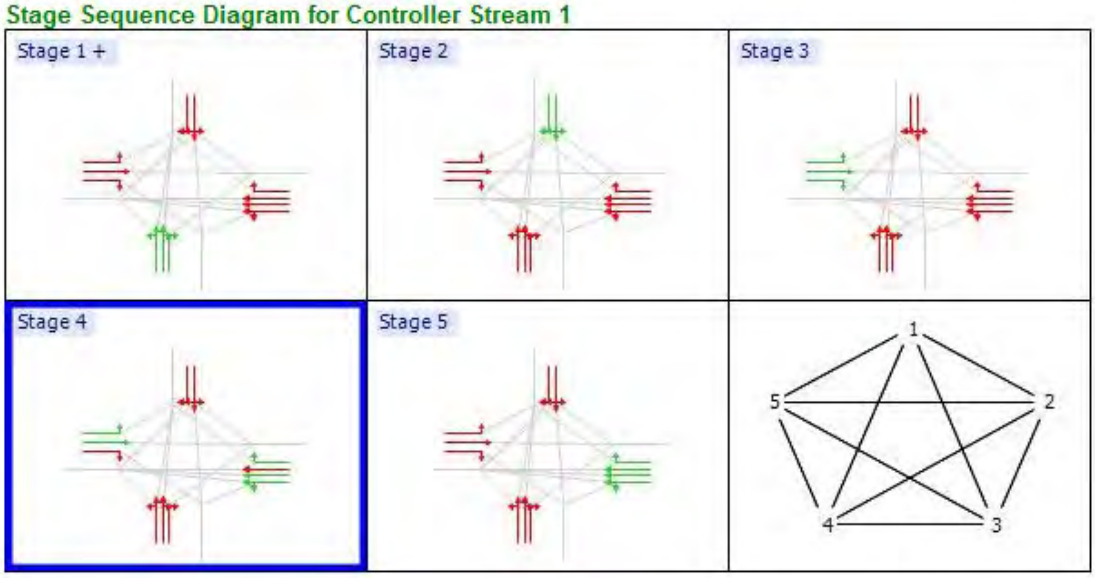
Banned Stage transitions for Controller Stream 1

		To				
		1	2	3	4	5
From	1	-				
	2		-			
	3			-		
	4				-	
	5					-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	68	3	10
1	2	✓	2	B	101	3	10
1	3	✓	3	C,D	131	3	10
1	4	✓	4	C,E	149	0	1
1	5	✓	5	E,F	29	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	68	3	10
1	2	✓	2	B	101	3	10
1	3	✓	3	C,D	131	3	10
1	4	✓	4	C,E	149	0	1
1	5	✓	5	E,F	29	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	3	0
1	B	1	2	3	3	0
1	C	1	3	5	3	0
1	D	1	3	4	3	0
1	E	1	4	1	0	0
1	F	1	5	1	0	0

Stage Timings (TRANSYT 12 timings)

150s cycle time; 150 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	5	68	101	131	149	29

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	E	0	149	68	69									
A	2	1	1	E	0	149	68	69									
A	3	1	1	F	0	29	68	39									
A	4	1	1	E	0	149	68	69									
B	1	1	1	A	0	71	101	30									
B	2	1	1	A	0	71	101	30									
B	4	1	1	A	0	71	101	30									
C	1	1	1	C	0	134	29	45									
C	2	1	1	C	0	134	29	45									
C	3	1	1	D	0	134	149	15									
D	1	1	1	B	0	104	131	27									
D	3	1	1	B	0	104	131	27									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	3	150.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	4	35.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	4	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100

C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	3600	100	100
C	3	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	3	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Dx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
08:00-09:00	A	1	(untitled)	E	N/A	614	1800	69.00	0.00	840	73	23	21.62	14.62	38.11
08:00-09:00	A	2	(untitled)	E	N/A	541	1800	69.00	0.00	840	64	40	17.71	12.60	34.35
08:00-09:00	A	3	(untitled)	F	N/A	541	1800	39.00	0.00	480	113	-20	53.80	48.60	274.62
08:00-09:00	A	4	(untitled)	E	N/A	41	1800	69.00	0.00	840	5	1744	0.92	0.91	21.96
08:00-09:00	B	1	(untitled)	A	N/A	474	1800	30.00	0.00	372	127	-29	68.13	65.03	447.18
08:00-09:00	B	2	(untitled)	A	N/A	174	1800	30.00	0.00	372	47	92	6.54	5.96	56.48
08:00-09:00	B	4	(untitled)	A	N/A	167	1800	30.00	0.00	372	45	100	6.26	5.70	55.95
08:00-09:00	C	1	(untitled)	C	N/A	293	1800	45.00	0.00	552	53	70	10.39	8.76	46.73
08:00-09:00	C	2	(untitled)	C	N/A	1091	3600	45.00	0.00	1104	99	-9	58.25	44.62	94.96
08:00-09:00	C	3	(untitled)	D	N/A	142	1800	15.00	0.00	192	74	22	6.70	6.27	89.90
08:00-09:00	D	1	(untitled)	B	N/A	449	1800	27.00	0.00	336	134	-33	71.83	69.31	510.09
08:00-09:00	D	3	(untitled)	B	N/A	180	1800	27.00	0.00	336	54	68	7.06	6.41	61.25
08:00-09:00	Ax	1	(untitled)	N/A	N/A	1293	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Bx	1	(untitled)	N/A	N/A	381	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Cx	1	(untitled)	N/A	N/A	2112	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Dx	1	(untitled)	N/A	N/A	645	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	71	101	30	7	0	0
1	B	1	104	131	27	7	0	0
1	C	1	134	29	45	7	0	0
1	D	1	134	149	15	7	0	0
1	E	1	149	68	69	7	0	0
1	F	1	29	68	39	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
08:00-09:00	A	1	614	614	0		1800	840	73		23	69.00	70.00	0
08:00-09:00	A	2	541	541	0		1800	840	64		40	69.00	70.00	0
08:00-09:00	A	3	541	480	0		1800	480	113	✓	-20	39.00	40.00	0
08:00-09:00	A	4	41	41	0		1800	840	5		1744	69.00	70.00	0
08:00-09:00	B	1	474	372	0		1800	372	127	✓	-29	30.00	31.00	0
08:00-09:00	B	2	174	174	0		1800	372	47		92	30.00	31.00	0
08:00-09:00	B	4	167	167	0		1800	372	45		100	30.00	31.00	0
08:00-09:00	C	1	293	293	0		1800	552	53		70	45.00	46.00	0
08:00-09:00	C	2	1091	1091	0		3600	1104	99	✓	-9	45.00	46.00	0
08:00-09:00	C	3	142	142	0		1800	192	74		22	15.00	16.00	0
08:00-09:00	D	1	449	336	0		1800	336	134	✓	-33	27.00	28.00	0
08:00-09:00	D	3	180	180	0		1800	336	54		68	27.00	28.00	0
08:00-09:00	Ax	1	1293	1293	12	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
08:00-09:00	Bx	1	381	381	56	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
08:00-09:00	Cx	1	2112	2112	171	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
08:00-09:00	Dx	1	645	645	37	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-	A	1	24.00	D	38.11	5.52	0.98	92.31	92.31	83.07	486.81	23.25	6.40	6.40

08:00-09:00	A	2	24.00	C	34.35	4.58	0.58	73.30	73.30	77.26	404.17	13.78	5.24	5.24
08:00-09:00	A	3	18.00	F	274.62	7.33	33.94	586.02	586.02	219.23	480.00	572.29	13.19	13.19
08:00-09:00	A	4	4.20	C	21.96	0.25	0.00	3.55	3.55	53.28	21.82	0.03	0.27	0.27
08:00-09:00	B	1	4.44	F	447.18	6.15	52.73	836.09	836.09	287.77	372.00	698.52	13.42	13.42
08:00-09:00	B	2	24.00	E	56.48	2.53	0.20	38.77	38.77	89.33	150.56	4.87	1.95	1.95
08:00-09:00	B	4	4.44	E	55.95	2.41	0.18	36.86	36.86	88.91	144.15	4.33	1.86	1.86
08:00-09:00	C	1	12.00	D	46.73	3.51	0.30	54.01	54.01	84.00	239.00	7.12	3.09	3.09
08:00-09:00	C	2	12.00	F	94.96	15.68	13.10	408.64	408.64	124.71	1067.80	292.79	17.06	17.06
08:00-09:00	C	3	12.00	F	89.90	2.56	0.98	50.36	50.36	111.78	136.10	22.63	1.99	1.99
08:00-09:00	D	1	24.00	F	510.09	5.69	57.93	903.39	903.39	310.43	336.00	707.04	13.08	13.08
08:00-09:00	D	3	24.00	E	61.25	2.76	0.31	43.49	43.49	93.20	160.49	7.26	2.10	2.10
08:00-09:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Dx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	A	1	0.00	21.62	34.78	0.00	0.00	0.00	0.98	14.62	0.00	0.00	0.00	
08:00-09:00	A	2	0.00	17.71	34.78	0.00	0.00	0.00	0.58	12.60	0.00	0.00	0.00	
08:00-09:00	A	3	0.00	53.80	26.09	17.78	0.00	0.00	33.94	48.60	0.00	0.00	0.00	
08:00-09:00	A	4	0.00	0.92	6.09	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.00	
08:00-09:00	B	1	0.00	68.13	6.43	53.99	0.00	0.00	52.73	65.03	0.00	0.00	0.00	
08:00-09:00	B	2	0.00	6.54	34.78	0.00	0.00	0.00	0.20	5.96	0.00	0.00	0.00	
08:00-09:00	B	4	0.00	6.26	6.43	0.00	0.00	0.00	0.18	5.70	0.00	0.00	0.00	
08:00-09:00	C	1	0.00	10.39	17.39	0.00	0.00	0.00	0.30	8.76	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	58.25	34.78	6.14	0.00	0.00	13.10	44.62	0.00	0.00	0.00	
08:00-09:00	C	3	0.00	6.70	17.39	0.00	0.00	0.00	0.98	6.27	0.00	0.00	0.00	
08:00-09:00	D	1	0.00	71.83	34.78	30.10	0.00	0.00	57.93	69.31	0.00	0.00	0.00	
08:00-09:00	D	3	0.00	7.06	34.78	0.00	0.00	0.00	0.31	6.41	0.00	0.00	0.00	

08:00-09:00	Ax	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.00	52.17	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Dx	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	A	1	122.80	10.59	11.59	62.11
08:00-09:00	A	2	108.20	8.77	12.34	58.35
08:00-09:00	A	3	81.15	43.97	1.85	292.62
08:00-09:00	A	4	1.44	0.30	4.82	26.16
08:00-09:00	B	1	17.54	59.46	0.29	451.62
08:00-09:00	B	2	34.80	3.89	8.95	80.48
08:00-09:00	B	4	6.18	2.80	2.21	60.39
08:00-09:00	C	1	29.30	4.78	6.13	58.73
08:00-09:00	C	2	109.10	32.41	3.37	106.96
08:00-09:00	C	3	14.20	4.02	3.53	101.90
08:00-09:00	D	1	89.80	66.61	1.35	534.09
08:00-09:00	D	3	36.00	4.26	8.45	85.25
08:00-09:00	Ax	1	129.32	4.31	30.00	12.00
08:00-09:00	Bx	1	38.11	1.27	30.00	12.00
08:00-09:00	Cx	1	211.21	7.04	30.00	12.00
08:00-09:00	Dx	1	64.46	2.15	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
08:00-09:00	A1 - (untitled)	27/01/2014 13:48:17	27/01/2014 13:48:59	08:00	150	220.19	133.63	D/1	4	25	D/1	Dx/1	D/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)
08:00-09:00	9138	8862	276	✓	0	0	134	✓	-33	1095.00	1107.00	0.00	3206.42

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	14.36	F	86.75	58.97	161.22	3126.76	3126.76	78.04	3998.89	2353.92	79.66	79.66

Network Results: Queues And Blocking

				Average	Average							

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	0.00	0.00	427.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	1093.60	256.65	4.26	101.11

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To			
		A	B	C	D
From	A	0.00	74.11	149.69	38.16
	B	72.39	0.00	463.62	278.05
	C	118.96	113.90	0.00	70.73
	D	546.09	546.09	321.67	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	70.35	70.35	0.00	0.00
2	74.11	74.11	0.00	0.00
3	74.11	74.11	0.00	0.00
4	304.62	304.62	0.00	0.00
5	38.16	38.16	0.00	0.00
6	463.62	463.62	0.00	0.00
7	463.62	463.62	0.00	0.00
8	92.48	92.48	0.00	0.00
9	72.39	72.39	0.00	0.00
10	70.73	70.73	0.00	0.00
11	118.96	118.96	0.00	0.00
12	113.90	113.90	0.00	0.00
13	546.09	546.09	0.00	0.00
14	546.09	546.09	0.00	0.00
15	546.09	546.09	0.00	0.00
16	97.25	97.25	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 27/01/2014 13:53:06
Analysis Set used for last run: A1 - (untitled)

Filename: J3- Soar Valley_Leicester Rd-AM+Dev.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 27/01/2014 13:54:06

» Network Diagrams
« A1 - (untitled) : D2 - 2018 Back + Dev *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

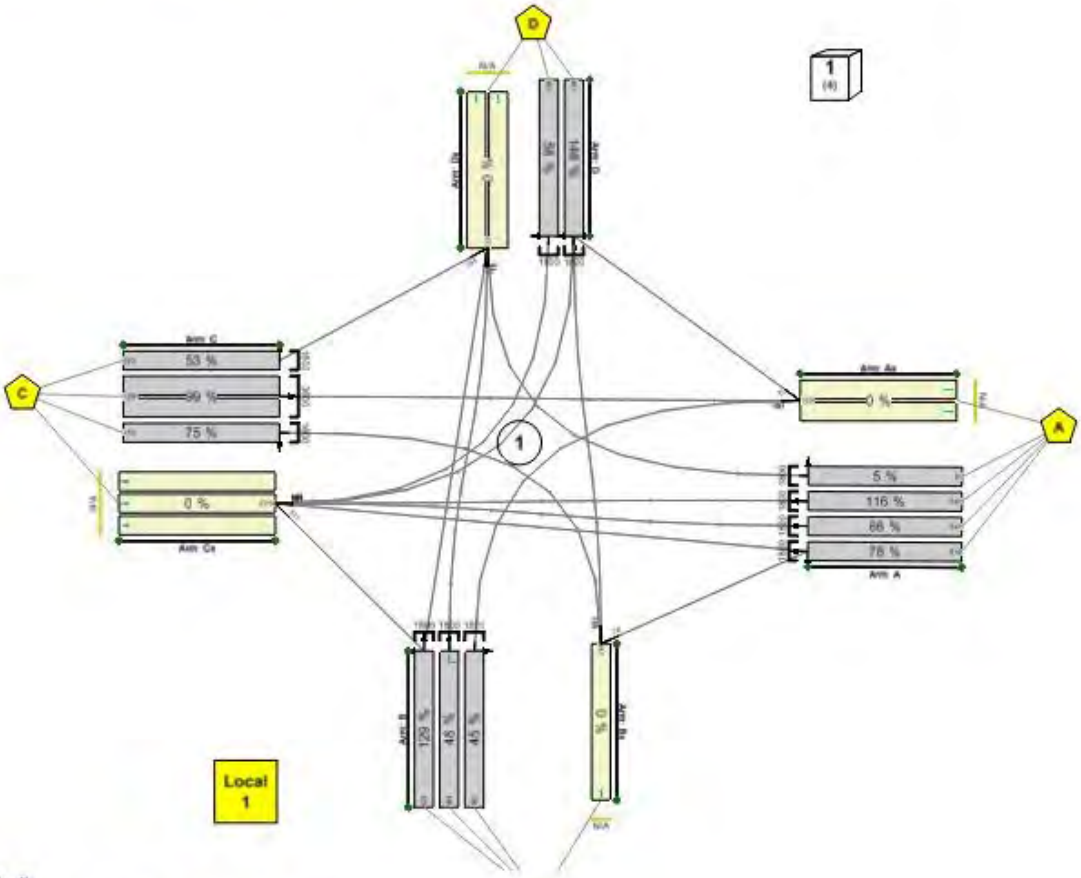
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 150s , Timesteps 0 / 150
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D2 - 2018 Back + Dev *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	27/01/2014 13:52:30	27/01/2014 13:53:06	08:00	150	253.23	148.40	D/1	4	25	D/1	Dx/1	D/1	

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D2	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 Back + Dev				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
150	1	150	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Shotgun Number Of Runs	Random Seed	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Shotgun Hill Climb (Medium)	Extended - Offsets And Green Splits	15,40,-1,15,40,1,-1,1,-15,-5,-1,15,1	10	1	✓	1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	3	(untitled)		150.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	F			Normal
A	4	(untitled)		35.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
B	1	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	4	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	3600	✓	1	C			Normal
C	3	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
D	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
D	3	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Dx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
A	3	1	(untitled)			1800
A	4	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
B	4	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
C	2	2	(untitled)			1800
C	3	1	(untitled)			1800
D	1	1	(untitled)			1800
D	3	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Ax	1	2	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800
Cx	1	2	(untitled)			1800
Cx	1	3	(untitled)			1800
Dx	1	1	(untitled)			1800
Dx	1	2	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		

A	2	100	100		0.00		
A	3	100	100		0.00		
A	4	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
B	4	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
C	3	100	100		0.00		
D	1	100	100		0.00		
D	3	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		
Dx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Dx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	619	619	0	0	100	1.00
A	2	541	541	0	0	100	1.00

A	3	541	541	0	0	100	1.00
A	4	41	41	0	0	100	1.00
B	1	525	525	0	0	100	1.00
B	2	194	194	0	0	100	1.00
B	4	182	182	0	0	100	1.00
C	1	293	293	0	0	100	1.00
C	2	1091	1091	0	0	100	1.00
C	3	153	153	0	0	100	1.00
D	1	463	463	0	0	100	1.00
D	3	180	180	0	0	100	1.00
Ax	1	1320	1320	0	0	100	1.00
Bx	1	467	467	0	0	100	1.00
Cx	1	2314	2314	0	0	100	1.00
Dx	1	722	722	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
B	1	100	100
B	2	100	100
B	4	100	100
C	1	100	100
C	2	100	100
C	3	100	100
D	1	100	100
D	3	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100
Dx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	3	18.00	30.00	Buses Not Permittted	Trams Not Permitted
A	4	4.20	30.00	Buses Not Permittted	Trams Not Permitted
B	1	4.44	30.00	Buses Not Permittted	Trams Not Permitted
B	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
B	4	4.44	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	3	12.00	30.00	Buses Not Permittted	Trams Not Permitted
D	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
D	3	24.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)

Ax	1	1	TrafficStream	D/1	47	47	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	B/4	182	182	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	3	TrafficStream	C/2	1091	1091	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	78	78	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/3	153	153	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	3	TrafficStream	D/1	236	236	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	331	331	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	3	TrafficStream	D/3	180	180	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	4	TrafficStream	D/1	180	180	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	5	TrafficStream	A/2	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	6	TrafficStream	A/3	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	1	TrafficStream	C/1	293	293	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	2	TrafficStream	B/1	194	194	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	3	TrafficStream	B/2	194	194	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	4	TrafficStream	A/4	41	41	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To			
		A	B	C	D
From	A	0	78	1624	41
	B	182	0	331	389
	C	1091	153	0	293
	D	47	236	360	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/2,A/1,A/3,A/4	Ax/1	1742	1742	0	0	1320	1320	0	0
1	B	(untitled)	B/1,B/2,B/4	Bx/1	901	901	0	0	467	467	0	0
1	C	(untitled)	C/1,C/2,C/3	Cx/1,Cx/1	1537	1537	0	0	2314	2314	0	0
1	D	(untitled)	D/1,D/3	Dx/1	643	643	0	0	722	722	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/2,Cx/1	541
1	2		A/1,Bx/1	78
1	3		A/1,Cx/1	541
1	4		A/3,Cx/1	541
1	5		A/4,Dx/1	41
1	6		B/1,Dx/1	194
1	7		B/1,Cx/1	331
1	8		B/2,Dx/1	194
1	9		B/4,Ax/1	182
1	10		C/1,Dx/1	293
1	11		C/2,Ax/1	1091
1	12		C/3,Bx/1	153
1	13		D/1,Ax/1	47
1	14		D/1,Bx/1	236
1	15		D/1,Cx/1	180
1	16		D/3,Cx/1	180

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	541
1	2	✓	Normal	N/A	N/A	78
1	3	✓	Normal	N/A	N/A	541
1	4	✓	Normal	N/A	N/A	541
1	5	✓	Normal	N/A	N/A	41
1	6	✓	Normal	N/A	N/A	194
1	7	✓	Normal	N/A	N/A	331
1	8	✓	Normal	N/A	N/A	194
1	9	✓	Normal	N/A	N/A	182
1	10	✓	Normal	N/A	N/A	293
1	11	✓	Normal	N/A	N/A	1091
1	12	✓	Normal	N/A	N/A	153
1	13	✓	Normal	N/A	N/A	47
1	14	✓	Normal	N/A	N/A	236
1	15	✓	Normal	N/A	N/A	180
1	16	✓	Normal	N/A	N/A	180

Signal Timings

150s cycle time; 150 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	
1	E	(untitled)	7	300	0	0	
1	F	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B	1
1	3	C,D	1
1	4	C,E	1
1	5	E,F	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3,4,5	99,127,146,25,63		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	66	99	33	1	7
1	2	✓	2	B	102	127	25	1	7
1	3	✓	3	C,D	130	146	16	1	7
1	4	✓	4	C,E	146	25	29	1	1
1	5	✓	5	E,F	25	63	38	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	66	99	33
1	B	1	✓	102	127	25
1	C	1	✓	130	25	45
1	D	1	✓	130	146	16
1	E	1	✓	146	63	67
1	F	1	✓	25	63	38

Intergreen Matrix for Controller Stream 1

		To					
		A	B	C	D	E	F
From	A	-	3			3	3
	B	3	-	3	3		
	C		3	-			
	D		3		-		
	E	3				-	
	F	3					-

Interstage Matrix for Controller Stream 1

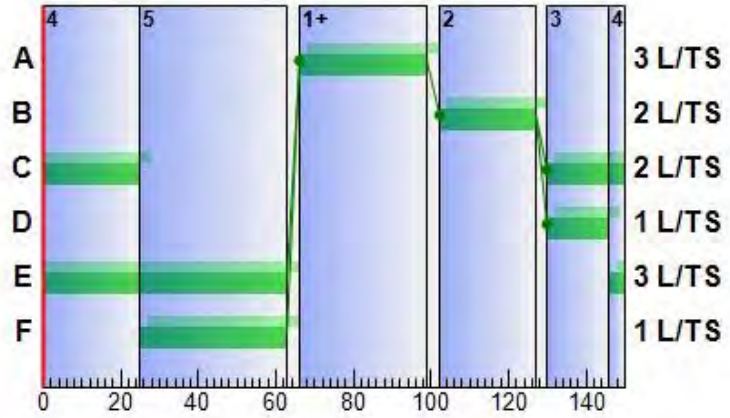
		To				
		1	2	3	4	5
From	1	-	3	0	3	3
	2	3	-	3	3	0
	3	0	3	-	0	0
	4	3	3	0	-	0
	5	3	0	0	0	-

Banned Stage transitions for Controller Stream 1

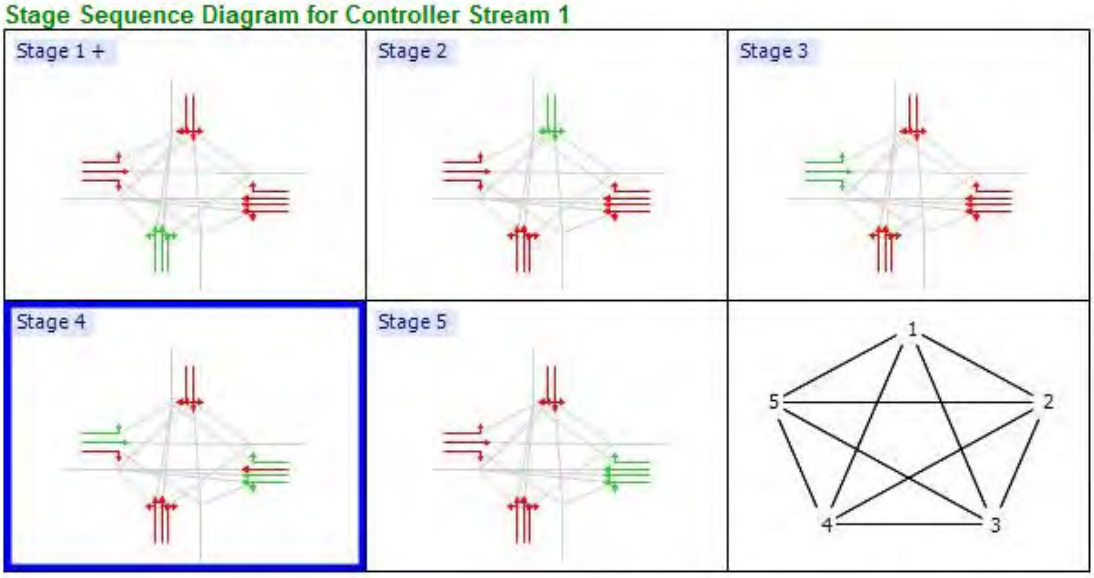
Banned Stage transitions for Controller Stream 1

		To				
		1	2	3	4	5
From	1	-				
	2		-			
	3			-		
	4				-	
	5					-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	63	3	10
1	2	✓	2	B	99	3	10
1	3	✓	3	C,D	127	3	10
1	4	✓	4	C,E	146	0	1
1	5	✓	5	E,F	25	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	63	3	10
1	2	✓	2	B	99	3	10
1	3	✓	3	C,D	127	3	10
1	4	✓	4	C,E	146	0	1
1	5	✓	5	E,F	25	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	3	0
1	B	1	2	3	3	0
1	C	1	3	5	3	0
1	D	1	3	4	3	0
1	E	1	4	1	0	0
1	F	1	5	1	0	0

Stage Timings (TRANSYT 12 timings)

150s cycle time; 150 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	5	63	99	127	146	25

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	E	0	146	63	67									
A	2	1	1	E	0	146	63	67									
A	3	1	1	F	0	25	63	38									
A	4	1	1	E	0	146	63	67									
B	1	1	1	A	0	66	99	33									
B	2	1	1	A	0	66	99	33									
B	4	1	1	A	0	66	99	33									
C	1	1	1	C	0	130	25	45									
C	2	1	1	C	0	130	25	45									
C	3	1	1	D	0	130	146	16									
D	1	1	1	B	0	102	127	25									
D	3	1	1	B	0	102	127	25									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	3	150.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	4	35.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	4	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100

C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	3600	100	100
C	3	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	3	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Dx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
08:00-09:00	A	1	(untitled)	E	N/A	619	1800	67.00	0.00	816	76	19	22.49	15.27	40.96
08:00-09:00	A	2	(untitled)	E	N/A	541	1800	67.00	0.00	816	66	36	18.23	12.97	36.34
08:00-09:00	A	3	(untitled)	F	N/A	541	1800	38.00	0.00	468	116	-22	58.77	53.83	310.17
08:00-09:00	A	4	(untitled)	E	N/A	41	1800	67.00	0.00	816	5	1691	0.95	0.94	23.06
08:00-09:00	B	1	(untitled)	A	N/A	525	1800	33.00	0.00	408	129	-30	77.05	73.31	457.65
08:00-09:00	B	2	(untitled)	A	N/A	194	1800	33.00	0.00	408	48	89	7.17	6.47	54.25
08:00-09:00	B	4	(untitled)	A	N/A	182	1800	33.00	0.00	408	45	102	6.70	6.04	53.43
08:00-09:00	C	1	(untitled)	C	N/A	293	1800	45.00	0.00	552	53	70	10.39	8.76	46.73
08:00-09:00	C	2	(untitled)	C	N/A	1091	3600	45.00	0.00	1104	99	-9	58.25	44.62	94.96
08:00-09:00	C	3	(untitled)	D	N/A	153	1800	16.00	0.00	204	75	20	7.21	6.70	89.18
08:00-09:00	D	1	(untitled)	B	N/A	463	1800	25.00	0.00	312	148	-39	89.42	87.25	636.65
08:00-09:00	D	3	(untitled)	B	N/A	180	1800	25.00	0.00	312	58	56	7.24	6.59	64.71
08:00-09:00	Ax	1	(untitled)	N/A	N/A	1305	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Bx	1	(untitled)	N/A	N/A	390	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Cx	1	(untitled)	N/A	N/A	2109	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Dx	1	(untitled)	N/A	N/A	679	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	66	99	33	7	0	0
1	B	1	102	127	25	7	0	0
1	C	1	130	25	45	7	0	0
1	D	1	130	146	16	7	0	0
1	E	1	146	63	67	7	0	0
1	F	1	25	63	38	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
08:00-09:00	A	1	619	619	0		1800	816	76		19	67.00	68.00	0
08:00-09:00	A	2	541	541	0		1800	816	66		36	67.00	68.00	0
08:00-09:00	A	3	541	468	0		1800	468	116	✓	-22	38.00	39.00	0
08:00-09:00	A	4	41	41	0		1800	816	5		1691	67.00	68.00	0
08:00-09:00	B	1	525	408	0		1800	408	129	✓	-30	33.00	34.00	0
08:00-09:00	B	2	194	194	0		1800	408	48		89	33.00	34.00	0
08:00-09:00	B	4	182	182	0		1800	408	45		102	33.00	34.00	0
08:00-09:00	C	1	293	293	0		1800	552	53		70	45.00	46.00	0
08:00-09:00	C	2	1091	1091	0		3600	1104	99	✓	-9	45.00	46.00	0
08:00-09:00	C	3	153	153	0		1800	204	75		20	16.00	17.00	0
08:00-09:00	D	1	463	312	0		1800	312	148	✓	-39	25.00	26.00	0
08:00-09:00	D	3	180	180	0		1800	312	58		56	25.00	26.00	0
08:00-09:00	Ax	1	1305	1305	15	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
08:00-09:00	Bx	1	390	390	77	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
08:00-09:00	Cx	1	2109	2109	205	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
08:00-09:00	Dx	1	679	679	43	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-	A	1	24.00	D	40.96	5.87	1.17	100.01	100.01	86.02	504.74	27.74	6.68	6.68

08:00-09:00	A	2	24.00	D	36.34	4.82	0.65	77.56	77.56	79.41	414.19	15.39	5.39	5.39
08:00-09:00	A	3	18.00	F	310.17	7.22	39.40	661.89	661.89	234.71	468.00	630.44	13.77	13.77
08:00-09:00	A	4	4.20	C	23.06	0.26	0.00	3.73	3.73	54.62	22.36	0.03	0.28	0.28
08:00-09:00	B	1	4.44	F	457.65	6.57	60.17	947.72	947.72	292.30	408.00	784.59	14.95	14.95
08:00-09:00	B	2	24.00	D	54.25	2.71	0.21	41.51	41.51	87.88	165.38	5.11	2.14	2.14
08:00-09:00	B	4	4.44	D	53.43	2.52	0.18	38.36	38.36	87.04	154.16	4.26	1.99	1.99
08:00-09:00	C	1	12.00	D	46.73	3.51	0.30	54.01	54.01	84.00	239.00	7.12	3.09	3.09
08:00-09:00	C	2	12.00	F	94.96	15.68	13.10	408.64	408.64	124.71	1067.80	292.79	17.06	17.06
08:00-09:00	C	3	12.00	F	89.18	2.74	1.05	53.82	53.82	111.62	146.56	24.21	2.14	2.14
08:00-09:00	D	1	24.00	F	636.65	5.37	76.51	1162.69	1162.69	355.93	312.00	798.52	13.92	13.92
08:00-09:00	D	3	24.00	E	64.71	2.85	0.39	45.94	45.94	95.64	162.96	9.19	2.16	2.16
08:00-09:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Dx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	A	1	0.00	22.49	34.78	0.00	0.00	0.00	1.17	15.27	0.00	0.00	0.00	
08:00-09:00	A	2	0.00	18.23	34.78	0.00	0.00	0.00	0.65	12.97	0.00	0.00	0.00	
08:00-09:00	A	3	0.00	58.77	26.09	22.99	0.00	0.00	39.40	53.83	0.00	0.00	0.00	
08:00-09:00	A	4	0.00	0.95	6.09	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	
08:00-09:00	B	1	0.00	77.05	6.43	62.18	0.00	0.00	60.17	73.31	0.00	0.00	0.00	
08:00-09:00	B	2	0.00	7.17	34.78	0.00	0.00	0.00	0.21	6.47	0.00	0.00	0.00	
08:00-09:00	B	4	0.00	6.70	6.43	0.01	0.00	0.00	0.18	6.04	0.00	0.00	0.00	
08:00-09:00	C	1	0.00	10.39	17.39	0.00	0.00	0.00	0.30	8.76	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	58.25	34.78	6.14	0.00	0.00	13.10	44.62	0.00	0.00	0.00	
08:00-09:00	C	3	0.00	7.21	17.39	0.00	0.00	0.00	1.05	6.70	0.00	0.00	0.00	
08:00-09:00	D	1	0.00	89.42	34.78	48.18	0.00	0.00	76.51	87.25	0.00	0.00	0.00	
08:00-09:00	D	3	0.00	7.24	34.78	0.00	0.00	0.00	0.39	6.59	0.00	0.00	0.00	

08:00-09:00	Ax	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.00	52.17	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Dx	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	A	1	123.80	11.17	11.08	64.96
08:00-09:00	A	2	108.20	9.07	11.93	60.34
08:00-09:00	A	3	81.15	49.32	1.65	328.17
08:00-09:00	A	4	1.44	0.31	4.62	27.26
08:00-09:00	B	1	19.43	67.39	0.29	462.09
08:00-09:00	B	2	38.80	4.22	9.20	78.25
08:00-09:00	B	4	6.73	2.93	2.30	57.87
08:00-09:00	C	1	29.30	4.78	6.13	58.73
08:00-09:00	C	2	109.10	32.41	3.37	106.96
08:00-09:00	C	3	15.30	4.30	3.56	101.18
08:00-09:00	D	1	92.60	84.97	1.09	660.65
08:00-09:00	D	3	36.00	4.44	8.12	88.71
08:00-09:00	Ax	1	130.47	4.35	30.00	12.00
08:00-09:00	Bx	1	39.00	1.30	30.00	12.00
08:00-09:00	Cx	1	210.85	7.03	30.00	12.00
08:00-09:00	Dx	1	67.88	2.26	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
08:00-09:00	A1 - (untitled)	27/01/2014 13:52:30	27/01/2014 13:53:06	08:00	150	253.23	148.40	D/1	4	25	D/1	Dx/1	D/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)
08:00-09:00	9305	8964	341	✓	0	0	148	✓	-39	1094.00	1106.00	0.00	3679.43

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	14.32	F	97.97	60.11	193.12	3595.87	3595.87	82.92	4065.15	2599.38	83.56	83.56

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	0.00	0.00	427.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	1110.04	290.23	3.82	112.29

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To			
		A	B	C	D
From	A	0.00	76.96	163.16	39.26
	B	69.87	0.00	474.09	282.17
	C	118.96	113.18	0.00	70.73
	D	672.65	672.65	386.68	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	72.34	72.34	0.00	0.00
2	76.96	76.96	0.00	0.00
3	76.96	76.96	0.00	0.00
4	340.17	340.17	0.00	0.00
5	39.26	39.26	0.00	0.00
6	474.09	474.09	0.00	0.00
7	474.09	474.09	0.00	0.00
8	90.25	90.25	0.00	0.00
9	69.87	69.87	0.00	0.00
10	70.73	70.73	0.00	0.00
11	118.96	118.96	0.00	0.00
12	113.18	113.18	0.00	0.00
13	672.65	672.65	0.00	0.00
14	672.65	672.65	0.00	0.00
15	672.65	672.65	0.00	0.00
16	100.71	100.71	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 27/01/2014 13:56:14
Analysis Set used for last run: A1 - (untitled)

Filename: J3- Soar Valley_Leicester Rd-PM.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 27/01/2014 13:58:28

» Network Diagrams
« A1 - (untitled) : D3 - 2018 Back *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

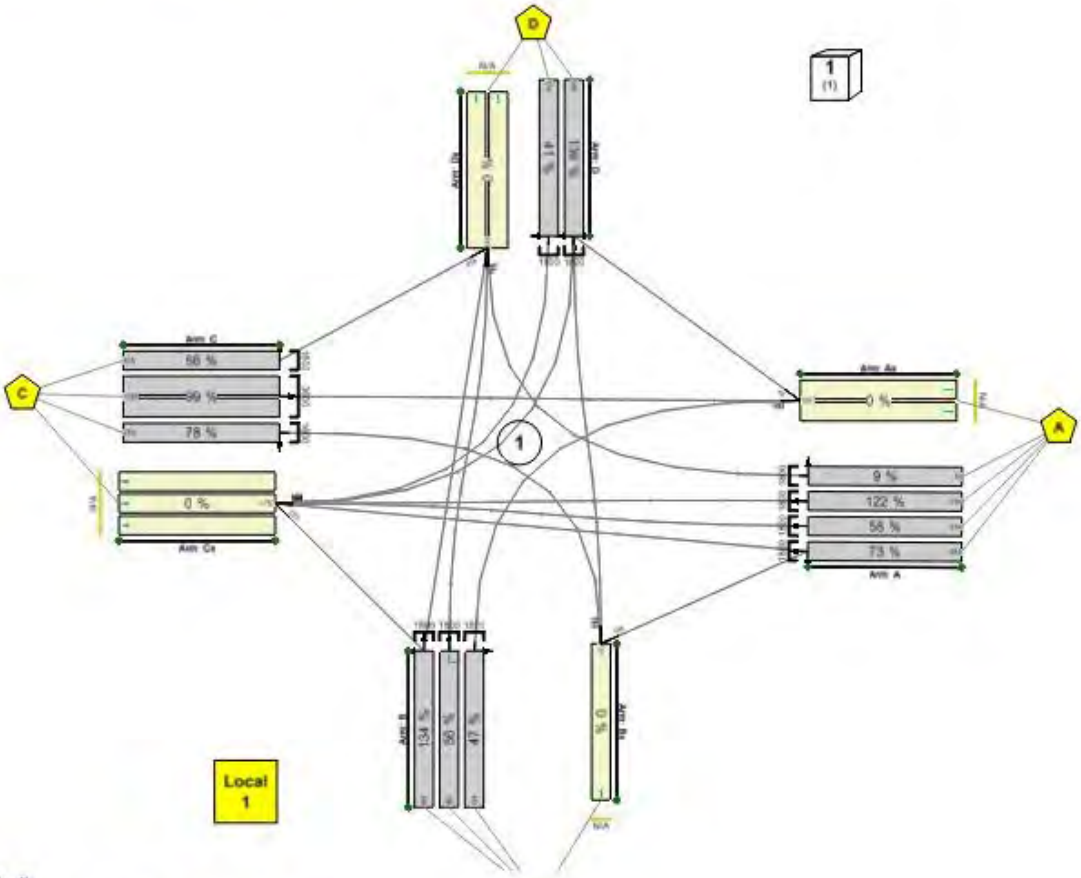
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 150s , Timesteps 0 / 150
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D3 - 2018 Back *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	27/01/2014 13:55:37	27/01/2014 13:56:14	17:00	150	247.20	135.65	D/1	4	25	D/1	Dx/1	D/1	

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D3	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 Back				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
150	1	150	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Shotgun Number Of Runs	Random Seed	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Shotgun Hill Climb (Medium)	Extended - Offsets And Green Splits	15,40,-1,15,40,1,-1,1,-15,-5,-1,15,1	10	1	✓	1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	3	(untitled)		150.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	F			Normal
A	4	(untitled)		35.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
B	1	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	4	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	3600	✓	1	C			Normal
C	3	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
D	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
D	3	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Dx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
A	3	1	(untitled)			1800
A	4	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
B	4	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
C	2	2	(untitled)			1800
C	3	1	(untitled)			1800
D	1	1	(untitled)			1800
D	3	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Ax	1	2	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800
Cx	1	2	(untitled)			1800
Cx	1	3	(untitled)			1800
Dx	1	1	(untitled)			1800
Dx	1	2	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		

A	2	100	100		0.00		
A	3	100	100		0.00		
A	4	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
B	4	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
C	3	100	100		0.00		
D	1	100	100		0.00		
D	3	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		
Dx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Dx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	500	500	0	0	100	1.00
A	2	394	394	0	0	100	1.00

A	3	394	394	0	0	100	1.00
A	4	63	63	0	0	100	1.00
B	1	385	385	0	0	100	1.00
B	2	162	162	0	0	100	1.00
B	4	134	134	0	0	100	1.00
C	1	458	458	0	0	100	1.00
C	2	1385	1385	0	0	100	1.00
C	3	263	263	0	0	100	1.00
D	1	586	586	0	0	100	1.00
D	3	176	176	0	0	100	1.00
Ax	1	1567	1567	0	0	100	1.00
Bx	1	731	731	0	0	100	1.00
Cx	1	1757	1757	0	0	100	1.00
Dx	1	845	845	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
B	1	100	100
B	2	100	100
B	4	100	100
C	1	100	100
C	2	100	100
C	3	100	100
D	1	100	100
D	3	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100
Dx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	3	18.00	30.00	Buses Not Permittted	Trams Not Permitted
A	4	4.20	30.00	Buses Not Permittted	Trams Not Permitted
B	1	4.44	30.00	Buses Not Permittted	Trams Not Permitted
B	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
B	4	4.44	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	3	12.00	30.00	Buses Not Permittted	Trams Not Permitted
D	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
D	3	24.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)

Ax	1	1	TrafficStream	D/1	48	48	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	B/4	134	134	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	3	TrafficStream	C/2	1385	1385	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	106	106	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/3	263	263	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	3	TrafficStream	D/1	362	362	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	394	394	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	223	223	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	3	TrafficStream	D/3	176	176	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	4	TrafficStream	D/1	176	176	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	5	TrafficStream	A/2	394	394	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	6	TrafficStream	A/3	394	394	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	1	TrafficStream	C/1	458	458	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	2	TrafficStream	B/1	162	162	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	3	TrafficStream	B/2	162	162	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	4	TrafficStream	A/4	63	63	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To			
		A	B	C	D
From	A	0	106	1183	63
	B	134	0	223	323
	C	1385	263	0	458
	D	48	362	352	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/2,A/1,A/3,A/4	Ax/1	1351	1351	0	0	1567	1567	0	0
1	B	(untitled)	B/1,B/2,B/4	Bx/1	681	681	0	0	731	731	0	0
1	C	(untitled)	C/1,C/2,C/3	Cx/1,Cx/1	2106	2106	0	0	1757	1757	0	0
1	D	(untitled)	D/1,D/3	Dx/1	762	762	0	0	845	845	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/2,Cx/1	394
1	2		A/1,Bx/1	106
1	3		A/1,Cx/1	394
1	4		A/3,Cx/1	394
1	5		A/4,Dx/1	63
1	6		B/1,Dx/1	162
1	7		B/1,Cx/1	223
1	8		B/2,Dx/1	162
1	9		B/4,Ax/1	134
1	10		C/1,Dx/1	458
1	11		C/2,Ax/1	1385
1	12		C/3,Bx/1	263
1	13		D/1,Ax/1	48
1	14		D/1,Bx/1	362
1	15		D/1,Cx/1	176
1	16		D/3,Cx/1	176

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	394
1	2	✓	Normal	N/A	N/A	106
1	3	✓	Normal	N/A	N/A	394
1	4	✓	Normal	N/A	N/A	394
1	5	✓	Normal	N/A	N/A	63
1	6	✓	Normal	N/A	N/A	162
1	7	✓	Normal	N/A	N/A	223
1	8	✓	Normal	N/A	N/A	162
1	9	✓	Normal	N/A	N/A	134
1	10	✓	Normal	N/A	N/A	458
1	11	✓	Normal	N/A	N/A	1385
1	12	✓	Normal	N/A	N/A	263
1	13	✓	Normal	N/A	N/A	48
1	14	✓	Normal	N/A	N/A	362
1	15	✓	Normal	N/A	N/A	176
1	16	✓	Normal	N/A	N/A	176

Signal Timings

150s cycle time; 150 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	
1	E	(untitled)	7	300	0	0	
1	F	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B	1
1	3	C,D	1
1	4	C,E	1
1	5	E,F	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3,4,5	22,60,90,120,146		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	149	22	23	1	7
1	2	✓	2	B	25	60	35	1	7
1	3	✓	3	C,D	63	90	27	1	7
1	4	✓	4	C,E	90	120	30	1	1
1	5	✓	5	E,F	120	146	26	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	149	22	23
1	B	1	✓	25	60	35
1	C	1	✓	63	120	57
1	D	1	✓	63	90	27
1	E	1	✓	90	146	56
1	F	1	✓	120	146	26

Intergreen Matrix for Controller Stream 1

		To					
		A	B	C	D	E	F
From	A	-	3			3	3
	B	3	-	3	3		
	C		3	-			
	D		3		-		
	E	3				-	
	F	3					-

Interstage Matrix for Controller Stream 1

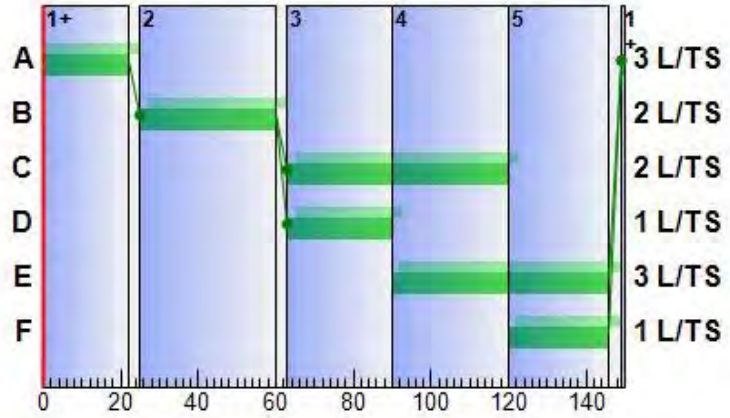
		To				
		1	2	3	4	5
From	1	-	3	0	3	3
	2	3	-	3	3	0
	3	0	3	-	0	0
	4	3	3	0	-	0
	5	3	0	0	0	-

Banned Stage transitions for Controller Stream 1

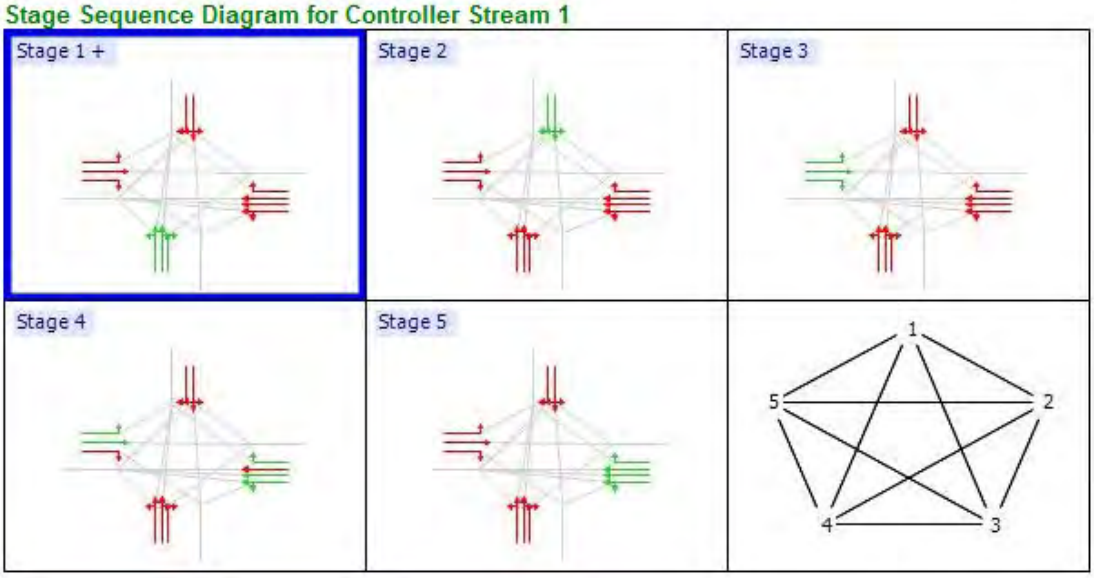
Banned Stage transitions for Controller Stream 1

		To				
		1	2	3	4	5
From	1	-				
	2		-			
	3			-		
	4				-	
	5					-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	146	3	10
1	2	✓	2	B	22	3	10
1	3	✓	3	C,D	60	3	10
1	4	✓	4	C,E	90	0	1
1	5	✓	5	E,F	120	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	146	3	10
1	2	✓	2	B	22	3	10
1	3	✓	3	C,D	60	3	10
1	4	✓	4	C,E	90	0	1
1	5	✓	5	E,F	120	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	3	0
1	B	1	2	3	3	0
1	C	1	3	5	3	0
1	D	1	3	4	3	0
1	E	1	4	1	0	0
1	F	1	5	1	0	0

Stage Timings (TRANSYT 12 timings)

150s cycle time; 150 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	5	146	22	60	90	120

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	E	0	90	146	56									
A	2	1	1	E	0	90	146	56									
A	3	1	1	F	0	120	146	26									
A	4	1	1	E	0	90	146	56									
B	1	1	1	A	0	149	22	23									
B	2	1	1	A	0	149	22	23									
B	4	1	1	A	0	149	22	23									
C	1	1	1	C	0	63	120	57									
C	2	1	1	C	0	63	120	57									
C	3	1	1	D	0	63	90	27									
D	1	1	1	B	0	25	60	35									
D	3	1	1	B	0	25	60	35									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	3	150.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	4	35.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	4	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100

C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	3600	100	100
C	3	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	3	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Dx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
17:00-18:00	A	1	(untitled)	E	N/A	500	1800	56.00	0.00	684	73	23	18.75	13.89	46.94
17:00-18:00	A	2	(untitled)	E	N/A	394	1800	56.00	0.00	684	58	56	13.41	10.57	40.46
17:00-18:00	A	3	(untitled)	F	N/A	394	1800	26.00	0.00	324	122	-26	50.53	48.19	389.79
17:00-18:00	A	4	(untitled)	E	N/A	63	1800	56.00	0.00	684	9	877	1.68	1.63	30.16
17:00-18:00	B	1	(untitled)	A	N/A	385	1800	23.00	0.00	288	134	-33	61.83	59.99	513.86
17:00-18:00	B	2	(untitled)	A	N/A	162	1800	23.00	0.00	288	56	60	6.57	6.03	66.08
17:00-18:00	B	4	(untitled)	A	N/A	134	1800	23.00	0.00	288	47	93	5.26	4.89	62.57
17:00-18:00	C	1	(untitled)	C	N/A	458	1800	57.00	0.00	696	66	37	16.27	12.33	42.77
17:00-18:00	C	2	(untitled)	C	N/A	1385	3600	57.00	0.00	1392	99	-10	73.78	51.85	88.63
17:00-18:00	C	3	(untitled)	D	N/A	263	1800	27.00	0.00	336	78	15	11.71	10.25	76.35
17:00-18:00	D	1	(untitled)	B	N/A	586	1800	35.00	0.00	432	136	-34	96.24	92.04	523.42
17:00-18:00	D	3	(untitled)	B	N/A	176	1800	35.00	0.00	432	41	121	6.30	5.71	50.87
17:00-18:00	Ax	1	(untitled)	N/A	N/A	1554	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Bx	1	(untitled)	N/A	N/A	636	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Cx	1	(untitled)	N/A	N/A	1585	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Dx	1	(untitled)	N/A	N/A	804	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	149	22	23	7	0	0
1	B	1	25	60	35	7	0	0
1	C	1	63	120	57	7	0	0
1	D	1	63	90	27	7	0	0
1	E	1	90	146	56	7	0	0
1	F	1	120	146	26	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
17:00-18:00	A	1	500	500	0		1800	684	73		23	56.00	57.00	0
17:00-18:00	A	2	394	394	0		1800	684	58		56	56.00	57.00	0
17:00-18:00	A	3	394	324	0		1800	324	122	✓	-26	26.00	27.00	0
17:00-18:00	A	4	63	63	0		1800	684	9		877	56.00	57.00	0
17:00-18:00	B	1	385	288	0		1800	288	134	✓	-33	23.00	24.00	0
17:00-18:00	B	2	162	162	0		1800	288	56		60	23.00	24.00	0
17:00-18:00	B	4	134	134	0		1800	288	47		93	23.00	24.00	0
17:00-18:00	C	1	458	458	0		1800	696	66		37	57.00	58.00	0
17:00-18:00	C	2	1385	1385	0		3600	1392	99	✓	-10	57.00	58.00	0
17:00-18:00	C	3	263	263	0		1800	336	78		15	27.00	28.00	0
17:00-18:00	D	1	586	432	0		1800	432	136	✓	-34	35.00	36.00	0
17:00-18:00	D	3	176	176	0		1800	432	41		121	35.00	36.00	0
17:00-18:00	Ax	1	1554	1554	13	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
17:00-18:00	Bx	1	636	636	95	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
17:00-18:00	Cx	1	1585	1585	172	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
17:00-18:00	Dx	1	804	804	41	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-	A	1	24.00	D	46.94	5.54	0.98	92.58	92.58	88.91	421.41	23.13	5.57	5.57

17:00-18:00	A	2	24.00	D	40.46	4.04	0.39	62.88	62.88	80.21	306.77	9.27	3.96	3.96
17:00-18:00	A	3	18.00	F	389.79	5.54	37.12	605.77	605.77	264.70	324.00	533.63	10.75	10.75
17:00-18:00	A	4	4.20	C	30.16	0.52	0.00	7.50	7.50	63.39	39.82	0.11	0.50	0.50
17:00-18:00	B	1	4.44	F	513.86	5.04	49.91	780.35	780.35	310.94	288.00	607.51	11.23	11.23
17:00-18:00	B	2	24.00	E	66.08	2.62	0.36	42.23	42.23	96.36	147.67	8.44	1.96	1.96
17:00-18:00	B	4	4.44	E	62.57	2.13	0.20	33.07	33.07	93.21	120.13	4.77	1.57	1.57
17:00-18:00	C	1	12.00	D	42.77	4.81	0.63	77.26	77.26	84.10	370.25	14.91	4.83	4.83
17:00-18:00	C	2	12.00	F	88.63	17.64	16.45	484.16	484.16	124.47	1355.91	368.04	21.62	21.62
17:00-18:00	C	3	12.00	E	76.35	4.24	1.33	79.20	79.20	105.63	246.78	31.04	3.48	3.48
17:00-18:00	D	1	24.00	F	523.42	6.84	78.36	1209.85	1209.85	316.78	432.00	936.48	17.16	17.16
17:00-18:00	D	3	24.00	D	50.87	2.35	0.14	35.32	35.32	84.99	146.25	3.33	1.88	1.88
17:00-18:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Dx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	A	1	0.00	18.75	34.78	0.00	0.00	0.00	0.98	13.89	0.00	0.00	0.00	
17:00-18:00	A	2	0.00	13.41	34.78	0.00	0.00	0.00	0.39	10.57	0.00	0.00	0.00	
17:00-18:00	A	3	0.00	50.53	26.09	17.74	0.00	0.00	37.12	48.19	0.00	0.00	0.00	
17:00-18:00	A	4	0.00	1.68	6.09	0.00	0.00	0.00	0.00	1.63	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	61.83	6.43	49.44	0.00	0.00	49.91	59.99	0.00	0.00	0.00	
17:00-18:00	B	2	0.00	6.57	34.78	0.00	0.00	0.00	0.36	6.03	0.00	0.00	0.00	
17:00-18:00	B	4	0.00	5.26	6.43	0.00	0.00	0.00	0.20	4.89	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	16.27	17.39	0.00	0.00	0.00	0.63	12.33	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	73.78	34.78	13.31	0.00	0.00	16.45	51.85	0.00	0.00	0.00	
17:00-18:00	C	3	0.00	11.71	17.39	0.00	0.00	0.00	1.33	10.25	0.00	0.00	0.00	
17:00-18:00	D	1	0.00	96.24	34.78	52.52	0.00	0.00	78.36	92.04	0.00	0.00	0.00	
17:00-18:00	D	3	0.00	6.30	34.78	0.00	0.00	0.00	0.14	5.71	0.00	0.00	0.00	

17:00-18:00	Ax	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.00	52.17	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Dx	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	100.00	9.85	10.15	70.94
17:00-18:00	A	2	78.80	7.05	11.17	64.46
17:00-18:00	A	3	59.10	44.63	1.32	407.79
17:00-18:00	A	4	2.21	0.60	3.67	34.36
17:00-18:00	B	1	14.25	55.43	0.26	518.30
17:00-18:00	B	2	32.40	4.05	7.99	90.08
17:00-18:00	B	4	4.96	2.49	1.99	67.01
17:00-18:00	C	1	45.80	6.97	6.57	54.77
17:00-18:00	C	2	138.50	38.71	3.58	100.63
17:00-18:00	C	3	26.30	6.45	4.07	88.35
17:00-18:00	D	1	117.20	89.11	1.32	547.42
17:00-18:00	D	3	35.20	3.66	9.62	74.87
17:00-18:00	Ax	1	155.44	5.18	30.00	12.00
17:00-18:00	Bx	1	63.59	2.12	30.00	12.00
17:00-18:00	Cx	1	158.46	5.28	30.00	12.00
17:00-18:00	Dx	1	80.42	2.68	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
17:00-18:00	A1 - (untitled)	27/01/2014 13:55:37	27/01/2014 13:56:14	17:00	150	247.20	135.65	D/1	4	25	D/1	Dx/1	D/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)
17:00-18:00	9479	9158	321	✓	0	0	136	✓	-34	1074.00	1086.00	0.00	3594.69

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	14.09	F	93.88	61.32	185.88	3510.18	3510.18	81.38	4198.99	2540.67	84.51	84.51

Network Results: Queues And Blocking

				Average	Average							

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	0.00	0.00	427.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	1112.61	284.28	3.91	107.97

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To			
		A	B	C	D
From	A	0.00	82.94	193.06	46.36
	B	79.01	0.00	530.30	316.19
	C	112.63	100.35	0.00	66.77
	D	559.42	559.42	323.15	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	76.46	76.46	0.00	0.00
2	82.94	82.94	0.00	0.00
3	82.94	82.94	0.00	0.00
4	419.79	419.79	0.00	0.00
5	46.36	46.36	0.00	0.00
6	530.30	530.30	0.00	0.00
7	530.30	530.30	0.00	0.00
8	102.08	102.08	0.00	0.00
9	79.01	79.01	0.00	0.00
10	66.77	66.77	0.00	0.00
11	112.63	112.63	0.00	0.00
12	100.35	100.35	0.00	0.00
13	559.42	559.42	0.00	0.00
14	559.42	559.42	0.00	0.00
15	559.42	559.42	0.00	0.00
16	86.87	86.87	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 28/01/2014 08:25:36
Analysis Set used for last run: A1 - (untitled)

Filename: J3- Soar Valley_Leicester Rd-PM+Dev.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 28/01/2014 08:26:23

» Network Diagrams
« A1 - (untitled) : D4 - 2018 Back + Dev - PM *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

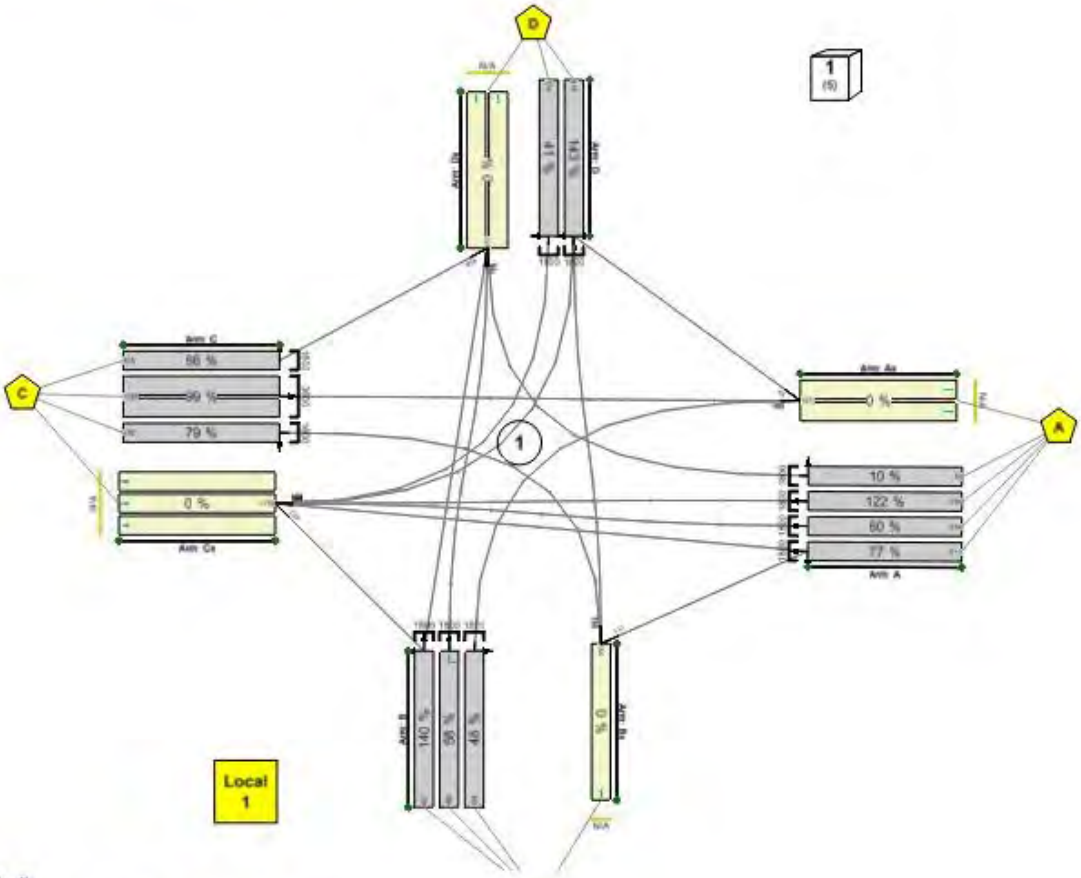
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 150s , Timesteps 0 / 150
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D4 - 2018 Back + Dev - PM *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	28/01/2014 08:25:03	28/01/2014 08:25:36	17:00	150	271.89	142.59	D/1	4	25	D/1	Dx/1	D/1	

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D4	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018 Back + Dev - PM				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
150	1	150	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Shotgun Number Of Runs	Random Seed	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Shotgun Hill Climb (Medium)	Extended - Offsets And Green Splits	15,40,-1,15,40,1,-1,1,-15,-5,-1,15,1	10	1	✓	1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1

D	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		
Cx	(untitled)		
Dx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
A	3	(untitled)		150.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	F			Normal
A	4	(untitled)		35.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	E			Normal
B	1	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	2	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	4	(untitled)		37.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	3600	✓	1	C			Normal
C	3	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
D	1	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
D	3	(untitled)		200.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Dx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
A	3	1	(untitled)			1800
A	4	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
B	4	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
C	2	2	(untitled)			1800
C	3	1	(untitled)			1800
D	1	1	(untitled)			1800
D	3	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Ax	1	2	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800
Cx	1	2	(untitled)			1800
Cx	1	3	(untitled)			1800
Dx	1	1	(untitled)			1800
Dx	1	2	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		

A	2	100	100		0.00		
A	3	100	100		0.00		
A	4	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
B	4	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
C	3	100	100		0.00		
D	1	100	100		0.00		
D	3	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		
Dx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	4	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
D	3	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Dx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	511	511	0	0	100	1.00
A	2	394	394	0	0	100	1.00

A	3	394	394	0	0	100	1.00
A	4	63	63	0	0	100	1.00
B	1	402	402	0	0	100	1.00
B	2	168	168	0	0	100	1.00
B	4	139	139	0	0	100	1.00
C	1	458	458	0	0	100	1.00
C	2	1385	1385	0	0	100	1.00
C	3	285	285	0	0	100	1.00
D	1	616	616	0	0	100	1.00
D	3	176	176	0	0	100	1.00
Ax	1	1572	1572	0	0	100	1.00
Bx	1	794	794	0	0	100	1.00
Cx	1	1768	1768	0	0	100	1.00
Dx	1	857	857	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
B	1	100	100
B	2	100	100
B	4	100	100
C	1	100	100
C	2	100	100
C	3	100	100
D	1	100	100
D	3	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100
Dx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
A	3	18.00	30.00	Buses Not Permittted	Trams Not Permitted
A	4	4.20	30.00	Buses Not Permittted	Trams Not Permitted
B	1	4.44	30.00	Buses Not Permittted	Trams Not Permitted
B	2	24.00	30.00	Buses Not Permittted	Trams Not Permitted
B	4	4.44	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	3	12.00	30.00	Buses Not Permittted	Trams Not Permitted
D	1	24.00	30.00	Buses Not Permittted	Trams Not Permitted
D	3	24.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)

Ax	1	1	TrafficStream	D/1	48	48	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	B/4	139	139	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	3	TrafficStream	C/2	1385	1385	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	117	117	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/3	285	285	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	3	TrafficStream	D/1	392	392	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	A/1	394	394	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	2	TrafficStream	B/1	234	234	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	3	TrafficStream	D/3	176	176	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	4	TrafficStream	D/1	176	176	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	5	TrafficStream	A/2	394	394	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	6	TrafficStream	A/3	394	394	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	1	TrafficStream	C/1	458	458	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	2	TrafficStream	B/1	168	168	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	3	TrafficStream	B/2	168	168	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Dx	1	4	TrafficStream	A/4	63	63	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To			
		A	B	C	D
From	A	0	117	1183	63
	B	139	0	234	337
	C	1385	285	0	458
	D	48	392	352	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/2,A/1,A/3,A/4	Ax/1	1362	1362	0	0	1572	1572	0	0
1	B	(untitled)	B/1,B/2,B/4	Bx/1	709	709	0	0	794	794	0	0
1	C	(untitled)	C/1,C/2,C/3	Cx/1,Cx/1	2128	2128	0	0	1768	1768	0	0
1	D	(untitled)	D/1,D/3	Dx/1	792	792	0	0	857	857	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		A/2,Cx/1	394
1	2		A/1,Bx/1	117
1	3		A/1,Cx/1	394
1	4		A/3,Cx/1	394
1	5		A/4,Dx/1	63
1	6		B/1,Dx/1	168
1	7		B/1,Cx/1	234
1	8		B/2,Dx/1	168
1	9		B/4,Ax/1	139
1	10		C/1,Dx/1	458
1	11		C/2,Ax/1	1385
1	12		C/3,Bx/1	285
1	13		D/1,Ax/1	48
1	14		D/1,Bx/1	392
1	15		D/1,Cx/1	176
1	16		D/3,Cx/1	176

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	394
1	2	✓	Normal	N/A	N/A	117
1	3	✓	Normal	N/A	N/A	394
1	4	✓	Normal	N/A	N/A	394
1	5	✓	Normal	N/A	N/A	63
1	6	✓	Normal	N/A	N/A	168
1	7	✓	Normal	N/A	N/A	234
1	8	✓	Normal	N/A	N/A	168
1	9	✓	Normal	N/A	N/A	139
1	10	✓	Normal	N/A	N/A	458
1	11	✓	Normal	N/A	N/A	1385
1	12	✓	Normal	N/A	N/A	285
1	13	✓	Normal	N/A	N/A	48
1	14	✓	Normal	N/A	N/A	392
1	15	✓	Normal	N/A	N/A	176
1	16	✓	Normal	N/A	N/A	176

Signal Timings

150s cycle time; 150 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

1	D	(untitled)	7	300	0	0	
1	E	(untitled)	7	300	0	0	
1	F	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B	1
1	3	C,D	1
1	4	C,E	1
1	5	E,F	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3,4,5	48,86,118,146,22		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	25	48	23	1	7
1	2	✓	2	B	51	86	35	1	7
1	3	✓	3	C,D	89	118	29	1	7
1	4	✓	4	C,E	118	146	28	1	1
1	5	✓	5	E,F	146	22	26	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	25	48	23
1	B	1	✓	51	86	35
1	C	1	✓	89	146	57
1	D	1	✓	89	118	29
1	E	1	✓	118	22	54
1	F	1	✓	146	22	26

Intergreen Matrix for Controller Stream 1

		To					
		A	B	C	D	E	F
From	A	-	3			3	3
	B	3	-	3	3		
	C		3	-			
	D		3		-		
	E	3				-	
	F	3					-

Interstage Matrix for Controller Stream 1

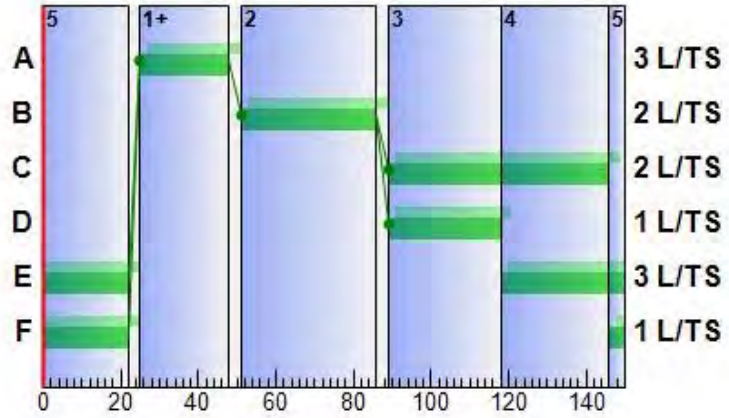
		To				
		1	2	3	4	5
From	1	-	3	0	3	3
	2	3	-	3	3	0
	3	0	3	-	0	0
	4	3	3	0	-	0
	5	3	0	0	0	-

Banned Stage transitions for Controller Stream 1

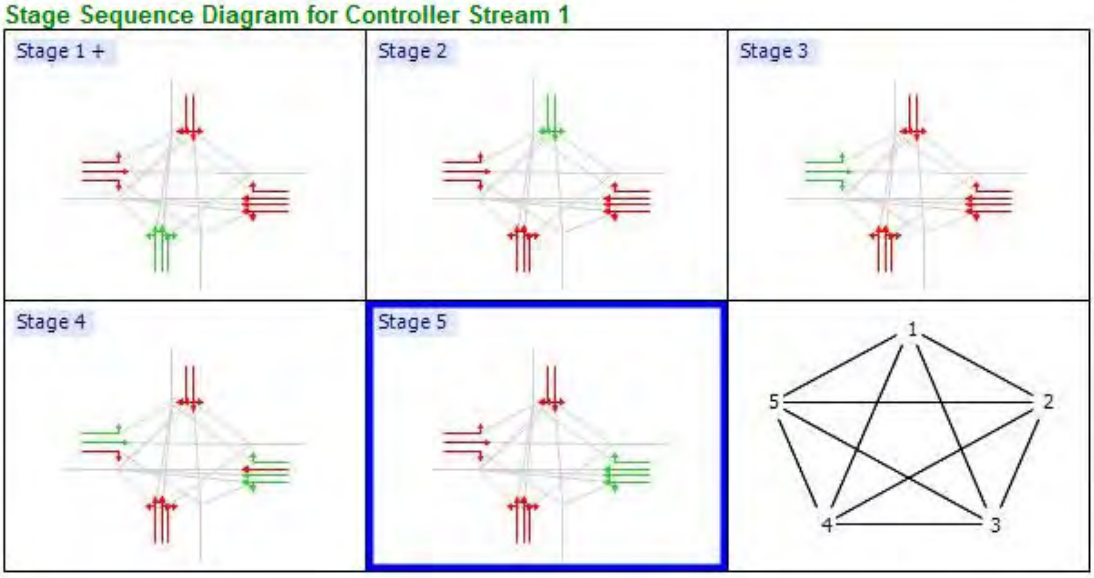
Banned Stage transitions for Controller Stream 1

		To				
		1	2	3	4	5
From	1	-				
	2		-			
	3			-		
	4				-	
	5					-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	22	3	10
1	2	✓	2	B	48	3	10
1	3	✓	3	C,D	86	3	10
1	4	✓	4	C,E	118	0	1
1	5	✓	5	E,F	146	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A	22	3	10
1	2	✓	2	B	48	3	10
1	3	✓	3	C,D	86	3	10
1	4	✓	4	C,E	118	0	1
1	5	✓	5	E,F	146	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	3	0
1	B	1	2	3	3	0
1	C	1	3	5	3	0
1	D	1	3	4	3	0
1	E	1	4	1	0	0
1	F	1	5	1	0	0

Stage Timings (TRANSYT 12 timings)

150s cycle time; 150 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	5	22	48	86	118	146

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	E	0	118	22	54									
A	2	1	1	E	0	118	22	54									
A	3	1	1	F	0	146	22	26									
A	4	1	1	E	0	118	22	54									
B	1	1	1	A	0	25	48	23									
B	2	1	1	A	0	25	48	23									
B	4	1	1	A	0	25	48	23									
C	1	1	1	C	0	89	146	57									
C	2	1	1	C	0	89	146	57									
C	3	1	1	D	0	89	118	29									
D	1	1	1	B	0	51	86	35									
D	3	1	1	B	0	51	86	35									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	3	150.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	4	35.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	4	37.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100

C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	3600	100	100
C	3	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	1	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
D	3	200.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Dx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
17:00-18:00	A	1	(untitled)	E	N/A	511	1800	54.00	0.00	660	77	16	20.03	14.78	51.1
17:00-18:00	A	2	(untitled)	E	N/A	394	1800	54.00	0.00	660	60	51	13.68	10.84	42.5
17:00-18:00	A	3	(untitled)	F	N/A	394	1800	26.00	0.00	324	122	-26	50.53	48.19	389.7
17:00-18:00	A	4	(untitled)	E	N/A	63	1800	54.00	0.00	660	10	843	1.72	1.67	31.4
17:00-18:00	B	1	(untitled)	A	N/A	402	1800	23.00	0.00	288	140	-36	70.14	68.30	566.4
17:00-18:00	B	2	(untitled)	A	N/A	168	1800	23.00	0.00	288	58	54	6.84	6.28	66.9
17:00-18:00	B	4	(untitled)	A	N/A	139	1800	23.00	0.00	288	48	86	5.47	5.09	63.1
17:00-18:00	C	1	(untitled)	C	N/A	458	1800	57.00	0.00	696	66	37	16.27	12.33	42.7
17:00-18:00	C	2	(untitled)	C	N/A	1385	3600	57.00	0.00	1392	99	-10	73.78	51.85	88.6
17:00-18:00	C	3	(untitled)	D	N/A	285	1800	29.00	0.00	360	79	14	12.66	10.92	74.9
17:00-18:00	D	1	(untitled)	B	N/A	616	1800	35.00	0.00	432	143	-37	111.03	106.83	584.3
17:00-18:00	D	3	(untitled)	B	N/A	176	1800	35.00	0.00	432	41	121	6.30	5.71	50.8
17:00-18:00	Ax	1	(untitled)	N/A	N/A	1558	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Bx	1	(untitled)	N/A	N/A	677	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Cx	1	(untitled)	N/A	N/A	1579	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Dx	1	(untitled)	N/A	N/A	809	Unrestricted	150.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	25	48	23	7	0	0
1	B	1	51	86	35	7	0	0
1	C	1	89	146	57	7	0	0
1	D	1	89	118	29	7	0	0
1	E	1	118	22	54	7	0	0
1	F	1	146	22	26	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
17:00-18:00	A	1	511	511	0		1800	660	77		16	54.00	55.00	0
17:00-18:00	A	2	394	394	0		1800	660	60		51	54.00	55.00	0
17:00-18:00	A	3	394	324	0		1800	324	122	✓	-26	26.00	27.00	0
17:00-18:00	A	4	63	63	0		1800	660	10		843	54.00	55.00	0
17:00-18:00	B	1	402	288	0		1800	288	140	✓	-36	23.00	24.00	0
17:00-18:00	B	2	168	168	0		1800	288	58		54	23.00	24.00	0
17:00-18:00	B	4	139	139	0		1800	288	48		86	23.00	24.00	0
17:00-18:00	C	1	458	458	0		1800	696	66		37	57.00	58.00	0
17:00-18:00	C	2	1385	1385	0		3600	1392	99	✓	-10	57.00	58.00	0
17:00-18:00	C	3	285	285	0		1800	360	79		14	29.00	30.00	0
17:00-18:00	D	1	616	432	0		1800	432	143	✓	-37	35.00	36.00	0
17:00-18:00	D	3	176	176	0		1800	432	41		121	35.00	36.00	0
17:00-18:00	Ax	1	1558	1558	14	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
17:00-18:00	Bx	1	677	677	117	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
17:00-18:00	Cx	1	1579	1579	189	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0
17:00-18:00	Dx	1	809	809	48	✓	Unrestricted	Unrestricted	0		Unrestricted	150.00	150.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-	A	1	24.00	D	51.11	5.96	1.29	103.02	103.02	92.87	444.02	30.54	5.95	5.95

17:00-18:00	A	2	24.00	D	42.52	4.22	0.44	66.09	66.09	82.32	313.90	10.46	4.07	4.07
17:00-18:00	A	3	18.00	F	389.79	5.54	37.12	605.77	605.77	264.70	324.00	533.63	10.75	10.75
17:00-18:00	A	4	4.20	C	31.48	0.55	0.01	7.82	7.82	64.74	40.66	0.12	0.51	0.51
17:00-18:00	B	1	4.44	F	566.47	5.04	58.22	898.23	898.23	330.06	288.00	662.57	11.92	11.92
17:00-18:00	B	2	24.00	E	66.98	2.72	0.40	44.38	44.38	96.87	153.24	9.50	2.04	2.04
17:00-18:00	B	4	4.44	E	63.13	2.21	0.22	34.62	34.62	93.67	124.90	5.30	1.63	1.63
17:00-18:00	C	1	12.00	D	42.77	4.81	0.63	77.26	77.26	84.10	370.25	14.91	4.83	4.83
17:00-18:00	C	2	12.00	F	88.63	17.64	16.45	484.16	484.16	124.47	1355.91	368.04	21.62	21.62
17:00-18:00	C	3	12.00	E	74.98	4.52	1.42	84.29	84.29	105.36	267.20	33.09	3.77	3.77
17:00-18:00	D	1	24.00	F	584.34	6.84	93.15	1419.82	1419.82	338.73	432.00	1031.29	18.35	18.35
17:00-18:00	D	3	24.00	D	50.87	2.35	0.14	35.32	35.32	84.99	146.25	3.33	1.88	1.88
17:00-18:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Dx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	A	1	0.00	20.03	34.78	0.00	0.00	0.00	1.29	14.78	0.00	0.00	0.00	
17:00-18:00	A	2	0.00	13.68	34.78	0.00	0.00	0.00	0.44	10.84	0.00	0.00	0.00	
17:00-18:00	A	3	0.00	50.53	26.09	17.74	0.00	0.00	37.12	48.19	0.00	0.00	0.00	
17:00-18:00	A	4	0.00	1.72	6.09	0.00	0.00	0.00	0.01	1.67	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	70.14	6.43	57.74	0.00	0.00	58.22	68.30	0.00	0.00	0.00	
17:00-18:00	B	2	0.00	6.84	34.78	0.00	0.00	0.00	0.40	6.28	0.00	0.00	0.00	
17:00-18:00	B	4	0.00	5.47	6.43	0.00	0.00	0.00	0.22	5.09	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	16.27	17.39	0.00	0.00	0.00	0.63	12.33	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	73.78	34.78	13.31	0.00	0.00	16.45	51.85	0.00	0.00	0.00	
17:00-18:00	C	3	0.00	12.66	17.39	0.00	0.00	0.00	1.42	10.92	0.00	0.00	0.00	
17:00-18:00	D	1	0.00	111.03	34.78	67.30	0.00	0.00	93.15	106.83	0.00	0.00	0.00	
17:00-18:00	D	3	0.00	6.30	34.78	0.00	0.00	0.00	0.14	5.71	0.00	0.00	0.00	

17:00-18:00	Ax	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.00	52.17	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Dx	1	0.00	0.00	34.78	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	102.20	10.66	9.59	75.11
17:00-18:00	A	2	78.80	7.28	10.82	66.52
17:00-18:00	A	3	59.10	44.63	1.32	407.79
17:00-18:00	A	4	2.21	0.62	3.53	35.68
17:00-18:00	B	1	14.87	63.75	0.23	570.91
17:00-18:00	B	2	33.60	4.25	7.91	90.98
17:00-18:00	B	4	5.14	2.61	1.97	67.57
17:00-18:00	C	1	45.80	6.97	6.57	54.77
17:00-18:00	C	2	138.50	38.71	3.58	100.63
17:00-18:00	C	3	28.50	6.89	4.14	86.98
17:00-18:00	D	1	123.20	104.09	1.18	608.34
17:00-18:00	D	3	35.20	3.66	9.62	74.87
17:00-18:00	Ax	1	155.77	5.19	30.00	12.00
17:00-18:00	Bx	1	67.69	2.26	30.00	12.00
17:00-18:00	Cx	1	157.91	5.26	30.00	12.00
17:00-18:00	Dx	1	80.94	2.70	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
17:00-18:00	A1 - (untitled)	28/01/2014 08:25:03	28/01/2014 08:25:36	17:00	150	271.89	142.59	D/1	4	25	D/1	Dx/1	D/1

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)
17:00-18:00	9614	9246	368	✓	0	0	143	✓	-37	1070.00	1082.00	0.00	3948.10

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	14.10	F	101.81	62.40	209.49	3860.79	3860.79	84.75	4260.33	2702.80	87.31	87.31

Network Results: Queues And Blocking

				Average	Average							

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	0.00	0.00	427.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	1129.42	309.53	3.65	115.91

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To			
		A	B	C	D
From	A	0.00	87.11	195.14	47.68
	B	79.57	0.00	582.91	342.94
	C	112.63	98.98	0.00	66.77
	D	620.34	620.34	353.61	0.00

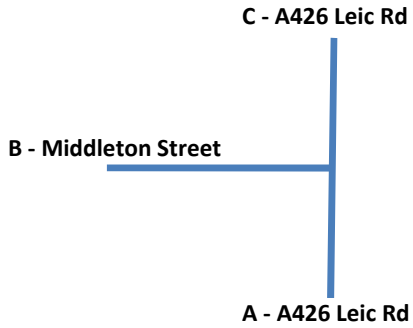
Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	78.52	78.52	0.00	0.00
2	87.11	87.11	0.00	0.00
3	87.11	87.11	0.00	0.00
4	419.79	419.79	0.00	0.00
5	47.68	47.68	0.00	0.00
6	582.91	582.91	0.00	0.00
7	582.91	582.91	0.00	0.00
8	102.98	102.98	0.00	0.00
9	79.57	79.57	0.00	0.00
10	66.77	66.77	0.00	0.00
11	112.63	112.63	0.00	0.00
12	98.98	98.98	0.00	0.00
13	620.34	620.34	0.00	0.00
14	620.34	620.34	0.00	0.00
15	620.34	620.34	0.00	0.00
16	86.87	86.87	0.00	0.00

Appendix O

J4 - Leicester Road / Middleton Street – Junction Assessment Data

J4 Leicester Road / Middleton St



0800-0900

Background 2013	A	B	C
A	0	55	644
B	48	0	381
C	492	333	0

Tempro 2013-18	A	B	C
A	1.072	1.072	1.072
B	1.072	1.072	1.072
C	1.072	1.072	1.072

Background 2018	A	B	C
A	0	59	690
B	51	0	408
C	527	357	0

Development	A	B	C
A	0	3	37
B	1	0	0
C	13	0	0

Back + Dev	A	B	C
A	0	62	728
B	52	0	408
C	541	357	0

1700-1800

Background 2013	A	B	C
A	0	60	652
B	72	0	367
C	640	409	0

Tempro 2013-18	A	B	C
A	1.0693	1.0693	1.0693
B	1.0693	1.0693	1.0693
C	1.0693	1.0693	1.0693

Background 2018	A	B	C
A	0	64	697
B	77	0	392
C	684	437	0

Development	A	B	C
A	0	1	13
B	2	0	0
C	27	0	0

Back + Dev	A	B	C
A	0	65	710
B	79	0	392
C	711	437	0

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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Tel: +44 (0)1344 770758 E-mail: 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

Last run: 27/01/2014 16:50:42
Analysis Set used for last run: A1 - (untitled)

Filename: J4 Lutterworth_Middleton.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 27/01/2014 16:53:20

» Network Diagrams
« A1 - (untitled) : D1 - 2018-Back-AM *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

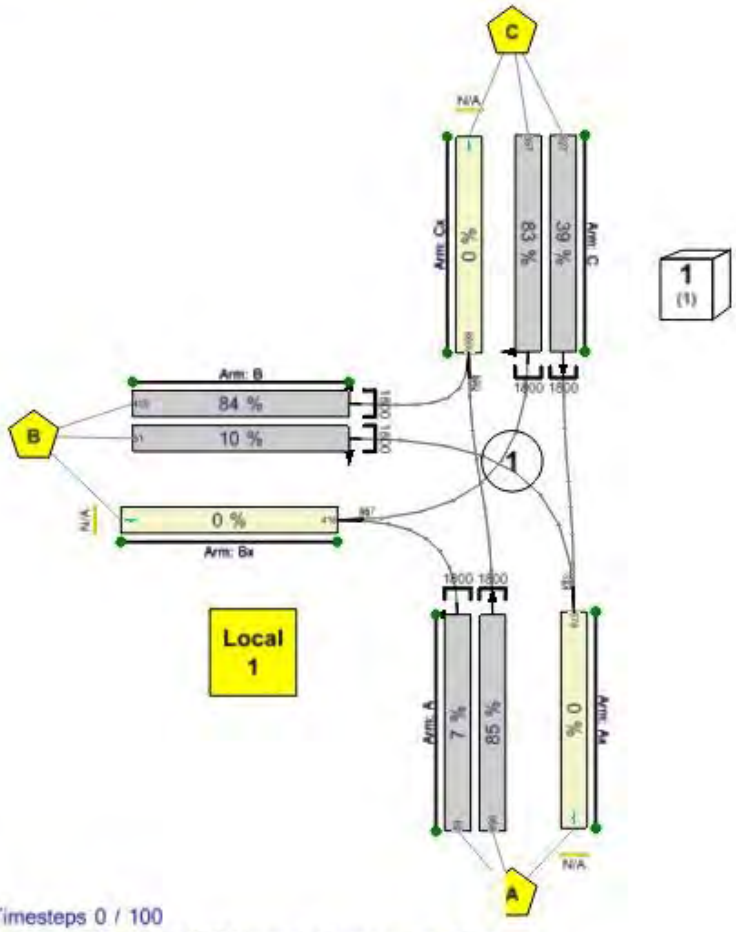
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018-Back-AM *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	27/01/2014 16:50:42	27/01/2014 16:50:42	08:00	100	19.81	85.19	A/2	0	0	A/2	Cx/1	A/2	✓

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018-Back-AM				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		

Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
A	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
A	2	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-	NetworkDefault	0.50

C	2	Default	35	80	0.00	0	0	NetworkDefault	Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	59	59	0	0	100	1.00
A	2	690	690	0	0	100	1.00
B	1	408	408	0	0	100	1.00
B	2	51	51	0	0	100	1.00
C	1	527	527	0	0	100	1.00
C	2	357	357	0	0	100	1.00
Ax	1	578	578	0	0	100	1.00
Bx	1	416	416	0	0	100	1.00
Cx	1	1098	1098	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
A	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	51	51	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	527	527	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	59	59	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	357	357	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	B/1	408	408	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Cx	1	2	TrafficStream	A/2	690	690	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	59	690
	B	51	0	408
	C	527	357	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	749	749	0	0	578	578	0	0
1	B	(untitled)	B/1,B/2	Bx/1	459	459	0	0	416	416	0	0
1	C	(untitled)	C/1,C/2	Cx/1	884	884	0	0	1098	1098	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		C/1,Ax/1	527
1	2		C/2,Bx/1	357
1	3		A/1,Bx/1	59
1	4		A/2,Cx/1	690
1	5		B/1,Cx/1	408
1	6		B/2,Ax/1	51

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	527
1	2	✓	Normal	N/A	N/A	357
1	3	✓	Normal	N/A	N/A	59
1	4	✓	Normal	N/A	N/A	690
1	5	✓	Normal	N/A	N/A	408
1	6	✓	Normal	N/A	N/A	51

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,C	1
1	2	D	1
1	3	B,C	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	41,67,90		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,C	97	41	44	1	7
1	2	✓	2	D	41	67	26	1	7
1	3	✓	3	B,C	67	90	23	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	97	41	44
1	B	1	✓	67	90	23
1	C	1	✓	67	41	74
1	D	1	✓	41	67	26

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

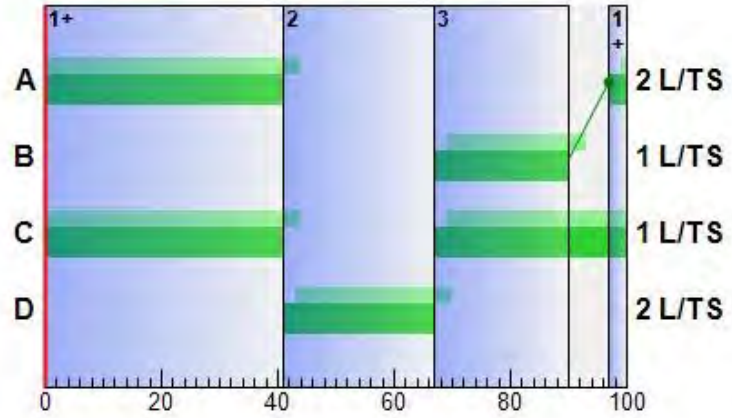
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

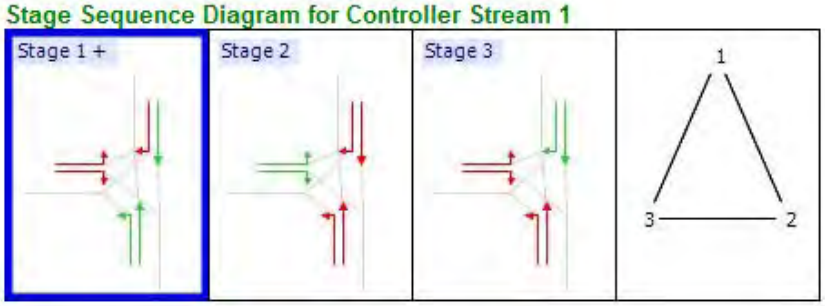
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	90	7	14
1	2	✓	2	D	41	0	7
1	3	✓	3	B,C	67	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	90	7	14
1	2	✓	2	D	41	0	7
1	3	✓	3	B,C	67	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	3	2	0	0
1	D	1	2	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	90	41	67

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	97	41	44									
A	2	1	1	A	0	97	41	44									
B	1	1	1	D	0	41	67	26									
B	2	1	1	D	0	41	67	26									
C	1	1	1	C	0	67	41	74									
C	2	1	1	B	0	67	90	23									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
08:00-09:00	A	1	(untitled)	A	N/A	59	1800	44.00	0.00	810	7	1136	0.92	0.90	15.83
08:00-09:00	A	2	(untitled)	A	N/A	690	1800	44.00	0.00	810	85	6	19.38	12.87	36.66
08:00-09:00	B	1	(untitled)	D	N/A	408	1800	26.00	0.00	486	84	7	12.70	10.32	52.50
08:00-09:00	B	2	(untitled)	D	N/A	51	1800	26.00	0.00	486	10	758	1.07	1.04	27.88
08:00-09:00	C	1	(untitled)	C	N/A	527	1800	74.00	0.00	1350	39	131	5.25	3.78	5.27
08:00-09:00	C	2	(untitled)	B	N/A	357	1800	23.00	0.00	432	83	9	11.16	9.37	54.55
08:00-09:00	Ax	1	(untitled)	N/A	N/A	578	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Bx	1	(untitled)	N/A	N/A	416	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Cx	1	(untitled)	N/A	N/A	1098	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	97	41	44	7	0	0
1	B	1	67	90	23	7	0	0
1	C	1	67	41	74	7	0	0
1	D	1	41	67	26	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
08:00-09:00	A	1	59	59	0		1800	810	7		1136	44.00	45.00	0
08:00-09:00	A	2	690	690	0		1800	810	85		6	44.00	45.00	0
08:00-09:00	B	1	408	408	0		1800	486	84		7	26.00	27.00	0
08:00-09:00	B	2	51	51	0		1800	486	10		758	26.00	27.00	0
08:00-09:00	C	1	527	527	0		1800	1350	39		131	74.00	75.00	0
08:00-09:00	C	2	357	357	0		1800	432	83		9	23.00	24.00	0
08:00-09:00	Ax	1	578	578	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Bx	1	416	416	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Cx	1	1098	1098	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	A	1	6.96	B	15.83	0.26	0.00	3.68	3.68	54.99	32.34	0.10	0.41	0.41
08:00-09:00	A	2	12.00	D	36.66	4.70	2.33	99.79	99.79	98.21	596.40	81.25	8.50	8.50
08:00-09:00	B	1	12.00	D	52.50	3.91	2.04	84.49	84.49	109.59	376.73	70.38	5.61	5.61
08:00-09:00	B	2	1.00	C	27.88	0.39	0.01	5.61	5.61	74.21	37.63	0.22	0.44	0.44
08:00-09:00	C	1	12.00	A	5.27	0.65	0.12	10.96	10.96	33.91	174.20	4.48	2.24	2.24

08:00-09:00	C	2	12.00	D	54.55	3.57	1.84	76.81	76.81	110.32	330.70	63.15	4.94	4.94
08:00-09:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	A	1	0.00	0.92	10.09	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00	
08:00-09:00	A	2	0.00	19.38	17.39	0.11	0.00	0.00	2.33	12.87	0.00	0.00	0.00	
08:00-09:00	B	1	0.00	12.70	17.39	0.00	0.00	0.00	2.04	10.32	0.00	0.00	0.00	
08:00-09:00	B	2	0.00	1.07	1.39	0.00	0.00	0.00	0.01	1.04	0.00	0.00	0.00	
08:00-09:00	C	1	0.00	5.25	17.39	0.00	0.00	0.00	0.12	3.78	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	11.16	17.39	0.00	0.00	0.00	1.84	9.37	0.00	0.00	0.00	
08:00-09:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	A	1	3.42	0.37	9.16	22.79
08:00-09:00	A	2	69.00	9.33	7.40	48.66
08:00-09:00	B	1	40.80	7.31	5.58	64.50
08:00-09:00	B	2	0.41	0.41	1.00	28.88
08:00-09:00	C	1	52.70	2.53	20.84	17.27
08:00-09:00	C	2	35.70	6.60	5.41	66.55
08:00-09:00	Ax	1	57.80	1.93	30.00	12.00
08:00-09:00	Bx	1	41.60	1.39	30.00	12.00
08:00-09:00	Cx	1	109.80	3.66	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
08:00-09:00	A1 - (untitled)	27/01/2014 16:50:42	27/01/2014 16:50:42	08:00	100	19.81	85.19	A/2	0	0	A/2	Cx/1	A/2

Network Results: Summary

	Calculated												

Time Segment	Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
08:00-09:00	4184	4184	0		0	0	85		6	537.00	543.00	0.00	303.47	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	11.79	C	17.05	13.47	6.34	281.34	281.34	42.25	1547.99	219.59	22.13	22.13

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	0.00	0.00	133.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	411.23	33.52	12.27	28.84

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	34.79	60.66
	B	40.88	0.00	76.50
	C	29.27	78.55	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	29.27	29.27	0.00	0.00
2	78.55	78.55	0.00	0.00
3	34.79	34.79	0.00	0.00
4	60.66	60.66	0.00	0.00
5	76.50	76.50	0.00	0.00
6	40.88	40.88	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 27/01/2014 16:55:38
Analysis Set used for last run: A1 - (untitled)

Filename: J4 Lutterworth_Middleton-AM-Back+Dev.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 27/01/2014 16:58:07

» Network Diagrams
« A1 - (untitled) : D1 - 2018-Back+Dev-AM *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

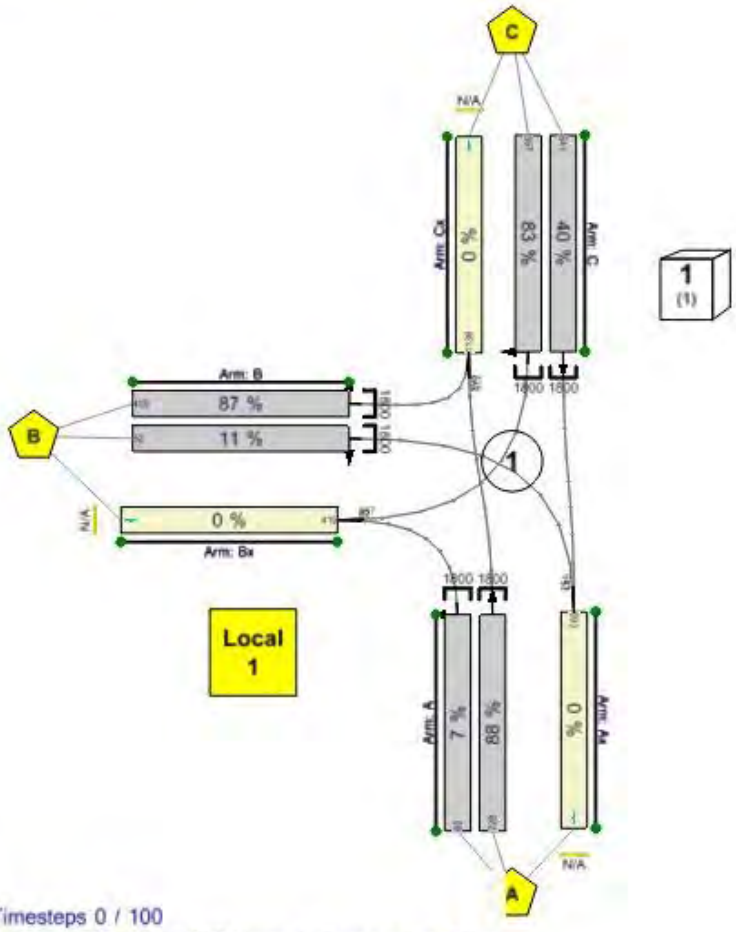
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018-Back+Dev-AM *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	27/01/2014 16:55:38	27/01/2014 16:55:38	08:00	100	21.42	87.92	A/2	0	0	A/2	Cx/1	A/2	✓

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018-Back+Dev-AM				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		

Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
A	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
A	2	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-	NetworkDefault	0.50

C	2	Default	35	80	0.00	0	0	NetworkDefault	Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	62	62	0	0	100	1.00
A	2	728	728	0	0	100	1.00
B	1	408	408	0	0	100	1.00
B	2	52	52	0	0	100	1.00
C	1	541	541	0	0	100	1.00
C	2	357	357	0	0	100	1.00
Ax	1	593	593	0	0	100	1.00
Bx	1	419	419	0	0	100	1.00
Cx	1	1136	1136	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
A	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	52	52	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	541	541	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	62	62	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	357	357	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	B/1	408	408	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Cx	1	2	TrafficStream	A/2	728	728	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	62	728
	B	52	0	408
	C	541	357	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	790	790	0	0	593	593	0	0
1	B	(untitled)	B/1,B/2	Bx/1	460	460	0	0	419	419	0	0
1	C	(untitled)	C/1,C/2	Cx/1	898	898	0	0	1136	1136	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		C/1,Ax/1	541
1	2		C/2,Bx/1	357
1	3		A/1,Bx/1	62
1	4		A/2,Cx/1	728
1	5		B/1,Cx/1	408
1	6		B/2,Ax/1	52

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	541
1	2	✓	Normal	N/A	N/A	357
1	3	✓	Normal	N/A	N/A	62
1	4	✓	Normal	N/A	N/A	728
1	5	✓	Normal	N/A	N/A	408
1	6	✓	Normal	N/A	N/A	52

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,C	1
1	2	D	1
1	3	B,C	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	42,67,90		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,C	97	42	45	1	7
1	2	✓	2	D	42	67	25	1	7
1	3	✓	3	B,C	67	90	23	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	97	42	45
1	B	1	✓	67	90	23
1	C	1	✓	67	42	75
1	D	1	✓	42	67	25

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

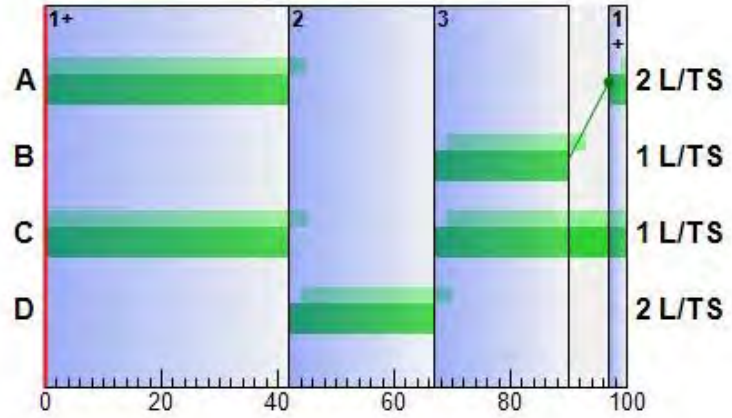
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

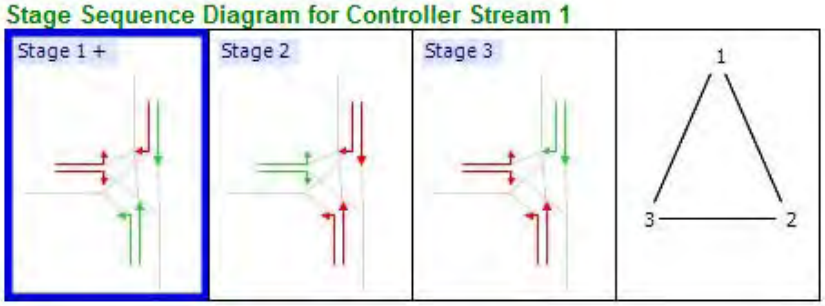
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	90	7	14
1	2	✓	2	D	42	0	7
1	3	✓	3	B,C	67	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	90	7	14
1	2	✓	2	D	42	0	7
1	3	✓	3	B,C	67	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	3	2	0	0
1	D	1	2	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	90	42	67

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	97	42	45									
A	2	1	1	A	0	97	42	45									
B	1	1	1	D	0	42	67	25									
B	2	1	1	D	0	42	67	25									
C	1	1	1	C	0	67	42	75									
C	2	1	1	B	0	67	90	23									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
08:00-09:00	A	1	(untitled)	A	N/A	62	1800	45.00	0.00	828	7	1102	0.95	0.93	15.29
08:00-09:00	A	2	(untitled)	A	N/A	728	1800	45.00	0.00	828	88	2	21.17	13.89	39.18
08:00-09:00	B	1	(untitled)	D	N/A	408	1800	25.00	0.00	468	87	3	13.42	11.04	58.82
08:00-09:00	B	2	(untitled)	D	N/A	52	1800	25.00	0.00	468	11	710	1.10	1.08	28.70
08:00-09:00	C	1	(untitled)	C	N/A	541	1800	75.00	0.00	1368	40	128	5.24	3.74	4.98
08:00-09:00	C	2	(untitled)	B	N/A	357	1800	23.00	0.00	432	83	9	11.16	9.37	54.55
08:00-09:00	Ax	1	(untitled)	N/A	N/A	593	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Bx	1	(untitled)	N/A	N/A	419	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
08:00-09:00	Cx	1	(untitled)	N/A	N/A	1136	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	97	42	45	7	0	0
1	B	1	67	90	23	7	0	0
1	C	1	67	42	75	7	0	0
1	D	1	42	67	25	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
08:00-09:00	A	1	62	62	0		1800	828	7		1102	45.00	46.00	0
08:00-09:00	A	2	728	728	0		1800	828	88		2	45.00	46.00	0
08:00-09:00	B	1	408	408	0		1800	468	87		3	25.00	26.00	0
08:00-09:00	B	2	52	52	0		1800	468	11		710	25.00	26.00	0
08:00-09:00	C	1	541	541	0		1800	1368	40		128	75.00	76.00	0
08:00-09:00	C	2	357	357	0		1800	432	83		9	23.00	24.00	0
08:00-09:00	Ax	1	593	593	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Bx	1	419	419	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
08:00-09:00	Cx	1	1136	1136	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	A	1	6.96	B	15.29	0.26	0.00	3.74	3.74	53.99	33.37	0.11	0.42	0.42
08:00-09:00	A	2	12.00	D	39.18	4.95	2.97	112.50	112.50	102.08	639.99	103.15	9.32	9.32
08:00-09:00	B	1	12.00	E	58.82	4.01	2.65	94.66	94.66	115.61	381.55	90.13	5.91	5.91
08:00-09:00	B	2	1.00	C	28.70	0.41	0.01	5.89	5.89	75.33	38.92	0.25	0.45	0.45
08:00-09:00	C	1	12.00	A	4.98	0.62	0.13	10.63	10.63	32.82	172.92	4.64	2.23	2.23

08:00-09:00	C	2	12.00	D	54.55	3.57	1.84	76.81	76.81	110.32	330.70	63.15	4.94	4.94
08:00-09:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	A	1	0.00	0.95	10.09	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.00	
08:00-09:00	A	2	0.00	21.17	17.39	0.37	0.00	0.00	2.97	13.89	0.00	0.00	0.00	
08:00-09:00	B	1	0.00	13.42	17.39	0.00	0.00	0.00	2.65	11.04	0.00	0.00	0.00	
08:00-09:00	B	2	0.00	1.10	1.39	0.00	0.00	0.00	0.01	1.08	0.00	0.00	0.00	
08:00-09:00	C	1	0.00	5.24	17.39	0.00	0.00	0.00	0.13	3.74	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	11.16	17.39	0.00	0.00	0.00	1.84	9.37	0.00	0.00	0.00	
08:00-09:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	A	1	3.60	0.38	9.39	22.25
08:00-09:00	A	2	72.80	10.35	7.03	51.18
08:00-09:00	B	1	40.80	8.03	5.08	70.82
08:00-09:00	B	2	0.42	0.43	0.97	29.70
08:00-09:00	C	1	54.10	2.55	21.20	16.98
08:00-09:00	C	2	35.70	6.60	5.41	66.55
08:00-09:00	Ax	1	59.30	1.98	30.00	12.00
08:00-09:00	Bx	1	41.90	1.40	30.00	12.00
08:00-09:00	Cx	1	113.60	3.79	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
08:00-09:00	A1 - (untitled)	27/01/2014 16:55:38	27/01/2014 16:55:38	08:00	100	21.42	87.92	A/2	0	0	A/2	Cx/1	A/2

Network Results: Summary

	Calculated

Time Segment	Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
08:00-09:00	4296	4296	0		0	0	88		2	538.00	544.00	0.00	327.49	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	11.79	D	17.95	13.82	7.60	304.22	304.22	43.27	1597.45	261.42	23.27	23.27

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	0.00	0.00	133.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	422.21	35.50	11.89	29.75

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	34.25	63.18
	B	41.70	0.00	82.82
	C	28.98	78.55	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	28.98	28.98	0.00	0.00
2	78.55	78.55	0.00	0.00
3	34.25	34.25	0.00	0.00
4	63.18	63.18	0.00	0.00
5	82.82	82.82	0.00	0.00
6	41.70	41.70	0.00	0.00

TRANSYT 14

Version: 14.1.2.315 [26-09-12]
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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

Last run: 27/01/2014 17:01:14
Analysis Set used for last run: A1 - (untitled)

Filename: J4 Lutterworth_Middleton-PM-Back.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 27/01/2014 17:02:08

» Network Diagrams
« A1 - (untitled) : D1 - 2018-Bac-PM *
» Summary
» Network Options
» Traffic Nodes
» Arms and Traffic Streams
» Flow Allocation Tool Tables - Local Matrix: 1
» Signal Timings
» TRANSYT 12 Tables
» Data Entry: Traffic Stream
» Results: Traffic Stream
» Results: Link
» Data Entry: Signal Timings
» Traffic Stream Results
» Network Results
» Point to Point Journey Time

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

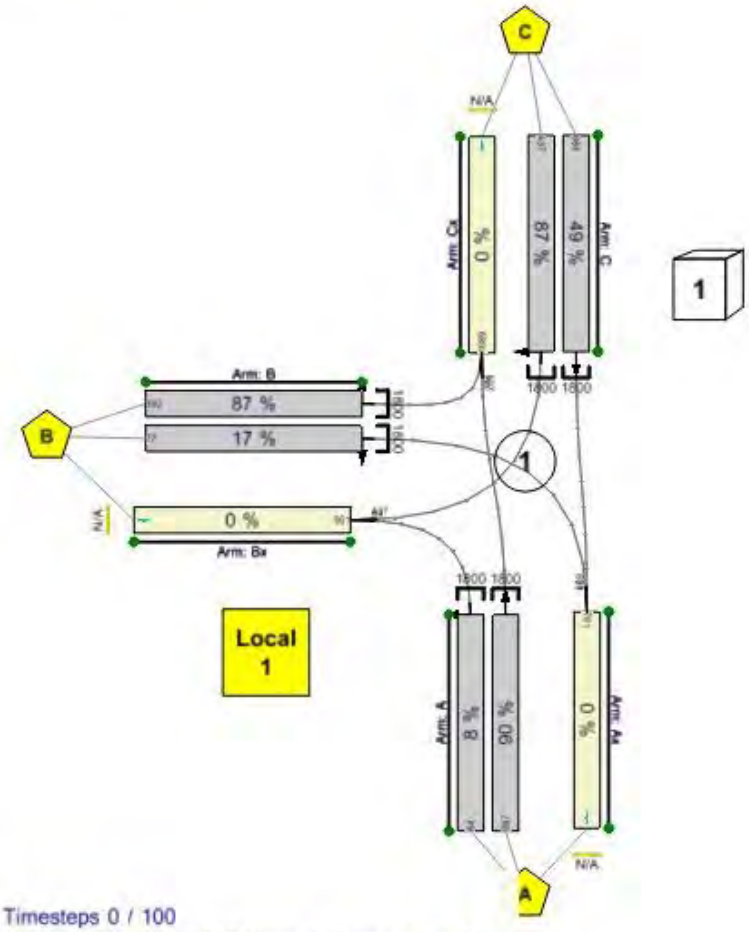
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018-Bac-PM *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	27/01/2014 17:01:14	27/01/2014 17:01:14	17:00	100	24.04	90.05	A/2	1	11	A/2	Cx/1	A/2	

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018-Bac-PM				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		

Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
A	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
A	2	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-	NetworkDefault	0.50

C	2	Default	35	80	0.00	0	0	NetworkDefault	Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	64	64	0	0	100	1.00
A	2	697	697	0	0	100	1.00
B	1	392	392	0	0	100	1.00
B	2	77	77	0	0	100	1.00
C	1	684	684	0	0	100	1.00
C	2	437	437	0	0	100	1.00
Ax	1	761	761	0	0	100	1.00
Bx	1	501	501	0	0	100	1.00
Cx	1	1089	1089	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
A	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	77	77	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	684	684	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	64	64	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	437	437	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	B/1	392	392	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Cx	1	2	TrafficStream	A/2	697	697	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	64	697
	B	77	0	392
	C	684	437	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	761	761	0	0	761	761	0	0
1	B	(untitled)	B/1,B/2	Bx/1	469	469	0	0	501	501	0	0
1	C	(untitled)	C/1,C/2	Cx/1	1121	1121	0	0	1089	1089	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		C/1,Ax/1	684
1	2		C/2,Bx/1	437
1	3		A/1,Bx/1	64
1	4		A/2,Cx/1	697
1	5		B/1,Cx/1	392
1	6		B/2,Ax/1	77

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	684
1	2	✓	Normal	N/A	N/A	437
1	3	✓	Normal	N/A	N/A	64
1	4	✓	Normal	N/A	N/A	697
1	5	✓	Normal	N/A	N/A	392
1	6	✓	Normal	N/A	N/A	77

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,C	1
1	2	D	1
1	3	B,C	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	43,67,94		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,C	1	43	42	1	7
1	2	✓	2	D	43	67	24	1	7
1	3	✓	3	B,C	67	94	27	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	1	43	42
1	B	1	✓	67	94	27
1	C	1	✓	67	43	76
1	D	1	✓	43	67	24

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

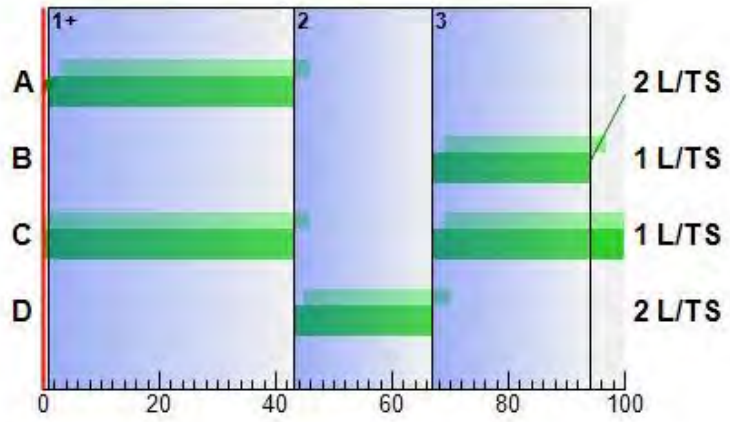
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

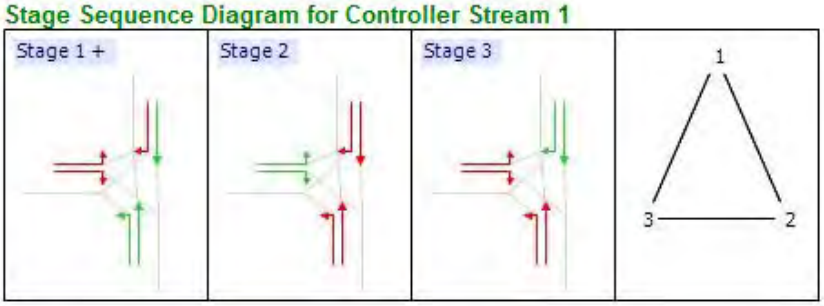
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	94	7	14
1	2	✓	2	D	43	0	7
1	3	✓	3	B,C	67	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	94	7	14
1	2	✓	2	D	43	0	7
1	3	✓	3	B,C	67	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	3	2	0	0
1	D	1	2	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	94	43	67

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	1	43	42									
A	2	1	1	A	0	1	43	42									
B	1	1	1	D	0	43	67	24									
B	2	1	1	D	0	43	67	24									
C	1	1	1	C	0	67	43	76									
C	2	1	1	B	0	67	94	27									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
17:00-18:00	A	1	(untitled)	A	N/A	64	1800	42.00	0.00	774	8	988	1.05	1.02	17.07
17:00-18:00	A	2	(untitled)	A	N/A	697	1800	42.00	0.00	774	90	0	21.46	14.68	45.34
17:00-18:00	B	1	(untitled)	D	N/A	392	1800	24.00	0.00	450	87	3	12.97	10.79	60.09
17:00-18:00	B	2	(untitled)	D	N/A	77	1800	24.00	0.00	450	17	426	1.69	1.62	30.23
17:00-18:00	C	1	(untitled)	C	N/A	684	1800	76.00	0.00	1386	49	82	7.27	4.61	5.53
17:00-18:00	C	2	(untitled)	B	N/A	437	1800	27.00	0.00	504	87	4	14.10	11.31	55.36
17:00-18:00	Ax	1	(untitled)	N/A	N/A	761	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Bx	1	(untitled)	N/A	N/A	501	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Cx	1	(untitled)	N/A	N/A	1089	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	1	43	42	7	0	0
1	B	1	67	94	27	7	0	0
1	C	1	67	43	76	7	0	0
1	D	1	43	67	24	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
17:00-18:00	A	1	64	64	0		1800	774	8		988	42.00	43.00	0
17:00-18:00	A	2	697	697	0		1800	774	90	✓	0	42.00	43.00	0
17:00-18:00	B	1	392	392	0		1800	450	87		3	24.00	25.00	0
17:00-18:00	B	2	77	77	0		1800	450	17		426	24.00	25.00	0
17:00-18:00	C	1	684	684	0		1800	1386	49		82	76.00	77.00	0
17:00-18:00	C	2	437	437	0		1800	504	87		4	27.00	28.00	0
17:00-18:00	Ax	1	761	761	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Bx	1	501	501	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Cx	1	1089	1089	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	A	1	6.96	B	17.07	0.30	0.00	4.31	4.31	57.81	36.87	0.13	0.46	0.46
17:00-18:00	A	2	12.00	D	45.34	5.13	3.65	124.65	124.65	108.16	628.60	125.26	9.45	9.45
17:00-18:00	B	1	12.00	E	60.09	3.92	2.63	92.91	92.91	116.35	366.98	89.10	5.72	5.72
17:00-18:00	B	2	1.00	C	30.23	0.63	0.02	9.18	9.18	77.69	59.19	0.63	0.69	0.69
17:00-18:00	C	1	12.00	A	5.53	0.81	0.24	14.92	14.92	35.58	234.77	8.61	3.05	3.05

17:00-18:00	C	2	12.00	E	55.36	4.16	2.57	95.43	95.43	112.83	405.41	87.64	6.18	6.18
17:00-18:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	A	1	0.00	1.05	10.09	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	
17:00-18:00	A	2	0.00	21.46	17.39	0.45	0.00	0.00	3.65	14.68	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	12.97	17.39	0.00	0.00	0.00	2.63	10.79	0.00	0.00	0.00	
17:00-18:00	B	2	0.00	1.69	1.39	0.02	0.00	0.00	0.02	1.62	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	7.27	17.39	0.00	0.00	0.00	0.24	4.61	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	14.10	17.39	0.00	0.00	0.00	2.57	11.31	0.00	0.00	0.00	
17:00-18:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	3.71	0.43	8.69	24.03
17:00-18:00	A	2	69.70	11.10	6.28	57.34
17:00-18:00	B	1	39.20	7.85	4.99	72.09
17:00-18:00	B	2	0.62	0.67	0.92	31.23
17:00-18:00	C	1	68.40	3.33	20.54	17.53
17:00-18:00	C	2	43.70	8.18	5.34	67.36
17:00-18:00	Ax	1	76.10	2.54	30.00	12.00
17:00-18:00	Bx	1	50.10	1.67	30.00	12.00
17:00-18:00	Cx	1	108.90	3.63	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
17:00-18:00	A1 - (untitled)	27/01/2014 17:01:14	27/01/2014 17:01:14	17:00	100	24.04	90.05	A/2	1	11	A/2	Cx/1	A/2

Network Results: Summary

	Calculated

Time Segment	Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
17:00-18:00	4702	4702	0		0	0	90	✓	0	535.00	541.00	0.00	366.96	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	11.75	D	18.41	14.94	9.10	341.40	341.40	43.45	1731.82	311.37	25.56	25.56

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	0.00	0.00	133.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	460.43	39.39	11.69	30.16

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	36.03	69.34
	B	43.23	0.00	84.09
	C	29.53	79.36	0.00

Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	29.53	29.53	0.00	0.00
2	79.36	79.36	0.00	0.00
3	36.03	36.03	0.00	0.00
4	69.34	69.34	0.00	0.00
5	84.09	84.09	0.00	0.00
6	43.23	43.23	0.00	0.00

TRANSYT 14

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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

Last run: 28/01/2014 08:21:28
Analysis Set used for last run: A1 - (untitled)

Filename: J4 Lutterworth_Middleton-PM-Back+Dev.t14
Path: S:\JPP\JPP Schemes R\R6711PP - Glen Parva\Reports\TA\Jct Analysis
Report generation date: 28/01/2014 08:22:24

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File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\MartinA
Description	

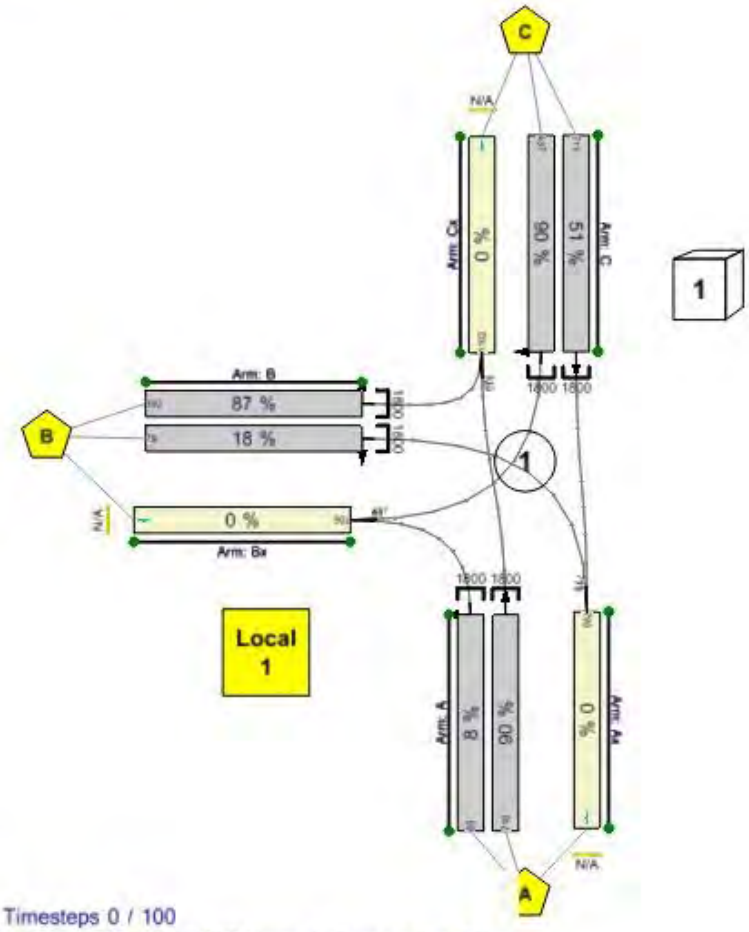
Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

Network Diagrams



(untitled)
Cycletime 0s / 100s , Timesteps 0 / 100
Diagram produced using TRANSYT 14.1.2.315 Network Construction Editor

A1 - (untitled) : D1 - 2018-Back+Dev-PM *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC	Network Within Capacity
A1 - (untitled)	28/01/2014 08:21:28	28/01/2014 08:21:28	17:00	100	24.93	89.92	C/2	0	0	C/2	Cx/1	C/2	✓

Analysis Set Details

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
2018-Back+Dev-PM				17:00	

Network Options

Network Timings

Network Cycle Time (s)	Resolution	Number Of Steps	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
100	1	100	60	1	60

Signals Options

Equal Length Multiple Cycling	Start Displacement (s)	End Displacement (s)	Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
✓	2	3	10000.00	10000.00	10000.00

Traffic Options

Traffic Model	DOS Threshold (%)	Flow Scaling Factor (%)	Cruise Scaling Factor (%)	Cruise Times Or Speeds	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)
Quick PDM	90	100	100	Cruise Speeds	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level	Hill Climb Increments	Use Enhanced Optimisation	Optimisation Order	Locked Green Splits	Full Simulation
✓	Hill Climb (Fast)	Offsets And Green Splits	15,40,-1,15,40,1,-1,1		1		

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic Node
A	(untitled)		1
B	(untitled)		1
C	(untitled)		1
Ax	(untitled)		
Bx	(untitled)		

Cx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Traffic Type
A	1	(untitled)		58.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
A	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	A			Normal
B	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
B	2	(untitled)		8.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	D			Normal
C	1	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	C			Normal
C	2	(untitled)		100.00	[QuickPDM]	✓	SumOfLanes	1800	✓	1	B			Normal
Ax	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Bx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal
Cx	1	(untitled)		100.00	[QuickPDM]		N/A	N/A		N/A	N/A			Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation Flow (PCU/hr)
A	1	1	(untitled)			1800
A	2	1	(untitled)			1800
B	1	1	(untitled)			1800
B	2	1	(untitled)			1800
C	1	1	(untitled)			1800
C	2	1	(untitled)			1800
Ax	1	1	(untitled)			1800
Bx	1	1	(untitled)			1800
Cx	1	1	(untitled)			1800

Modelling

Arm	Traffic Stream	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
A	1	100	100		0.00		
A	2	100	100		0.00		
B	1	100	100		0.00		
B	2	100	100		0.00		
C	1	100	100		0.00		
C	2	100	100		0.00		
Ax	1	100	100		0.00		
Bx	1	100	100		0.00		
Cx	1	100	100		0.00		

Modelling - Advanced

Arm	Traffic Stream	Normal Dispersal Type	Normal Dispersal Coefficient	Normal Travel Time Coefficient	Initial Queue (PCU)	Point1 Time Step (s)	Point2 Time Step (s)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter
A	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
A	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
B	2	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
C	2	Default	35	80	0.00	0	0	NetworkDefault	Not-	NetworkDefault	0.50

C	2	Default	35	80	0.00	0	0	NetworkDefault	Included	NetworkDefault	0.50
Ax	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Bx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50
Cx	1	Default	35	80	0.00	0	0	NetworkDefault	Not-Included	NetworkDefault	0.50

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)	Cruise Sensitivity Multiplier (%)	Calculated Cruise Speed (kph)
A	1	65	65	0	0	100	1.00
A	2	710	710	0	0	100	1.00
B	1	392	392	0	0	100	1.00
B	2	79	79	0	0	100	1.00
C	1	711	711	0	0	100	1.00
C	2	437	437	0	0	100	1.00
Ax	1	790	790	0	0	100	1.00
Bx	1	502	502	0	0	100	1.00
Cx	1	1102	1102	0	0	100	1.00

Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
A	1	100	100
A	2	100	100
B	1	100	100
B	2	100	100
C	1	100	100
C	2	100	100
Ax	1	100	100
Bx	1	100	100
Cx	1	100	100

Sources - default sources for entries

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
A	1	6.96	30.00	Buses Not Permittted	Trams Not Permitted
A	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
B	2	1.00	30.00	Buses Not Permittted	Trams Not Permitted
C	1	12.00	30.00	Buses Not Permittted	Trams Not Permitted
C	2	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Sources - sources for internals

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Source Total Flow (PCU/hr)	Source Normal Flow (PCU/hr)	Source Bus Flow (PCU/hr)	Source Tram Flow (PCU/hr)	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)
Ax	1	1	TrafficStream	B/2	79	79	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Ax	1	2	TrafficStream	C/1	711	711	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	1	TrafficStream	A/1	65	65	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Bx	1	2	TrafficStream	C/2	437	437	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted
Cx	1	1	TrafficStream	B/1	392	392	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Cx	1	2	TrafficStream	A/2	710	710	0	0	12.00	30.00	Buses Not Permittted	Trams Not Permitted

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		A	B	C
From	A	0	65	710
	B	79	0	392
	C	711	437	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	A	(untitled)	A/1,A/2	Ax/1	775	775	0	0	790	790	0	0
1	B	(untitled)	B/1,B/2	Bx/1	471	471	0	0	502	502	0	0
1	C	(untitled)	C/1,C/2	Cx/1	1148	1148	0	0	1102	1102	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		C/1,Ax/1	711
1	2		C/2,Bx/1	437
1	3		A/1,Bx/1	65
1	4		A/2,Cx/1	710
1	5		B/1,Cx/1	392
1	6		B/2,Ax/1	79

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal	N/A	N/A	711
1	2	✓	Normal	N/A	N/A	437
1	3	✓	Normal	N/A	N/A	65
1	4	✓	Normal	N/A	N/A	710
1	5	✓	Normal	N/A	N/A	392
1	6	✓	Normal	N/A	N/A	79

Signal Timings

100s cycle time; 100 steps

Controller Stream

Controller Stream	Name	Description	Gaining Delay Type	Signals Manipulation Mode	Multiple Cycling	Offset Relative To	Offset Valid	Offset Positive (s)	Offset Negative (s)	Auto Redistribute	Optimisation Level	Use Sequence
1	(untitled)		Absolute	StageBased	Single	1	✓	0	0	✓	Offsets And Green Splits	1

Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Dummy
1	A	(untitled)	7	300	0	0	
1	B	(untitled)	7	300	0	0	
1	C	(untitled)	7	300	0	0	
1	D	(untitled)	7	300	0	0	

Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A,C	1
1	2	D	1
1	3	B,C	1

Stage Sequences

Controller Stream	Stage Sequence	Name	Stage IDs	Stage Ends	Multiple Cycling Stage IDs	Multiple Cycling Stage Ends
1	1	(untitled)	1,2,3	44,68,94		

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A,C	1	44	43	1	7
1	2	✓	2	D	44	68	24	1	7
1	3	✓	3	B,C	68	94	26	1	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	1	44	43
1	B	1	✓	68	94	26
1	C	1	✓	68	44	76
1	D	1	✓	44	68	24

Intergreen Matrix for Controller Stream 1

		To			
		A	B	C	D
From	A	-	7		
	B	7	-		
	C			-	
	D				-

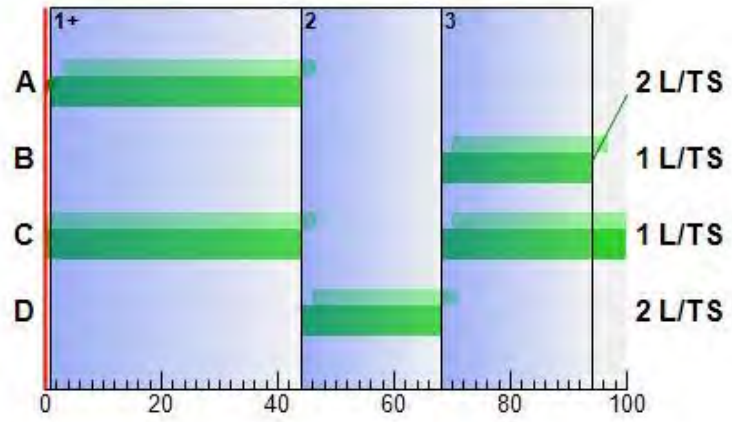
Interstage Matrix for Controller Stream 1

		To		
		1	2	3
From	1	-	0	7
	2	0	-	0
	3	7	0	-

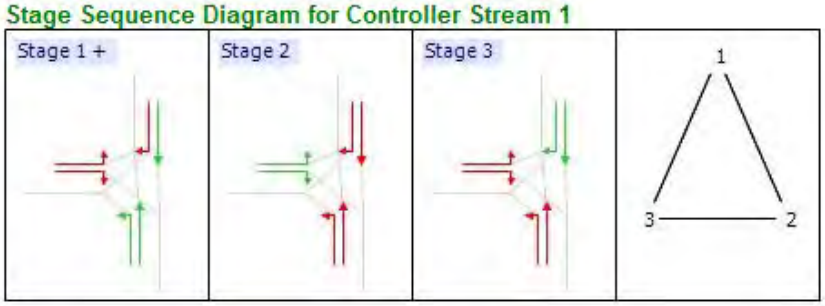
Banned Stage transitions for Controller Stream 1

		To		
		1	2	3
From	1	-		
	2		-	
	3			-

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	94	7	14
1	2	✓	2	D	44	0	7
1	3	✓	3	B,C	68	0	7

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	A,C	94	7	14
1	2	✓	2	D	44	0	7
1	3	✓	3	B,C	68	0	7

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	A	1	1	2	7	0
1	B	1	3	1	0	0
1	C	1	3	2	0	0
1	D	1	2	3	0	0

Stage Timings (TRANSYT 12 timings)

100s cycle time; 100 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3
1	3	94	44	68

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
						Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
A	1	1	1	A	0	1	44	43									
A	2	1	1	A	0	1	44	43									
B	1	1	1	D	0	44	68	24									
B	2	1	1	D	0	44	68	24									
C	1	1	1	C	0	68	44	76									
C	2	1	1	B	0	68	94	26									

Data Entry: Traffic Stream

Traffic Stream

Arm	Traffic Stream	Length (m)	Max Queue Storage (PCU)	Normal Cruise Speed (kph)	Traffic Model	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Delay Weighting (%)	Stop Weighting (%)
A	1	58.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
A	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
B	2	8.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	1	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
C	2	100.00	0.00	30.00	[QuickPDM]	✓	SumOfLanes	1800	100	100
Ax	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Bx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100
Cx	1	100.00	0.00	N/A	[QuickPDM]		N/A	N/A	100	100

Results: Traffic Stream

Results: Traffic Stream: Summary

Time Segment	Arm	Traffic Stream	Name	Phase	Phase2	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Mean Delay Per PCU (s)
17:00-18:00	A	1	(untitled)	A	N/A	65	1800	43.00	0.00	792	8	997	1.05	1.01	16.48
17:00-18:00	A	2	(untitled)	A	N/A	710	1800	43.00	0.00	792	90	0	21.65	14.55	43.67
17:00-18:00	B	1	(untitled)	D	N/A	392	1800	24.00	0.00	450	87	3	12.97	10.79	60.09
17:00-18:00	B	2	(untitled)	D	N/A	79	1800	24.00	0.00	450	18	413	1.73	1.66	30.29
17:00-18:00	C	1	(untitled)	C	N/A	711	1800	76.00	0.00	1386	51	75	7.58	4.81	5.74
17:00-18:00	C	2	(untitled)	B	N/A	437	1800	26.00	0.00	486	90	0	15.06	12.27	63.29
17:00-18:00	Ax	1	(untitled)	N/A	N/A	790	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Bx	1	(untitled)	N/A	N/A	502	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00
17:00-18:00	Cx	1	(untitled)	N/A	N/A	1102	Unrestricted	100.00	0.00	Unrestricted	0	Unrestricted	0.00	N/A	0.00

Results: Link

Data Entry: Signal Timings

Green Period

Controller Stream	Phase	Green Period	Start Time (s)	End Time (s)	Duration (s)	Minimum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)
1	A	1	1	44	43	7	0	0
1	B	1	68	94	26	7	0	0
1	C	1	68	44	76	7	0	0
1	D	1	44	68	24	7	0	0

Traffic Stream Results

Traffic Stream Results: Summary

Time Segment	Arm	Traffic Stream	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Co Per (£
17:00-18:00	A	1	65	65	0		1800	792	8		997	43.00	44.00	0
17:00-18:00	A	2	710	710	0		1800	792	90		0	43.00	44.00	0
17:00-18:00	B	1	392	392	0		1800	450	87		3	24.00	25.00	0
17:00-18:00	B	2	79	79	0		1800	450	18		413	24.00	25.00	0
17:00-18:00	C	1	711	711	0		1800	1386	51		75	76.00	77.00	0
17:00-18:00	C	2	437	437	0		1800	486	90		0	26.00	27.00	0
17:00-18:00	Ax	1	790	790	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Bx	1	502	502	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0
17:00-18:00	Cx	1	1102	1102	0		Unrestricted	Unrestricted	0		Unrestricted	100.00	100.00	0

Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	A	1	6.96	B	16.48	0.29	0.00	4.23	4.23	56.79	36.78	0.13	0.46	0.46
17:00-18:00	A	2	12.00	D	43.67	5.11	3.51	122.29	122.29	106.74	637.15	120.74	9.50	9.50
17:00-18:00	B	1	12.00	E	60.09	3.92	2.63	92.91	92.91	116.35	366.98	89.10	5.72	5.72
17:00-18:00	B	2	1.00	C	30.29	0.65	0.02	9.44	9.44	77.72	60.73	0.67	0.71	0.71
17:00-18:00	C	1	12.00	A	5.74	0.86	0.27	16.09	16.09	36.51	249.94	9.67	3.26	3.26

17:00-18:00	C	2	12.00	E	63.29	4.27	3.41	109.09	109.09	120.51	412.07	114.55	6.60	6.60
17:00-18:00	Ax	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx	1	12.00	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	A	1	0.00	1.05	10.09	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.00	
17:00-18:00	A	2	0.00	21.65	17.39	0.48	0.00	0.00	3.51	14.55	0.00	0.00	0.00	
17:00-18:00	B	1	0.00	12.97	17.39	0.00	0.00	0.00	2.63	10.79	0.00	0.00	0.00	
17:00-18:00	B	2	0.00	1.73	1.39	0.03	0.00	0.00	0.02	1.66	0.00	0.00	0.00	
17:00-18:00	C	1	0.00	7.58	17.39	0.00	0.00	0.00	0.27	4.81	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	15.06	17.39	0.00	0.00	0.00	3.41	12.27	0.00	0.00	0.00	
17:00-18:00	Ax	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.00	17.39	0.00	0.00	0.00	N/A	N/A	0.00	0.00	0.00	

Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	A	1	3.77	0.42	8.91	23.44
17:00-18:00	A	2	71.00	10.98	6.47	55.67
17:00-18:00	B	1	39.20	7.85	4.99	72.09
17:00-18:00	B	2	0.63	0.69	0.92	31.29
17:00-18:00	C	1	71.10	3.50	20.30	17.74
17:00-18:00	C	2	43.70	9.14	4.78	75.29
17:00-18:00	Ax	1	79.00	2.63	30.00	12.00
17:00-18:00	Bx	1	50.20	1.67	30.00	12.00
17:00-18:00	Cx	1	110.20	3.67	30.00	12.00

Network Results

Run Summary

Time Segment	Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	LTSWith Worst Signalised PRC	LTSWith Worst Unsignalised PRC	LTSWith Worst Overall PRC
17:00-18:00	A1 - (untitled)	28/01/2014 08:21:28	28/01/2014 08:21:28	17:00	100	24.93	89.92	C/2	0	0	C/2	Cx/1	C/2

Network Results: Summary

	Calculated

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Calculated Flow Out Of LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	P I
17:00-18:00	4788	4788	0		0	0	90		0	536.00	542.00	0.00	380.30	

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	11.75	D	18.75	15.10	9.83	354.05	354.05	43.83	1763.65	334.86	26.25	26.25

Network Results: Queues And Blocking

Time Segment	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	0.00	0.00	133.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	468.80	40.56	11.56	30.50

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To		
		A	B	C
From	A	0.00	35.44	67.67
	B	43.29	0.00	84.09
	C	29.74	87.29	0.00

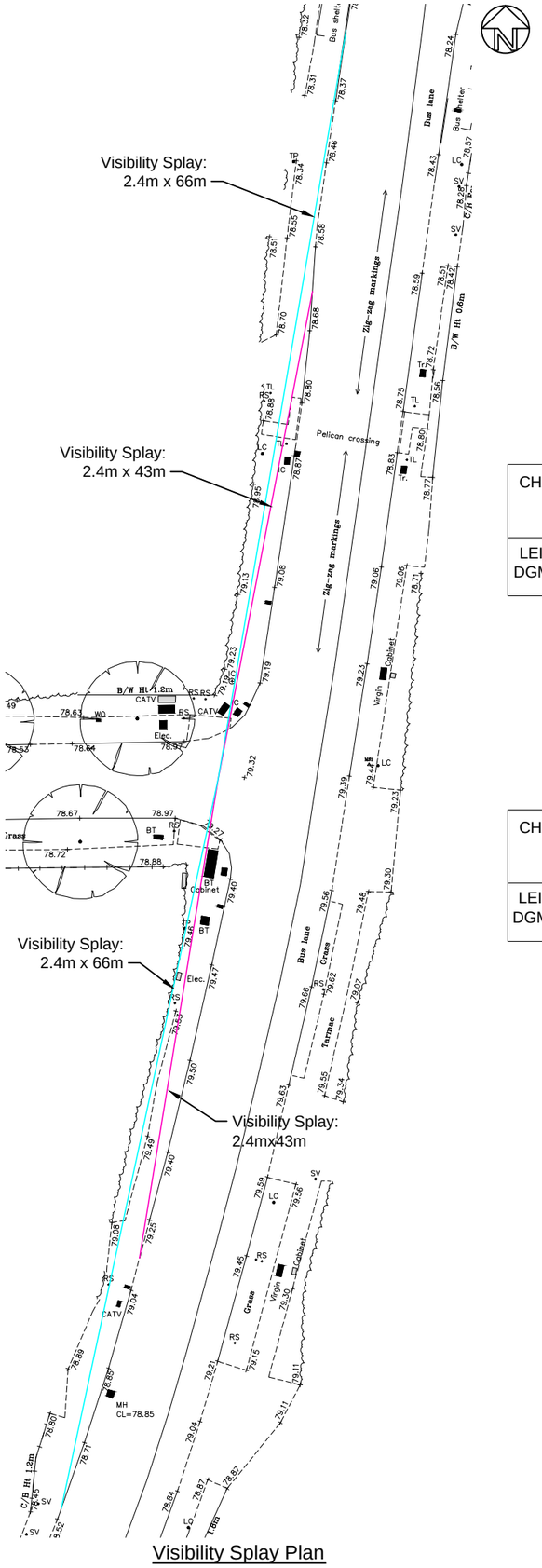
Path Journey Time

Path	Avg Journey Time (s)	Normal Journey Time (s)	Bus Journey Time (s)	Tram Journey Time (s)
1	29.74	29.74	0.00	0.00
2	87.29	87.29	0.00	0.00
3	35.44	35.44	0.00	0.00
4	67.67	67.67	0.00	0.00
5	84.09	84.09	0.00	0.00
6	43.29	43.29	0.00	0.00

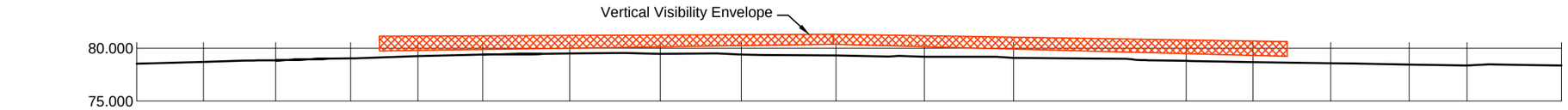
Appendix P

Visibility Splays: Glenville Avenue

JPP drawing no. R6711PP-TA06

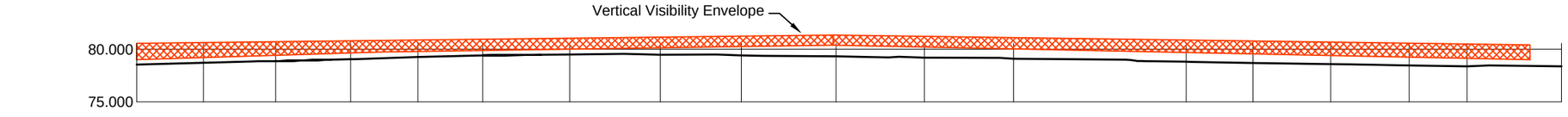


Visibility Splay Plan



CHAINAGE	100.000	105.000	110.000	115.000	120.000	125.000	130.000	135.000	140.000	145.000	150.000	155.000	160.000	165.000	170.000	175.000	180.000	185.000	190.000	195.000	200.000	205.000	210.000	215.000	220.000	225.000	230.000	235.000
LEIC ROAD DGM LEVEL	78.536	78.671	78.812	**78.907**	79.031	79.194	79.334	**79.429**	79.486	79.535	79.470	79.495	79.350	79.328	79.237	79.191	79.182	79.066	79.028	78.878	78.788	78.693	78.619	78.547	78.464	78.388	78.430	78.366

Visibility Splay Long Section 2.4m x 44m



CHAINAGE	100.000	105.000	110.000	115.000	120.000	125.000	130.000	135.000	140.000	145.000	150.000	155.000	160.000	165.000	170.000	175.000	180.000	185.000	190.000	195.000	200.000	205.000	210.000	215.000	220.000	225.000	230.000	235.000
LEIC ROAD DGM LEVEL	78.536	78.671	78.812	**78.907**	79.031	79.194	79.334	**79.429**	79.486	79.535	79.470	79.495	79.350	79.328	79.237	79.191	79.182	79.066	79.028	78.878	78.788	78.693	78.619	78.547	78.464	78.388	78.430	78.366

Visibility Splay Long Section 2.4m x 66m

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Client Manor Oak Homes

Project Residential Development
Glen Parva, Leicester

Title Visibility Splays:
Glenville Avenue

Scale at A3	1:500	Drawn by	MJA	Checked by		Date	04/02/2014
Status				Project ref	R6711PP	Drawing no.	TA06
						Revision	