Barratt Homes

PROPOSED RESIDENTIAL DEVELOPMENT, HIGGINS BROOK, EAST OF CHIPPING LANE, LONGRIDGE

Transport Assessment

VN30277

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1 INTRODUCTION

1.1 Introduction

1.1.1 Vectos have been instructed by Barratt Homes to advise on the traffic and transportation aspects of proposals for a residential development on land to the north of Longridge and the east of Chipping Lane known as Higgins Brook.

1.1.2 A full application has been previously submitted for part of the site consisting of 106 dwellings and this site is known as Bowland Meadows which is directly to the east of Chipping Lane, following comments from Lancashire County Council (LCC) and Ribble Valley Borough Council (RVBC) the scheme has been amended and now provides around 80 dwellings. This outline application will cover the whole site and consist of a proposed residential scheme of up to 363 dwellings, relocation of Longridge Cricket Club and a new primary school.

1.1.3 It should be noted that the outline scheme originally submitted provided some 520 dwellings and again following ongoing discussions with LCC and RVBC the outline scheme has been revised to provide 363 dwelling, a reduction of around 30%. Highway comments were provided based on the larger scheme and the applicable comments have been incorporated in to this revised Transport Assessment (TA) considering 363 dwelling.

1.1.4 The location of the application site in relation to the wider area is shown in **Plan 1** while **Plan 2** shows the location of the site in a more local context.

1.1.5 The report provides information on the traffic and transport planning aspects of the development proposals and will form supplementary information to assist in the determination of an outline planning application.

1.2 Scope of Report

1.2.1 Following this introduction the report will consider the development site and its location in Section 2. Section 3 of the report provides details of the development proposals and Section 4 considers the accessibility of the site by non-car modes.

1.2.2 Section 5 presents the traffic impact assessment, Section 6 provides details of the site layout and the conclusions are then drawn together in Section 7.

2 DEVELOPMENT SITE AND IT'S LOCATION

2.1 Development Site and Its Location

2.1.1 The development site is located directly to the north of Longridge and the site is currently used as agricultural land and the site is characterised by fields formed mainly by hedgerows with trees scattered long the hedgerows.

2.1.2 Vehicular access is currently afforded off Chipping Lane in the form of an iron gate leading in to the site.

2.1.3 The existing site is currently bounded to the east by Willows Park Lane, an existing residential development to the south, Chipping Lane to the west and open fields to the north.

2.1.4 Longridge is located 12.9 kilometres (8 miles) north-east of Preston, 14.5 kilometres (9 miles) south-west of Clitheroe and about 12.1 kilometres (7.5 miles) north-west of Blackburn.

2.1.5 The M55 to Blackpool, the M61 to Manchester and the M65 to Blackburn, Accrington and Burnley are all directly accessible from the M6 or adjoining main road networks. These major road connections make Longridge highly accessible to the wider region.

2.2 Access

2.2.1 As part of the development scheme it is proposed to provide the main vehicular site access junction from Chipping Lane. A 30mph speed restriction is currently in force along Chipping Lane and this then changes to national speed limit approximately 110 metres from Inglewhite Road. As part of the site access arrangement it is proposed to extend the 30 mph speed limit to the north of the existing cricket club. It is also proposed to provide a right turning ghost-island for access to the proposed site. The proposed site access arrangement can be seen on **Plan 3** and the proposed gateway feature along Chipping Lane has been identified on **Plan 4**. The gateway feature will consist of appropriate signage informing drivers that they are entering Longridge village with the speed limit being 30mph; this will also include appropriate traffic calming on the approach in to Longridge to reduce drivers' speeds.

2.2.2 There will also be a secondary residential access provided off Chipping Lane to the north of the main site access junction, this will provide access to a small area of residential units to the northern corner of the site, but also link through to the main internal spine road. The existing Longridge Cricket Club access point to the northern end of Chipping Lane will be maintained at the same location with the internal road alignment being amended to provide access to the new cricket club car parking area.

2.2.3 New footways will be provided along the site frontage connecting the internal site footway network to the existing off-site footway network. The footways along the site frontage will be provided at a width of 3 metres which will then be able to cater for both pedestrian and cyclists.

2.3 Accident Data

2.3.1 An accident investigation has been undertaken and covers the last five years within the vicinity of the site. Lancashire Constabulary has provided this information for the period between 22/11/2008 to 19/08/2013 and the full accident data has been included within **Appendix 1**.

2.3.2 In summary, there have been a total of 30 road traffic accidents that have occurred in the last five years within the search area with 26 having a slight severity, 4 having a serious severity and no fatalities. The following section summarises the accidents at the key junctions within Longridge.

Inglewhite Road/Chipping Lane

2.3.3 There has been a total of one accident at this junction and this had a slight severity, this accident involved two vehicles with an overtaking vehicle colliding with a 'U' turning vehicle.

Inglewhite Road/Halfpenny Lane

2.3.4 No accidents have occurred at this junction within the last five years.

Inglewhite Road/Berry Lane

2.3.5 At this mini-roundabout junction there has been only one accident that has occurred within the last five years and this had a slight severity. This accident involved two vehicles colliding on the roundabout due to bad weather and poor visibility.

Stonebridge Roundabout

2.3.6 At the existing mini-roundabout with Preston Road/Derby Road/Whittingham Road/Kestor Lane there have been a total of two accidents that have occurred over the last five years both of which had a slight severity.

2.3.7 The first accident involved a car and a motorcycle colliding on the roundabout and the second accident also involved a collision of the roundabout but this involved a car and a motorcycle.

Preston Road/Chapel Hill

2.3.8 At the existing mini-roundabout with Preston Road and Chapel Hill there has been a total of four accidents that have occurred within the five year period, all accidents had a slight severity.

2.3.9 Two of the accidents involved two cars colliding on the roundabout junction, one accident involved a vehicle losing control and colliding with a hedge due to a vehicle malfunction. The fourth accident involved a car colliding with a cyclist on the roundabout due to their vision being impaired by the sun.

Berry Lane/Calder Avenue

2.3.10 No accidents have occurred at this junction within the last five years.

Whittingham Road/Halfpenny Lane

2.3.11 At the priority controlled junction with Whittingham Road and Halfpenny Lane there has been a total of two accidents that have occurred at this junction within the last five years, both of these accidents had a severity of slight.

2.3.12 The first accident involved a refuse operative loading to the rear of the refuse vehicle when a vehicle to the rear struck the operative and stated that there foot slipped off the brake. The second accident occurred when a vehicle over ran the give way line and another vehicle travelling along Whittingham Road had the swerve to avoid vehicle and then collided with a lamp post.

Accident Summary

2.3.13 The remaining accidents area scattered around Longridge with no clusters of accidents at one location or evidence of a particular reoccurring accident problem at any one location.

2.3.14 As such, it is concluded that there are no existing highway or safety issues currently present within the vicinity of the site in Longridge.

3 DEVELOPMENT PROPOSALS

3.1.1 The development proposals for this outline planning application will consist of up to 363 residential units, including affordable housing and housing for the elderly, relocation of Longridge Cricket Club to provide new cricket ground, pavilion, car park and associated facilities, new primary school, vehicular and pedestrian accesses, landscaping and public open space at Land at Higgins Brook, East of Chipping Lane, Longridge.

3.1.2 It should be noted that the original outline application included some 520 dwellings, the scheme has now been revised following comments and feedback from LCC and RVBC and the new scheme results in around 30% fewer dwellings.

3.1.3 The proposed development masterplan can be seen on **Plan 5**.

3.1.4 The main vehicular access will be provided off Chipping Lane via a new priority controlled junction along with a right turn ghost-island facility. Pedestrian and cycle access will be provided for from Chipping Lane with a new footway provided along the site frontage. The footway adjacent to the junction with Inglewhite Road and Chipping Lane will be set back in order to improve forward visibility around the bend. A pedestrian connection from the site to the bus stops along Chipping Lane will also be provided.

3.1.5 It is also proposed to extend the 30mph speed limit along Chipping Lane to the north of the site, with the 30mph speed limit coming in to force to the north side of the existing cricket club along Chipping Lane. It is also proposed to provide two refuge islands within the proposed ghost island to prevent overtaking manoeuvres at this location and improve highway safety and junction visibility splays of 2.4 metres x 43 metres from the proposed site access.

3.1.6 In addition to the main vehicular access off Chipping Lane a secondary vehicular access will also be provided to the north of the main site access junction. The existing priority controlled access to the cricket club will also be maintained with amendment to the internal road alignment which will provide access to the new cricket club car parking area.

3.1.7 The proposed site access arrangements can be seen on **Plan 3**.

3.1.8 In addition to the internal network of pedestrian facilities, given that this site essentially forms an extension to the residential provision to the north of Longridge the proposed site will provide connections at the following points:

- Pedestrian/cycle connections at the site access junctions off Chipping Lane.
- Pedestrian/cycle connection on to Chipping Lane connecting to the existing bus stops.
- Direct pedestrian/cycle connection from the site to the existing Sainsbury's food store, this route will be 3 metres wide along with appropriate lighting.
- Pedestrian/cycle connection to Thornfield Avenue.
- Two pedestrian/cycle connections to Redwood Drive.
- Pedestrian/cycle connection to Willows Park Lane.

3.1.9 An email has been attached within **Appendix 2** which confirms Sainsbury's in-principle agreement to the pedestrian link from the site to the existing foodstore.

3.1.10 In addition to the sites pedestrian connections to the surrounding area the internal pedestrian route around the northern area of the site has been designed to connect to the aspirations of the Longridge Loop. Details of this can be seen within **Appendix 3**.

3.1.11 The proposed improvements/ connections to the nearby bus stops are provided as **Plan 6**.

3.1.12 The proposed site access arrangements in detail can be seen on **Plan 3** with the proposed gateway feature along Chipping Lane identified on **Plan 4**. **Plan 5** identifies the proposed site layout.

3.1.13 **Plan 6** identifies the sites pedestrian access points which link the site to the surrounding areas of Longridge.

3.1.14 The proposed improvements/ connections to the nearby bus stops are provided as **Plan 7**.

4 ACCESS BY A CHOICE OF MODE OF TRANSPORT

4.1 Introduction

4.1.1 New proposals should attempt to influence the mode of travel to the development in terms of gaining a shift in modal split towards non-car modes.

4.1.2 The accessibility of the proposed development by the following modes of transport has, therefore been considered:

- Accessibility on foot.
- Accessibility by cycle.
- Accessibility by bus.

4.2 Accessibility Questionnaire

4.2.1 As requested the Lancashire County Council residential development accessibility questionnaire has been completed and included as part of this application. The score for this outline application site was awarded a medium level of accessibility. The completed Accessibility questionnaire is provided in **Appendix 4** of this report.

4.3 Accessibility on Foot

4.3.1 As previously stated, pedestrian access to the proposed site will be afforded from numerous locations around the site. Pedestrian facilities will be provided throughout the site along with numerous connections to the surrounding highway network. To clarify, these connections are identified on **Plan 7** and are as follows:

- Pedestrian/cycle connections at the site access junctions off Chipping Lane.
- Pedestrian/cycle connection on to Chipping Lane connecting to the existing bus stops.
- Direct pedestrian/cycle connection from the site to the existing Sainsbury's food store.
- Pedestrian/cycle connection to Thornfield Avenue.
- Two pedestrian/cycle connections to Redwood Drive.

- Pedestrian/cycle connection to Willows Park Lane.

4.3.2 The closest bus route is located to the south of the proposed site access junction adjacent to the existing Alston Arms Public House. As part of the development proposals a footpath connection to this location from the site will be provided. The bus stop for services heading in to Longridge town centre will be upgraded to quality bus standards and the bus stop for services heading north out of Longridge will be upgraded by providing an area of footway which will replace the verge area where the existing bus stop is located. The proposed improvements to the bus stop facilities along Chipping Lane have been identified on **Plan 7**.

4.3.3 There are existing bus stops located along Chipping Lane, Inglewhite Road and Calder Lane which are identified on **Plan 8**. In addition, the local amenities are identified on **Plan 9**. This plan demonstrates that the site is located in an accessible and sustainable location with a wide range of local amenities available within a short walk from the proposed site. These facilities include local schools, health care facilities, two supermarkets and a wide range of local shops location with the centre of Longridge.

4.3.4 At the request of LCC an accessibility distance to local amenities table has been completed, this table details walk distances to local amenities including, health, education, faith organisations and retail facilities. This table has been completed and included within **Appendix 5**.

4.3.5 Guidelines produced by the Institute of Highways of Transportation (IHT) within their document entitled 'Guidelines for Providing for Journeys on Foot' state that the preferred maximum walking distance for developments in Town Centres is 800 metres.

4.3.6 A distance of 2,000 metres has also been derived from the Institution of Highways and Transportation (IHT) document entitled 'Guidelines for Providing for Journeys on Foot' as a 'preferred maximum' distance for commuting, school and sight-seeing journeys.

4.3.7 In this regard an analysis of the Baseline pedestrian catchment area has been completed. This has been undertaken to illustrate the site's 800 metre and 2 kilometre walking catchment, this is illustrated in **Plan 10**. Given that the development covers such a large area, the pedestrian catchments have been taken from the centre of the site.

4.3.8 With reference to **Plan 10**, it can be seen that the 800m catchment covers the local primary school along with the facilities located within the town centre of Longridge as well as Sainsbury's and Booths supermarkets.

4.3.9 It should also be noted that as part of this residential scheme there will also be the provision of a new primary school which will provide approximately 210 school places. This will cater for the whole residential site which is likely to require in the region of 190 school places, with all properties being within a 400 metre walking distance or less. This will reduce the need to travel to/from the site to surrounding schools and reduce the number of trips arriving and departing during the peak periods.

4.3.10 The 2 kilometre pedestrian catchment encompasses the majority of Longridge and includes the local high school/college along with other facilities such as, dentists, doctors, employment areas, two supermarkets and the majority of the town local retail facilities.

4.3.11 The close proximity of the amenities in Longridge centre also provides an excellent opportunity for linked walking trips for a variety of purposes to be undertaken between the development site and town centre.

4.3.12 It has been demonstrated that the site's walking catchment covers residential, retail, education and employment areas, as well as public transport amenities, and that there is excellent pedestrian infrastructure in the vicinity of the site to serve these links for pedestrians. The provision of the proposed school on site will encourage pedestrian/cycle trips within the site and ultimately reduce car borne trips to/from the site during the peak hour periods.

4.4 Accessibility by Cycle

4.4.1 Cycling has the potential to replace short car journeys, particularly those under 5 kilometres. The proposed layout will be designed to provide numerous connections to the existing infrastructure surrounding the site in order to encourage travel by cycle.

4.4.2 **Plan 11** displays a 5 kilometre cycle catchment from the site. This would equate to a journey of around 25 minutes using a leisurely cycle speed of 12 kilometres per hour.

4.4.3 As can be seen from **Plan 11** the 5 kilometre cycle catchment encompasses the whole of Longridge as well as areas surrounding such as Whittingham, Grimsargh and Knowle Green.

4.4.4 As such, the site can be considered as being accessible by cycle.

4.5 Accessibility by Bus

4.5.1 When considering how accessible a site is to bus services it is generally accepted that 400 metres is a suitable walking distance to a bus stop. This distance has been taken from the IHT Guidelines on Planning for Public Transport for Development.

4.5.2 Existing bus routes are located along Chipping Lane, Inglewhite Road and Calder Avenue, within 400 metres of the site, there are also bus services provided along Berry Lane which are slightly beyond 400 metres but still offer a realistic opportunity for public transport access. The bus stop locations and bus routes within Longridge are identified on **Plan 8**.

4.5.3 Table 4.1 provides a summary of the bus services and frequencies that operate within 400 metres of the site.

Serv.	Route	Frequency/Hour					
		Mon-Fri				Sat	Sun
		AM Peak	Mid day	PM Peak	Eve.		
5	Chipping-Longridge-Ribchester-Whalley-Clitheroe	1	0.5	1	1 service	0.5	0
5A	Chipping-Longridge-Ribchester-Whalley-Clitheroe	1	0	0	0.5	0.5 eve.	0
35	Chipping-Longridge-Ribchester-Blackburn	1	0.5	0	0.5	0.5	0

Table 4.1 – Bus Routes and Frequencies in Operation along Chipping Lane

4.5.4 Table 4.2 provides a summary of the bus services that a slight beyond the 400 metre distance within Longridge town centre but these services still offer a realistic opportunity for public transport access.

Serv.	Route	Frequency/Hour					
		Mon-Fri				Sat	Sun
		AM Peak	Mid day	PM Peak	Eve.		
1	Preston-Ribbleton-Red Scar-Grimsargh-Longridge	7	6	6	2	6	2
4	Preston-Fulwood-Whittingham-Longridge	1	1	0	1	1	0

Table 4.2 – Bus Routes and Frequencies in Operation along Berry Lane

4.5.5 As can be seen from Table 4.1, during the busiest peak hours of the day there is a frequency of between 1 and 3 buses per hour in each direction which operate within 400 metres of the site.

4.5.6 Table 4.2 demonstrates that there are 2 additional frequent services operating within Longridge town centre that provide weekday peak hours frequencies of between 6 and 8 buses per hour.

4.5.7 It can be concluded that the site is currently served by bus and can be considered as accessible by bus.

4.6 Multi-Modal Trip Generation

4.6.1 In order to assess the modal split of trips generated by the proposed use the TRICS database was utilised using the "Houses Privately Owned" sub-heading. Trip rates per household were obtained for pedestrians, cyclists and public transport users for the busiest periods of the day. The full TRICS outputs are contained within **Appendix 6**.

4.6.2 The modal split figures for the weekday peak hour for the proposed residential use are shown within Table 4.3 below.

Mode	Trip Rates/Household			Trip Generation		
	Arr	Dep	2-Way	Arr	Dep	2-Way
Pedestrian	0.190	0.068	0.258	69	25	94
Cyclist	0.011	0.026	0.037	4	9	13
PT User	0.035	0.004	0.039	13	1	14

Table 4.3 – Weekday Peak Hour Multi – Modal Trip Generation for Proposed Residential Development (363 Units)

4.6.3 Based on the above, the proportional modal split is shown within Table 4.4.

Mode	Weekday Peak Hour
Pedestrian	77%
Cyclist	11%
Public Transport	12%
Total	100%

Table 4.4 – Proportional Modal Split for Residential Scheme (363 Units)

4.6.4 As can be seen from Tables 4.3 and 4.4 it is forecast that the majority of people would access the site by walking with a smaller percentage cycling and using public transport. As such, it can be concluded that the existing infrastructure can more than adequately cater for the proposed demand by non-car modes.

4.7 Conclusion

4.7.1 An analysis has been completed that studies the accessibility of the site by walking, cycling and public transport and the conclusions are as follows:

- The site is accessible by foot with a network of pedestrian facilities surrounding the site and providing connections to Longridge town centre and all of its associated facilities.
- There are bus services within 400 metres of the site which are located along Chipping Lane/Inglewhite Road and Calder Avenue along with further services within the town centre operating along Berry Lane.

4.7.2 In conclusion, the proposed development can be considered to be accessible for pedestrians, cyclists and public transport users.

5 TRAFFIC IMPACT ASSESSMENT

5.1 Introduction

5.1.1 Having established that the proposed development site is accessible by modes of transport other than the private car, the following section of the report considers the traffic impact of the development proposals on the local highway network.

5.2 Existing Traffic

5.2.1 In order to establish the existing highway network traffic flows for the agreed scope of junctions, traffic surveys have been undertaken and obtained at the following junctions for a typical weekday peak hours. The junctions are as follows:

- Junction 1 – Proposed site access off Chipping Lane.
- Junction 2 – Priority controlled junction with Inglewhite Road/Chipping Lane.
- Junction 3 – Roundabout junction with Inglewhite Road/Sainsbury's access.
- Junction 4 – Roundabout junction with Inglewhite Road/Berry Lane.
- Junction 5 – Roundabout junction with Berry Lane/Calder Avenue.
- Junction 6 – Roundabout junction with Derby Rd/Whittingham Rd/Kestor Lane.
- Junction 7 – Roundabout junction with Preston Road/Chapel Hill.
- Junction 8 – Priority controlled junction with Berry Lane/Market Place.
- Junction 9 – Priority controlled junction with Inglewhite Road/Halfpenny Lane.
- Junction 10 – Priority controlled junction with Whittingham Rd/Halfpenny Lane.

5.2.2 The raw survey data has been included within **Appendix 7**.

5.2.3 The weekday AM peak hour flows are identified on **Figure 1** and the weekday PM peak hour flows are identified on **Figure 2**. These flows are displayed in Passenger Car Units (PCUs) for the purpose of this assessment.

5.3 Growthed Flows

5.3.1 For the purpose of this assessment it is proposed to provide an assessment of the year of opening 2016 and a future year assessment of 2025 as agreed with LCC.

5.3.2 In order to fully inform the local authority and provide a robust assessment TEMPRO growth factors have been applied to the base traffic data in order to growth these to the opening year of 2016 and future year of 2025. The TEMPRO growth calculated for Longridge, Ribble Valley, Lancashire have been summarised in Table 5.1.

Year	Scenario	
	AM Peak	PM Peak
2010 to 2016	1.0342	1.0354
2013 to 2016	1.0208	1.0211
2014 to 2016	1.0172	1.0174
2010 to 2025	1.1669	1.1713
2013 to 2025	1.1515	1.1551
2014 to 2025	1.1475	1.1510

Table 5.1 – TEMPRO Growth Factors for Longridge

5.3.3 It should be noted that it is considered that applying growth along with including numerous committed development schemes in the Longridge area will overestimate the likely future traffic growth and provide an element of double counting. As such, it is considered that applying traffic growth will provide an extremely robust assessment and over predict the future traffic flows.

5.3.4 The resultant 2016 baseline flows are shown in **Figures 3** and **4** for the weekday AM and PM peaks hours.

5.3.5 Similarly, the resultant 2025 baseline flows are shown in **Figures 5** and **6** for the weekday AM and PM peaks hours.

5.4 Committed Developments

5.4.1 LCC and Ribble Valley Borough Council have requested that the following pertinent committed developments are considered within our assessment:

- Fox Strategic Land & Property – Whittingham Road, Longridge (200 Dwellings).
- David Wilson Homes – Whittingham Road, Whittingham (78 Dwellings).
- Residential and Employment Site, Whittingham Hospital.
- Miller Homes, Land of Preston Road (58 Dwellings).
- Spout Farm, Preston (32 Dwellings).
- Land bound by Dilworth Lane (49 Dwellings).
- Inglewhite Road/Fox Land (190 Dwellings).
- Chapel Hill (52 Dwellings).
- Dilworth Lane (Taylor Wimpey) (195 Dwellings).

5.4.2 The resultant committed development flows have been added together and are identified on **Figures 7** and **8** for the weekday AM and PM peak hours.

5.5 Baseline Flows

5.5.1 In order to calculate the baseline flows the committed development flows have been added to the growthed flows.

5.5.2 **Figures 9** and **10** identify the resultant 2016 Baseline Flows for the weekday AM and PM peak hours.

5.5.3 Similarly **Figures 11** and **12** identify the 2025 Baseline flows for the weekday AM and PM peak hours.

5.6 Distribution

5.6.1 The distribution for the proposed residential trips has now been agreed with LCC officers and the methodology originally adopted and the agreed results are set out below.

5.6.2 To determine the distribution patterns for the proposed site, Journey-to-Work Census data (2001) was utilised. This contains the origin (Home) and destination (usual place of work) information for work travel within the UK. Origin and Destination areas are uniquely defined by their COA Wards.

5.6.3 The COA Wards 30ULGC, 30ULGJ and 30ULGK were used to identify where local people currently travel to work and a map showing these three zones in a local perspective is provided within **Appendix 8**. Destinations for each of the three wards were loaded into the Geographic Information System (GIS) MapInfo and the shortest routes to these destinations from the application site were generated. A map providing a snapshot of these destinations and routes is provided within **Appendix 8**.

5.6.4 These routes highlighted that there are essentially six end nodes within the local highway network where traffic will exit the study area before branching out onto other routes in the wider area to reach the various destinations. By establishing these routes, it allowed destinations to be zoned and in turn, identifying the percentage of people travelling to each zone via the following end nodes of the local highway network (study area) as listed below along with the distribution percentages that have been agreed with LCC:

- Inglewhite Road 3.5%
- B5269 Whittingham Road 26.9%
- B6244 Preston Road 37.0%
- King Street/Calder Avenue 18.2%
- Chipping Lane 14.4%
- **Total** **100%**

5.6.5 The proposed distribution percentages for the weekday AM and PM peak hours have been identified on **Figures 13** and **14**, respectively.

5.7 Development Trip Generation

5.7.1 As previously stated it is proposed to provide up to 363 residential units, including affordable housing and housing for the elderly, relocation of Longridge Cricket Club to provide new cricket ground, pavilion, car park and associated facilities, new primary school, vehicular and pedestrian accesses, landscaping and public open space.

Residential Trips

5.7.2 Following discussions with LCC regarding trips rates, LCC provided feedback on the previous outline application for 520 dwellings. Within that feedback, LCC stated "To reflect the rural nature of the application site LCC would expect higher trip rates than those presented in the TA, with trip rates from the full application for 106 dwellings being used as a minimum."

5.7.3 The trip rates previously agreed with LCC in support of the submitted full application for 106 dwellings on the application site are presented in **Table 5.3** with full TRICS output provided as **Appendix 9**. These trip rates have been derived from the TRICS database using the 'Houses Privately Owned' range for sites of a similar size and location.

Time Period	Agreed Trip Rates (Full Application)					
	AM Peak			PM Peak		
	Arr	Dep	2-Way	Arr	Dep	2-Way
Weekday PM Peak	0.160	0.440	0.600	0.408	0.229	0.637

Table 5.3 – Previously Agreed Residential Trip Rates (Full Application)

5.7.4 As highlighted, LCC suggest that these trips rates should be used as a minimum and therefore Vectos has undertaken a comparison of these trip rates against agreed trip rates associated with committed developments included as part of the detailed Traffic Impact Assessment. In addition, TRICS has been interrogated for similar sites accommodating between 100 to 500 dwellings and this is presented in **Appendix 10** to provide a further comparison.

5.7.5 Table 5.4 presents the various trip rates for the committed residential developments within/ around Longridge (considered 'similar' sites) along with the updated TRICS trip rates and trip rates associated with the 106 dwelling application. **Appendix 11** provides further information on the trip comparisons shown in Table 5.4.

Development	Size	Trip Rates					
		AM Peak			PM Peak		
		Arr	Dep	2-Way	Arr	Dep	2-Way
Spout Farm	32	0.14	0.377	0.517	0.383	0.215	0.598
Dilworth Lane	49	0.173	0.394	0.567	0.409	0.238	0.647
Inglewhite Road	190	0.153	0.463	0.616	0.437	0.242	0.679
Chapel Hill	52	0.162	0.402	0.564	0.449	0.244	0.693
David Wilson Homes	78	0.153	0.438	0.591	0.41	0.226	0.636
Whittingham Road	200	0.155	0.465	0.620	0.435	0.24	0.675
Average (Committed Developments)		**0.156**	**0.423**	**0.579**	**0.421**	**0.234**	**0.655**
TRICS (Updated)		**0.139**	**0.441**	**0.580**	**0.395**	**0.233**	**0.628**
Proposed Trip Rates (106 Dwellings)		**0.160**	**0.440**	**0.600**	**0.408**	**0.229**	**0.637**

Table 5.4 – Trip Comparison: Committed Residential Development Trip Rates, TRICS (Updated) and Proposed Trip Rates

5.7.6 As it can be seen from Tables 5.4, the previously agreed trip rates for the full application (106 dwellings) represent comparable trips rates to those agreed as part of other committed developments within/ around Longridge. The proposed AM peak trip rates are above the AM peak average trip rates calculated from the committed developments and the PM peak is only marginally lower than the calculated PM peak average trip rates.

5.7.7 Furthermore, an interrogation of the TRICS database based on sites of similar sized sites and location returns lower trip rates than the trip rates proposed. Also, the traffic impact assessment undertaken as part of this report includes both TEMPRO growth factors and committed development traffic, and no deductions/ adjustments within TEMPRO have been applied to account for committed development with Longridge.

5.7.8 Therefore, as previously discussed within this section, the proposed traffic impact assessment includes a level of double counting, in turn allowing for a robust and potential onerous assessment.

5.7.9 Taking into consideration the aforementioned, Vectos consider it both reasonable and robust to apply those trips rates presented in Table 5.3 (Agreed Full Application) to the outline application of 363 residential dwellings. Table 5.5 presents the potential trip generations associated with the proposed development.

	AM Peak Flows			PM Peak Flows		
	Arr	**Dep**	**2-Way**	**Arr**	**Dep**	**2-Way**
Proposed Development (363 Dwellings)	58	160	218	148	83	231

Table 5.3 – Traffic Generation for Proposed Residential Scheme (363 Dwellings – Outline Application)

5.7.10 **Figures 15** and **16** identify the residential traffic generation associated with the outline application for the weekday AM and PM peak hours. It should be noted that no allowance has been made for the affordable housing and housing for the elderly. As such, again a robust approach has been adopted in order to calculate the proposed residential trip generation.

Primary School Trips

5.7.11 It has been advised that the proposed residential development will require approximately 190 primary school places. As such, as part of the residential development scheme it is proposed to provide a primary school within the site and providing up to 210 school places, will predominately serve the proposed site.

5.7.12 The trip rates for the proposed residential element do not include any sites which have a primary school on site. Therefore, the residential trips already make an allowance for school trips in the weekday AM and PM peak hour periods arriving and departing the site.

5.7.13 Providing a primary school within a short walk (400 metres and less) within the site will significantly reduce the number of residential trips arriving and departing the site and retain trips within the site. However, in order to provide a robust assessment no trip reduction for the primary school has been applied.

Cricket Club Trips

5.7.14 As part of the development scheme it is proposed relocate the existing Longridge Cricket Club within the site to provide new cricket ground, pavilion, car park and associated facilities.

5.7.15 Given that the cricket club proposals are simply improving the existing facilities there will be no additional trips associated with the club. Any trips associated with the cricket club that are visiting the club during the weekday peak hour periods have already been counted for within the surveyed flows.

5.8 Assessment Flows

5.8.1 In order to establish the assessment flow scenarios the proposed traffic associated with the outline application the development flows have been added to the 2016 baseline flows. The resultant 2016 assessment flows are identified on **Figures 17** and **18** for the weekday AM and PM peak hours.

5.8.2 It should be noted that all of the 363 residential units will not be completed in 2016, as such, this 2016 analysis should be considered as extremely robust.

5.8.3 In order to calculate the 2025 assessment flows, the trips associated with the proposed residential scheme have been added to the 2025 baseline flows. The resultant 2025 assessment flows are identified on **Figures 19** and **20** for the weekday AM and PM peak hours.

5.8.4 As requested by Lancashire County Council the following junctions within Longridge have been assessed in detail:

- Junction 1 – Proposed site access off Chipping Lane.
- Junction 2 – Priority controlled junction with Inglewhite Road/Chipping Lane.
- Junction 3 – Roundabout junction with Inglewhite Road/Sainsbury's access.
- Junction 4 – Roundabout junction with Inglewhite Road/Berry Lane.
- Junction 5 – Roundabout junction with Berry Lane/Calder Avenue.
- Junction 6 – Roundabout junction with Derby Rd/Whittingham Rd/Kestor Lane.
- Junction 7 – Roundabout junction with Preston Road/Chapel Hill.
- Junction 8 – Priority controlled junction with Berry Lane/Market Place.
- Junction 9 – Priority controlled junction with Inglewhite Road/Halfpenny Lane.
- Junction 10 – Priority controlled junction with Whittingham Rd/Halfpenny Lane.

5.9 Junction Assessments

5.9.1 The following sections will provide an analysis of each pertinent junction surrounding the site.

Proposed Site Access off Chipping Lane

5.9.2 In order to assess the operational characteristics of this proposed site access junction off Chipping Lane, the computer program PICADY has been utilised. The assessment has used the 2016 and 2025 assessment flows which assume the proposed 363 units are built out.

5.9.3 As previously stated it is proposed to provide a main site access junction off Chipping Lane with a right turning ghost island facility along with a secondary simple priority controlled junction to the north. In order to provide a robust assessment it has been assumed that all of the development trips use the main site access junction.

5.9.4 Table 5.6 provides a summary of the PICADY results for the 2016 and 2025 assessment flows, whilst the full outputs are contained within **Appendix 12**.

Arm	2016 Assessment Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Site Access	0.327	0.48	0.170	0.20	0.331	0.49	0.171	0.21
Chipping Ln – Right In	0.087	0.09	0.218	0.28	0.088	0.10	0.220	0.28

Table 5.6 - PICADY Results for Proposed Site Access Junction off Chipping Lane– 2016 and 2025 Assessment Flows

5.9.5 As can be seen from Table 5.6 the proposed site access junction off Chipping Lane can accommodate the outline application scheme in both future design years with no material impact to the operation of Chipping Lane.

Existing Junction with Inglewhite Road/Chipping Lane

5.9.6 In order to assess the operational characteristics of this existing priority access junction with Inglewhite Road and Chipping Lane, the computer program PICADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios.

5.9.7 Table 5.7 provides a summary of the PICADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 13**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Iglewhite Road – Left Out	0.125	0.14	0.081	0.09	0.165	0.20	0.185	0.23
Inglewhite Road – Right Out	0.411	0.69	0.436	0.76	0.458	0.83	0.492	0.95
Chipping Lane – Right In	0.107	0.12	0.101	0.11	0.213	0.27	0.164	0.19

Table 5.7 - PICADY Results for Existing Junction with Inglewhite Rd/Chipping Lane– 2016 Baseline and Assessment Flows

5.9.8 Table 5.8 provides a summary of the PICADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 13**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Iglewhite Road – Left Out	0.141	0.16	0.094	0.10	0.188	0.23	0.212	0.27
Inglewhite Road – Right Out	0.469	0.87	0.499	0.98	0.524	1.08	0.565	1.27
Chipping Lane – Right In	0.118	0.13	0.107	0.12	0.228	0.29	0.170	0.20

Table 5.8 - PICADY Results for Existing Junction with Inglewhite Rd/Chipping Lane– 2025 Baseline and Assessment Flows

5.9.9 As can be seen from Table 5.7 and 5.8 the existing priority controlled junction with Inglewhite Road and Chipping Lane operates within capacity without the proposed residential development in place and will continue to operate within capacity with the proposed outline residential scheme in place.

Existing Junction with Inglewhite Road/Sainsbury's Access

5.9.10 In order to assess the operational characteristics of this existing priority controlled mini-roundabout junction with Inglewhite Road and Sainsbury's access, the computer program ARCADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios.

5.9.11 Table 5.9 provides a summary of the ARCADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 14**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Inglewhite Rd (SB)	0.52	1.06	0.53	1.12	0.65	1.80	0.61	1.50
Sainsbury's Access	0.15	0.17	0.44	0.76	0.16	0.19	0.46	0.84
Inglewhite Rd (NB)	0.50	0.98	0.66	1.92	0.54	1.17	0.78	3.36

Table 5.9 - ARCADY Results for Existing Junction with Inglewhite Rd/Sainsbury's Access – 2016 Baseline and Assessment Flows

5.9.12 Table 5.10 provides a summary of the ARCADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 14**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Inglewhite Rd (SB)	0.58	1.36	0.60	1.47	0.71	2.40	0.68	2.03
Sainsbury's Access	0.17	0.21	0.51	1.02	0.19	0.24	0.54	1.13
Inglewhite Rd (NB)	0.55	1.23	0.75	2.83	0.60	1.47	0.86	5.63

Table 5.10 - ARCADY Results for Existing Junction with Inglewhite Rd/Sainsbury's Access – 2025 Baseline and Assessment Flows

5.9.13 As can be seen from Table 5.9 and 5.10 the existing priority controlled mini-roundabout junction with Inglewhite Road and Sainsbury's access operates within capacity in both assessment years without the proposed residential development in place. The tables demonstrate that this junction will continue to operate within capacity with the proposed residential scheme present.

Existing Junction with Inglewhite Road/Berry Lane

5.9.14 In order to assess the operational characteristics of this existing priority controlled mini-roundabout junction with Inglewhite Road and Berry Lane, the computer program ARCADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios. It should be noted that the request of LCC, queue surveys have been undertaken at this junction in order to calibrate the junction models, the queue surveys are contained within **Appendix 7**.

5.9.15 Table 5.11 provides a summary of the ARCADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 15**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Inglewhite Rd (SB)	0.38	0.62	0.82	4.13	0.46	0.85	0.93	9.07
Berry Lane	0.33	0.49	0.70	2.27	0.35	0.53	0.76	2.97
Inglewhite Rd (NB)	0.64	1.76	0.72	2.53	0.69	2.16	0.82	4.30

Table 5.11 - ARCADY Results for Existing Junction with Inglewhite Rd/Berry Lane – 2016 Baseline and Assessment Flows

5.9.16 Table 5.12 provides a summary of the ARCADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 15**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Inglewhite Rd (SB)	0.43	0.75	0.94	13.01	0.51	1.03	1.06	27.60
Berry Lane	0.38	0.60	0.78	3.72	0.39	0.65	0.85	5.15
Inglewhite Rd (NB)	0.74	2.69	0.84	4.68	0.79	3.52	0.94	10.39

Table 5.12 - ARCADY Results for Existing Junction with Inglewhite Rd/Berry Lane – 2025 Baseline and Assessment Flows

5.9.17 As can be seen from Table 5.11 and 5.12 the existing priority controlled mini-roundabout junction with Inglewhite Road and Berry Lane generally operates within capacity without and with development during the 2016 scenarios. During the 2025 Baseline PM peak period, Inglewhite Road (SB) begins to offer a reduce level of service.

5.9.18 As a result, this is reciprocated once development traffic is added in the 2025 Assessment PM Peak, with Inglewhite Road (SB) exceeding capacity that causes additional delay and congestion. However, it should be noted that this only occurs for a short period of time during the peak hours and generally operates within capacity for the majority of the day.

5.9.19 The junction results identify an increase in vehicular queues on the Inglewhite Road (SB) approach arm. However, the proposals only potentially add 2 additional vehicles every minute on Inglewhite Road in the weekday AM and PM peak hours.

5.9.20 In reality the assessment have assumed all of the residential development trips are ingressing and egressing the site during the peak hour, when in fact if there were any congestion at certain location within the town centre, vehicles would then seek alternative routes as well as travelling outside of the peaks hours, resulting in peak spreading, vehicles are unlikely to simply join the back of a queue of traffic at the busiest times of the day.

5.9.21 It is considered that the proposals will not have a severe impact to the operation of this existing junction with the proposed development resulting in 2 or less additional vehicles per minute during the weekday peak hour periods.

Existing Junction with Berry Lane/Calder Avenue

5.9.22 In order to assess the operational characteristics of this existing priority controlled mini-roundabout junction with Berry Lane and Calder Avenue, the computer program ARCADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios.

5.9.23 Table 5.13 provides a summary of the ARCADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 16**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Berry Lane (SB)	0.30	0.43	0.63	1.70	0.34	0.52	0.66	1.87
Calder Avenue	0.30	0.43	0.31	0.45	0.31	0.44	0.32	0.46
Berry Lane (NB)	0.50	0.98	0.51	1.05	0.51	1.04	0.55	1.21

Table 5.13 - ARCADY Results for Existing Junction with Berry Lane/Calder Avenue – 2016 Baseline and Assessment Flows

5.9.24 Table 5.14 provides a summary of the ARCADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 16**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Berry Lane (SB)	0.34	0.50	0.71	2.43	0.38	0.60	0.74	2.69
Calder Avenue	0.34	0.52	0.37	0.58	0.35	0.54	0.37	0.59
Berry Lane (NB)	0.56	1.27	0.58	1.38	0.58	1.35	0.62	1.60

Table 5.14 - ARCADY Results for Existing Junction with Berry Lane/Calder Avenue – 2025 Baseline and Assessment Flows

5.9.25 As can be seen from Table 5.13 and 5.14 the existing priority controlled mini-roundabout junction with Berry Lane and Calder Avenue operates within capacity without the proposed residential development on the local highway network.

5.9.26 The results demonstrate that the existing junction will continue to operate with capacity and with no significant vehicle queues with the proposed residential trip at this junction.

Junction with Derby Rd/Whittingham Rd/Kestor Lane

5.9.27 As part of the consented David Wilson Homes application (06/2012/0544) there is a package of highway works at this existing roundabout junction, as such, this consented junction arrangement will be considered as the baseline scenario. The consented junction arrangement is identified as **Plan 12**.

5.9.28 In order to assess the operational characteristics of this existing priority controlled mini-roundabout junction with Derby Road, Whittingham Road and Kestor Lane, the computer program ARCADY has been utilised. The assessment has used the 2016/2015 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios. Again, it should be noted that the request of LCC, queue surveys have been undertaken at this junction in order to calibrate the junction models, the queue surveys are contained within **Appendix 7**.

5.9.29 Table 5.15 provides a summary of the ARCADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 17**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Derby Road (N)	0.67	1.95	0.89	6.73	0.74	2.80	0.95	10.26
Kestor Lane	0.85	4.68	0.63	1.61	0.90	6.29	0.64	1.71
Preston Road	0.89	6.52	0.80	3.93	0.92	8.38	0.86	5.58
Whittingham Road	0.92	8.31	0.91	7.61	0.94	9.46	0.96	10.90

Table 5.15 - ARCADY Results for Existing Junction with Derby Rd/Whittingham Rd/Kestor Ln – 2016 Baseline and Assessment Flows

5.9.30 Table 5.16 provides a summary of the ARCADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 17**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Derby Road (N)	0.76	3.03	1.02	20.72	0.84	4.71	1.06	30.28
Kestor Lane	1.00	13.29	0.71	2.31	1.06	19.63	0.72	2.37
Preston Road	1.00	19.09	0.90	8.00	1.03	25.08	0.96	13.76
Whittingham Road	1.03	20.24	1.07	28.40	1.04	22.14	1.13	38.46

Table 5.16 - ARCADY Results for Existing Junction with Derby Rd/Whittingham Rd/Kestor Ln – 2025 Baseline and Assessment Flows

5.9.31 As can be seen from Table 5.15 the existing priority controlled mini-roundabout junction with Derby Rd, Whittingham Road and Kestor Lane generally operates within capacity during the 2016 'without' and 'with' development scenarios. Nevertheless, it is noted that queues form along several of the approach as arms as they near their theoretical capacity levels. However, as observed on-site, queues are expected to form and disperse swiftly.

5.9.32 Table 5.16 which provide the 2025 'without' and 'with' development scenarios highlights that all approaches, with the exception of Kestor Lane and Preston Road (PM Peak), will at some point provide a reduced level of service. Although notable queues form across these approach arms during the 'without' and 'with' development peak period scenarios, the proposed development will only result in around 1 vehicle every minute at this location.

5.9.33 Furthermore, it is expected that queues will form and disperse quickly as experienced during exiting observed conditions. Therefore, it is considered that the proposed development does not result in a severe impact at this junction.

Existing Junction with Preston Road/Chapel Hill

5.9.34 In order to assess the operational characteristics of this existing priority controlled mini-roundabout junction with Preston Road and Chapel Hill, the computer program ARCADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios. It should be noted that the request of LCC, queue surveys have been undertaken at this junction in order to calibrate the junction models, the queue surveys are contained within **Appendix 7**.

5.9.35 Table 5.17 provides a summary of the ARCADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 18**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Preston Road (SB)	0.85	5.25	0.92	8.29	0.93	9.49	0.97	13.11
Chapel Hill	0.62	1.60	0.92	7.29	0.65	1.80	0.97	9.68
Preston Road (NB)	0.48	0.91	0.93	10.26	0.49	0.96	0.97	17.70

Table 5.17 - ARCADY Results for Existing Junction with Preston Road and Chapel Hill – 2016 Baseline and Assessment Flows

5.9.36 Table 5.18 provides a summary of the ARCADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 18**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Preston Road (SB)	0.96	13.82	1.06	27.23	1.04	31.37	1.10	37.54
Chapel Hill	0.72	2.42	1.07	19.69	0.73	2.65	1.10	23.57
Preston Road (NB)	0.53	1.13	1.02	34.30	0.55	1.19	1.07	58.30

Table 5.18 - ARCADY Results for Existing Junction with Preston Road and Chapel Hill – 2025 Baseline and Assessment Flows

5.9.37 As can be seen from Table 5.17 and 5.18 the existing priority controlled mini-roundabout junction with Preston Road and Chapel Hill operates close to capacity during the 2016 AM and PM peak periods without and with development traffic. It also indicates that manageable queues will start to form on Preston Road.

5.9.38 Moreover, the junction will operate at capacity causing queuing and congestion during the 2025 without development scenarios, in particular during the PM peak period.

5.9.39 As the junction is operating at capacity, the minimal increase traffic caused by the proposed development, Preston Road approach will exceed capacity during the 2025 with development scenarios during both peak periods.

5.9.40 Although notable queues form across these approach arms during the 'without' and 'with' development peak period scenarios, the proposed development will only result in around 1 vehicle every minute at this location. Thus, it is expected that queues will form and disperse quickly as experienced during exiting observed conditions.

5.9.41 It is considered that this assessment has provided an extremely robust analysis, with traffic growth and committed development included, which effectively results in double counting, no allowance has been made for peak spreading or any allowance for trips taking alternative routes during the peak hours.

5.9.42 This junction will only offer a reduced level of service for a short period of time during the peak periods and the junction will actually operate with no capacity issues for the majority of the day. As such, it is considered that the level of impact as a result of the residential scheme is not considered to be severe.

Existing Junction with Berry Lane/Market Place/King Street

5.9.43 In order to assess the operational characteristics of this existing priority controlled junction with Berry Lane, Market Place and King Street, the computer program PICADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios.

5.9.44 Table 5.19 provides a summary of the PICADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 19**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Berry Lane – Left and Right Out	0.488	0.94	0.621	1.60	0.541	1.16	0.656	1.85
King Street – Ahead and Right	0.446	0.96	0.373	0.66	0.469	1.06	0.429	0.85

Table 5.19 - PICADY Results for Existing Junction with Berry Lane/Market Place/King St – 2016 Baseline and Assessment Flows

5.9.45 Table 5.20 provides a summary of the PICADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 19**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Berry Lane – Left and Right Out	0.561	1.25	0.716	2.40	0.616	1.56	0.753	2.87
King Street – Ahead and Right	0.507	1.28	0.426	0.85	0.530	1.42	0.484	1.09

Table 5.20 - PICADY Results for Existing Junction with Berry Lane/Market Place/King St – 2025 Baseline and Assessment Flows

5.9.46 As can be seen from Table 5.19 and 5.20 the existing priority controlled junction with Berry Lane, Market Place and King Street operates within capacity without the development present and will continue to operate within capacity with no capacity or vehicular queuing issues with the proposed development trips present at this junction.

Existing Junction with Inglewhite Road/Halfpenny Lane

5.9.47 In order to assess the operational characteristics of this existing priority controlled junction with Inglewhite Road and Halfpenny Lane, the computer program PICADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows and, this will enable a comparison to be made between the 'without' and 'with' development scenarios.

5.9.48 Table 5.21 provides a summary of the PICADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 20**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Halfpenny Lane	0.128	0.15	0.160	0.19	0.169	0.20	0.248	0.33
Inglewhite Rd – Ahead and Right	0.027	0.03	0.019	0.02	0.027	0.03	0.017	0.02

Table 5.21 - PICADY Results for Existing Junction with Inglewhite Road/Halfpenny Lane – 2016 Baseline and Assessment Flows

5.9.49 Table 5.22 provides a summary of the PICADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 20**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Halfpenny Lane	0.146	0.17	0.164	0.19	0.191	0.23	0.272	0.37
Inglewhite Rd – Ahead and Right	0.031	0.03	0.019	0.02	0.032	0.03	0.019	0.02

Table 5.22 - PICADY Results for Existing Junction with Inglewhite Road/Halfpenny Lane – 2025 Baseline and Assessment Flows

5.9.50 As can be seen from Table 5.21 and 5.22 the existing priority controlled junction with Inglewhite Road and Halfpenny Lane operates with substantial reserve capacity without the proposed residential scheme trips on the highway network and will continue to operate within capacity with the residential trips present at this junction with no material impact to capacity or vehicular queues.

Existing Junction with Whittingham Road/Halfpenny Lane

5.9.51 In order to assess the operational characteristics of this existing priority controlled junction with Whittingham Road and Halfpenny Lane, the computer program PICADY has been utilised. The assessment has used the 2016/2025 baseline and assessment flows and the 2025 baseline and assessment flows, this will enable a comparison to be made between the 'without' and 'with' development scenarios.

5.9.52 Table 5.23 provides a summary of the PICADY results for the 2016 baseline and assessment flows, whilst the full outputs are contained within **Appendix 21**.

Arm	2016 Baseline Flows				2016 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Halfpenny Lane	0.225	0.29	0.181	0.22	0.371	0.58	0.258	0.34
Whittingham Road – Ahead and Right	0.064	0.07	0.048	0.05	0.065	0.07	0.049	0.05

Table 5.23 - PICADY Results for Existing Junction with Whittingham Road/Halfpenny Lane – 2016 Baseline and Assessment Flows

5.9.53 Table 5.24 provides a summary of the PICADY results for the 2025 baseline and assessment flows, whilst the full outputs are contained within **Appendix 21**.

Arm	2025 Baseline Flows				2025 Assessment Flows			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC	Max Q
Halfpenny Lane	0.261	0.35	0.212	0.27	0.413	0.69	0.292	0.41
Whittingham Road – Ahead and Right	0.073	0.08	0.055	0.06	0.074	0.08	0.056	0.06

Table 5.24 - PICADY Results for Existing Junction with Whittingham Road/Halfpenny Lane – 2025 Baseline and Assessment Flows

5.9.54 As can be seen from Table 5.21 and 5.22 the existing priority controlled junction with Whittingham Road and Halfpenny Lane operates with substantial spare capacity both without and with the development proposals in place.

5.10 Traffic Impact Assessment Conclusions

5.10.1 The Traffic Impact Assessment has been undertaken to analyse a study network as agreed with Lancashire County Council.

5.10.2 The conclusions of the consideration of transport impact is that there will be an increase in pedestrian, cycle and vehicle flows at the proposed site, which can be accommodated on the local highway network without any requirement for highway improvement works.

5.10.3 There will also be an increase in demand for local bus services, which can be accommodated by the current service provision.

5.10.4 Again, it should be noted that the proposed analysis has assumed background traffic growth using TEMPRO as well as taking in to account the pertinent committed developments in the area as should it is considered that this analysis should be considered as being robust.

5.10.5 It has been demonstrated that the proposed site access arrangement off Chipping Lane can accommodate the proposed development as part of this outline application.

5.10.6 The existing priority controlled junction with Inglewhite Road and Chipping Lane currently operates within capacity and as part of the outline application scheme this junction will continue to operate within capacity with the proposed scheme in place.

5.10.7 The existing mini-roundabout with Inglewhite Road and the Sainsbury's site access currently operates within capacity without the development scheme in place. This existing junction will continue to operate within capacity with minimal queues forming on the approaches during the future with development scenarios.

5.10.8 The existing mini-roundabout with Inglewhite Road and Berry Lane which is located to the south of the site approaches capacity during 2016 'without' and 'with' development scenarios. The Inglewhite Road (SB) approach operates at capacity during the 2025 without development and operates over capacity during the 2025 with development scenario. However, the proposed development only increases traffic on this approach by around 2 vehicles per minute and it is expected that queues will form and disperse quickly as observed on-site during existing conditions.

5.10.9 The existing mini-roundabout junction with Berry Lane and Calder Avenue which is also located to the south of the site currently operates within capacity with no material vehicle queues present during the weekday morning and evening peak hours. It has been demonstrated that the development proposals can be accommodated for at this junction with no material impact to the operational characteristics.

5.10.10 The existing roundabout junction with Whittingham Road, Derby Road and Kestor Lane currently offers a reduced level of service during the peak hour periods for both the 'without' and 'with' development scenarios, however it has been demonstrated that the proposed residential scheme will not have a severe impact with only around 1 additional vehicles every minute passing through this junction as a result of the proposed scheme.

5.10.11 To the south of the site along Preston Road there is a mini-roundabout junction with Chapel Hill. It has been demonstrated that this junction currently operates with a level of reduce service, however, again the development proposals will only generate around 1 additional vehicles every minute during the peak hour periods.

5.10.12 Located to the south-east of the site Berry Lane forms a three-arm priority junction with Market Place and King Street. It has been demonstrated that this existing junction operates within capacity and there will be a minimal impact as a result of the development proposals.

5.10.13 To the west of the site Inglewhite Road forms a three-arm priority controlled junction with Halfpenny Lane. It has been demonstrated that this existing junction currently operates within capacity without the proposals on the highway network and the proposed residential scheme will have a minimal impact at this junction in terms of both capacity and vehicular queues.

5.10.14 Finally, to the south-west of the site Whittingham Road forms a three-arm priority controlled junction with Halfpenny Lane. It has been demonstrated that this existing junction currently operates within capacity and the proposed development scheme will have a minimal impact in terms of both capacity and vehicular queues.

5.10.15 It can be concluded that the proposed development will have a minimal impact to the operation of the highway network in and around Longridge and the additional level of trips cannot be considered as severe.

6 SITE LAYOUT

6.1 Introduction

6.1.1 This section of the report will detail the proposed site access arrangement and the internal layout.

6.2 Site Access

6.2.1 Vehicular access will be provided off Chipping Lane via a new priority controlled junction along with a right turn ghost-island facility. Pedestrian and cycle access will be provided for from Chipping Lane with a new footway provided along the site frontage. The footway adjacent to the junction with Inglewhite Road and Chipping Lane will be set back in order to improve forward visibility around the bend. A pedestrian connection from the site to the bus stops along Chipping Lane will also be provided.

6.2.2 It is also proposed to extend the 30mph speed limit along Chipping Lane to the north of the site, with the 30mph speed limit coming in to force to the north side of the existing cricket club along Chipping Lane. It is also proposed to provide two refuge islands within the proposed ghost island to prevent overtaking manoeuvres at this location and improve highway safety and junction visibility splays of 2.4 metres x 43 metres from the proposed site access.

6.2.3 As well as the main vehicular access off Chipping Lane a secondary vehicular access will also be provided to the north of the main site access junction. The existing priority controlled access to the cricket club will also be maintained with amendments to the internal road alignment which will provide access to the new cricket club car parking area.

6.2.4 In addition to the internal network of pedestrian facilities, given that this site essentially forms an extension to the residential provision to the north of Longridge the proposed site will provide connections at the following points:

- Pedestrian/cycle connections at the site access junctions off Chipping Lane.

- Pedestrian/cycle connection on to Chipping Lane connecting to the existing bus stops.
- Direct pedestrian/cycle connection from the site to the existing Sainsbury's food store.
- Pedestrian/cycle connection to Thornfield Avenue.
- Two pedestrian/cycle connections to Redwood Drive.
- Pedestrian/cycle connection to Willows Park Lane.

6.2.5 The proposed site access arrangement in detail can be seen on **Plan 3**, the proposed site layout can be seen on **Plan 5** and the proposed pedestrian/cycle connection points are identified on **Plan 6**.

6.3 Internal Layout

6.3.1 The internal site layout will be designed to accommodate the turning movements of both delivery and refuse vehicles.

6.3.2 Appropriate turning head facilities will be provided for at the end of any cul-de-sac to allow refuse and delivery vehicles to manoeuvre.

6.4 Parking

6.4.1 As part of the proposed outline application, the car parking provision will be provided in accordance with the Council's car parking standards.

6.5 Potential Developer Contribution

6.5.1 In accordance with Lancashire County Council's document 'Planning Obligations in Lancashire Policy' adopted November 2006 and updated in September 2008 there will be a requirement to contribution towards promoting sustainable development. This is based on the accessibility score as presented in **Appendix 4**.

6.5.2 Within LCC's highway comments for the larger 520 dwelling scheme developer financial contributions were requested for the following items:

- Preston – Longridge railway route – funding would be used to provide a cycle route along the old Preston to Longridge railway which is an aspiration of both LCC and Longridge Town Council.
- The Longridge – Grimsargh – Ribbleton – Preston City bus route – This is a public transport corridor, with traffic management solutions and other measures that follow a public realm approach to support sustainable transport movements and improve the operation of junctions and service reliability along this corridor. This contribution would be targeted at traffic management improvements through Grimsargh to reduce friction and improve reliability.
- A6 Broughton – Infrastructure improvements to address congestion on this corridor.
- Longridge Loop – A new cycle/pedestrian route around/through the town to link/ integrate all parts of the town and encourage the use of sustainable transport and public health.
- Bus Service Improvements – Depending on the outcomes regarding bus service accessibility potential bus service frequency improvements and or, new or altered service routes.
- Travel Plan Guidance – A contribution of £24,000 will be sought or the purpose of LCC providing advice and guidance on Travel plan development and the implementation in line with 2.1.5.16 of the Planning Obligations in Lancashire Policy (September 2008).

- Funding to support the measures and achieve the targets of the Full Travel Plan – Travel Plan to include Funding to support the measure and achieve the targets of the Full Travel Plan. A number of potential measures are included for consideration as part of the interim Travel Plan. However, without a commitment to funding these measures they cannot be implemented and therefore the benefits of the Travel Plan will be overestimated. The development of sustainable measures is a key to our agreement to development trip rate targets within the TA/TP, without these measures these rates are unlikely to be achieved. This contribution would be included in the planning contribution request above but ring fenced in any s106 for the developer to retain for the use by the travel plan co-ordinator.

  Notwithstanding necessary and appropriate sustainable transport services provisions and new infrastructure links/upgrades, LCC request that a sustainable transport contribution of £260 per unit is included in the s106 to deliver a range of necessary Personalised Travel Plan Measures as set out below:

  - Public Transport Smartcards for households to encourage sustainable patterns from the outset of the development. (£110 towards bus fares)
  - Provision of cycles and safety equipment for households (£150 cycle contributions).

  LCC are satisfied that this request meets the requirements of the CIL regulations, and on balance, an overall package of measures is appropriate and necessary to minimise the impact of this proposal and support a sustainable development. Agreement of the targets to be set within the Full Travel Plan should be progressed as soon as possible to support this approach.

6.5.3 It should be noted that the above items detailed by LCC were based on the original larger scheme which included up to 520 dwellings. It should also be noted that the travel plan comments originally provided for the larger 520 dwelling outline scheme have been incorporated in to the updated Travel Plan document for the 363 dwelling scheme.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1.1 This report has considered the proposals of up to 363 residential units, including affordable housing and housing for the elderly, relocation of Longridge Cricket Club to provide new cricket ground, pavilion, car park and associated facilities, new primary school, vehicular and pedestrian accesses, landscaping and public open space.

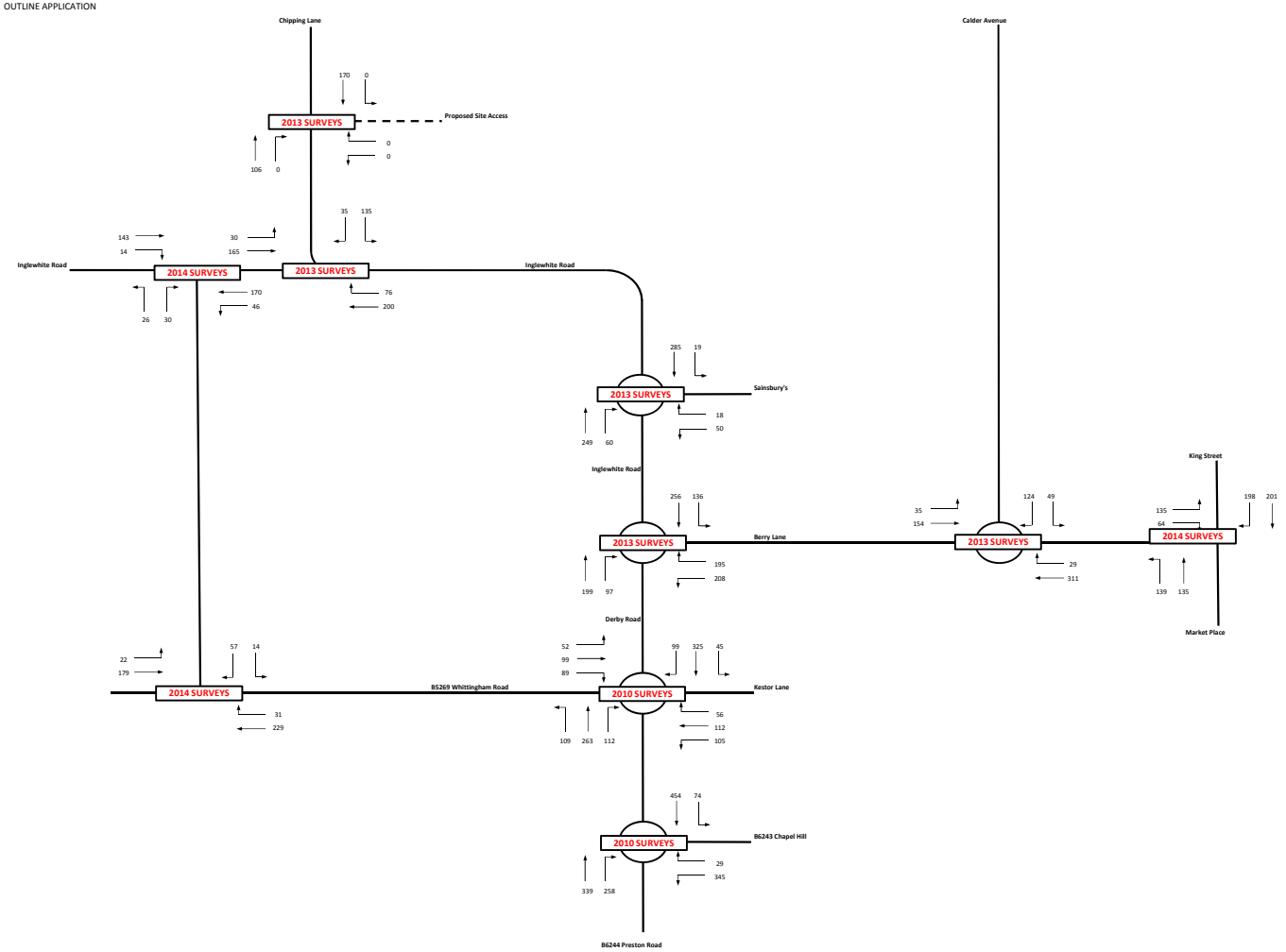
7.1.2 The conclusions can be summarised as follows:

- The site is accessible by sustainable modes of travel given its proximity to Longridge town centre;
- There is an established network of footways located within the vicinity of the site providing links to the surrounding retail, employment, educational and residential areas;
- The sustainable credential of the site will also be strengthened with the provision of the primary school on site which will reduce the need to travel to/from the site during the highway networks peak hour periods.
- There is a bus route located within 400 metres of the site with further services provided with Longridge town centre.
- It has been demonstrated that the proposed residential development will not have a material impact to the operation to the majority of the existing highway network in and around Longridge. Where a reduce level of service is offered it is considered that the level of impact is not severe.

7.1.3 In conclusion, there are no highway or transportation reasons why the proposals should not receive planning consent.

FIGURES

OUTLINE APPLICATION

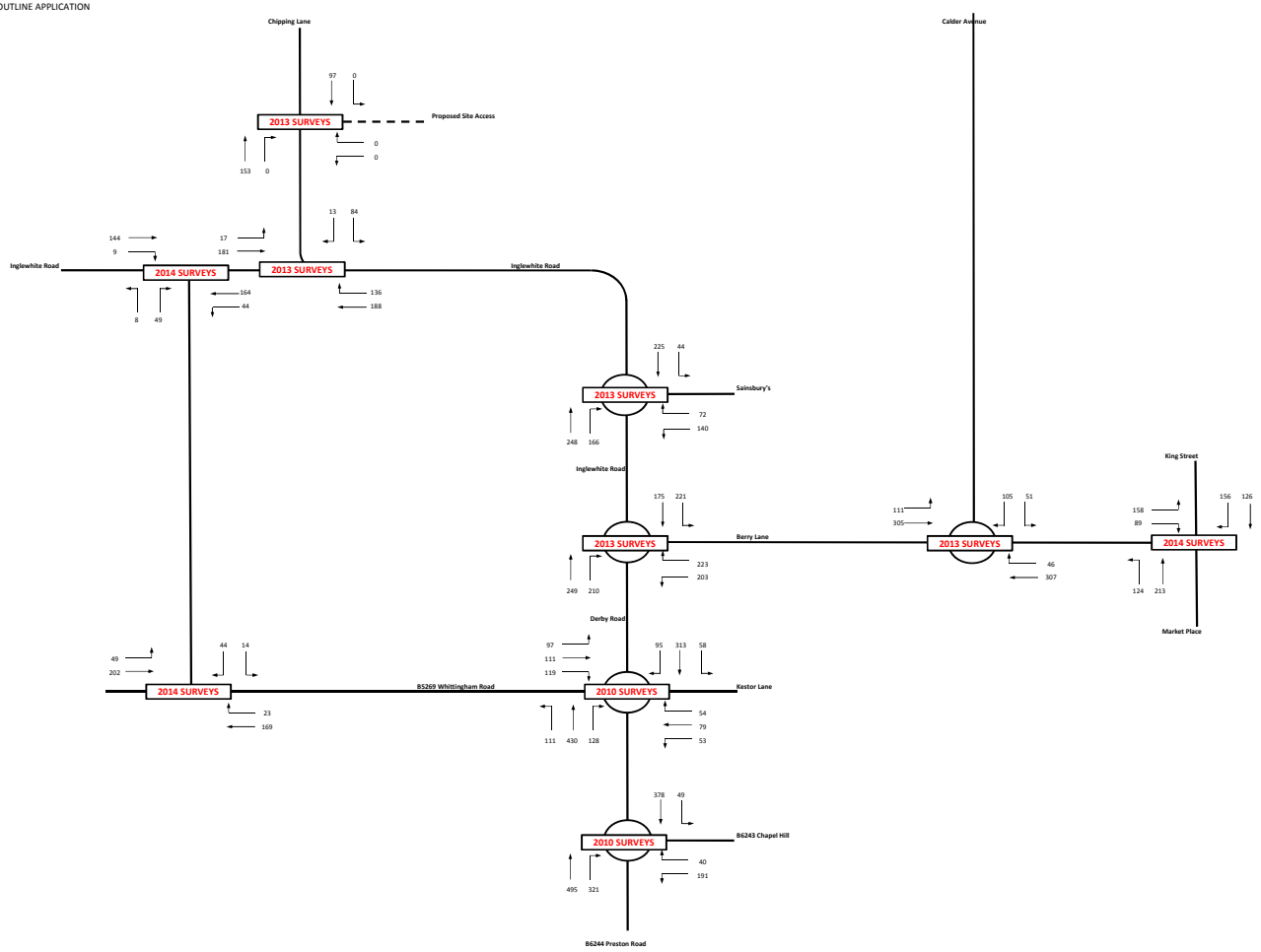


PCUs

Figure 1 **Surveyed Traffic Flows (Weekday AM Peak 0800 to 0900)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

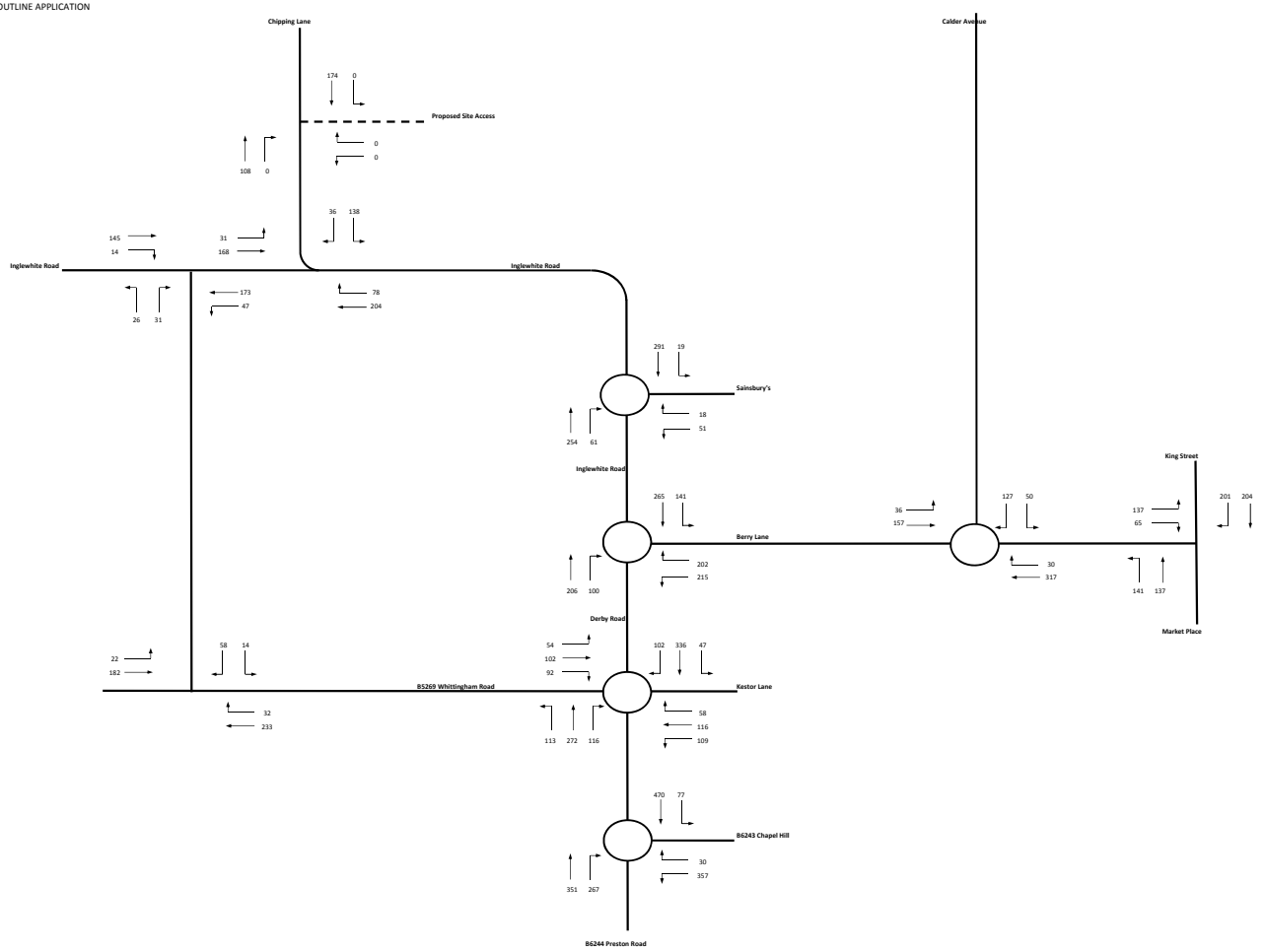


PCUs

Figure 2 **Surveyed Traffic Flows (Weekday PM Peak 1700 to 1800)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION



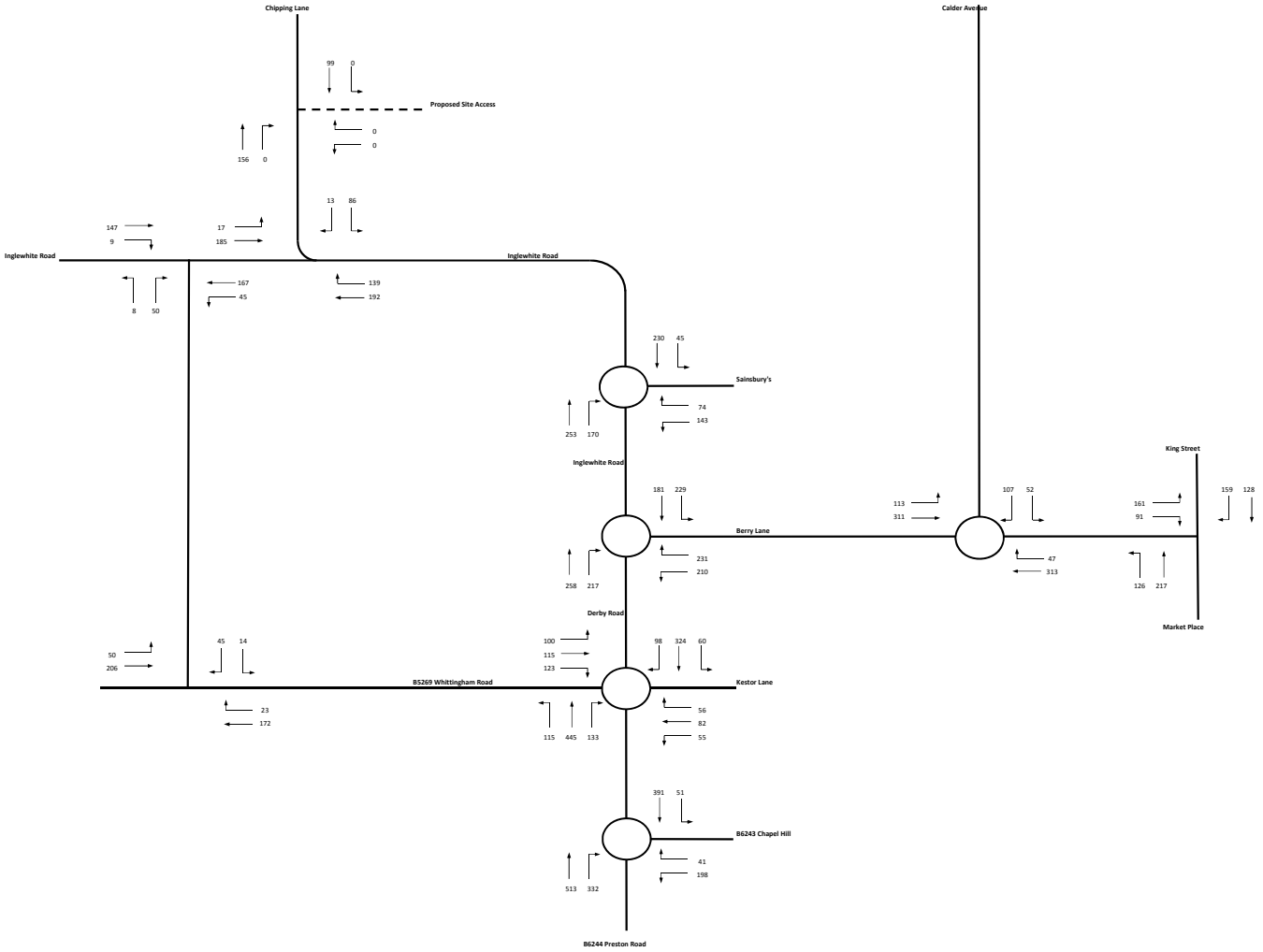
NTM TEMPRO Growth Factor 2010 to 2016 = 1.034
NTM TEMPRO Growth Factor 2013 to 2016 = 1.021
NTM TEMPRO Growth Factor 2014 to 2016 = 1.017

PCUs

Figure 3 **2016 Growthed Flows (Weekday AM Peak 0800 to 0900)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION



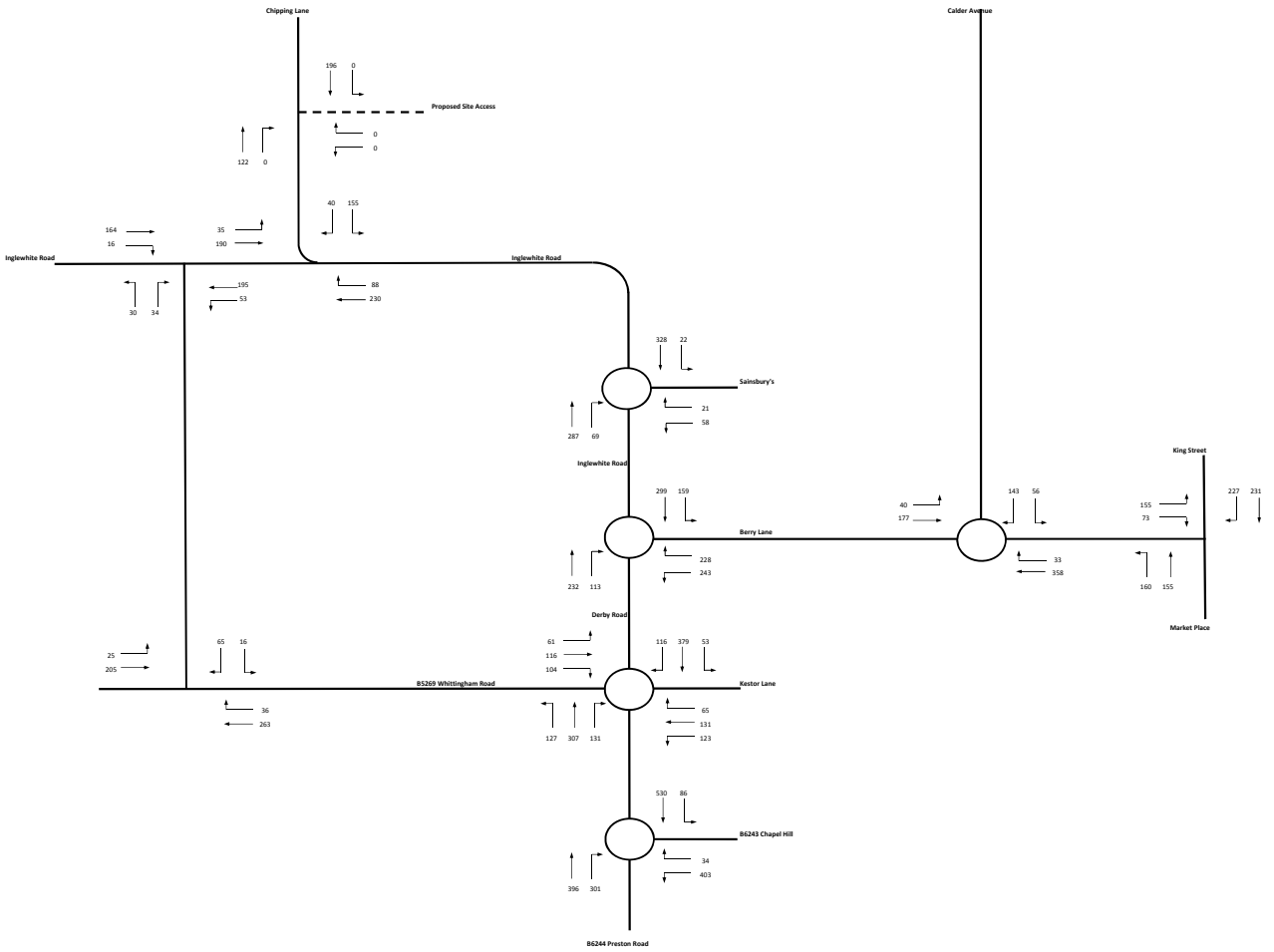
NTM TEMPRO Growth Factor 2010 to 2016 = 1.04
NTM TEMPRO Growth Factor 2013 to 2016 = 1.02
NTM TEMPRO Growth Factor 2014 to 2016 = 1.02

PCUs

Figure 4 **2016 Growthed Flows (Weekday PM Peak 1700 to 1800)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION



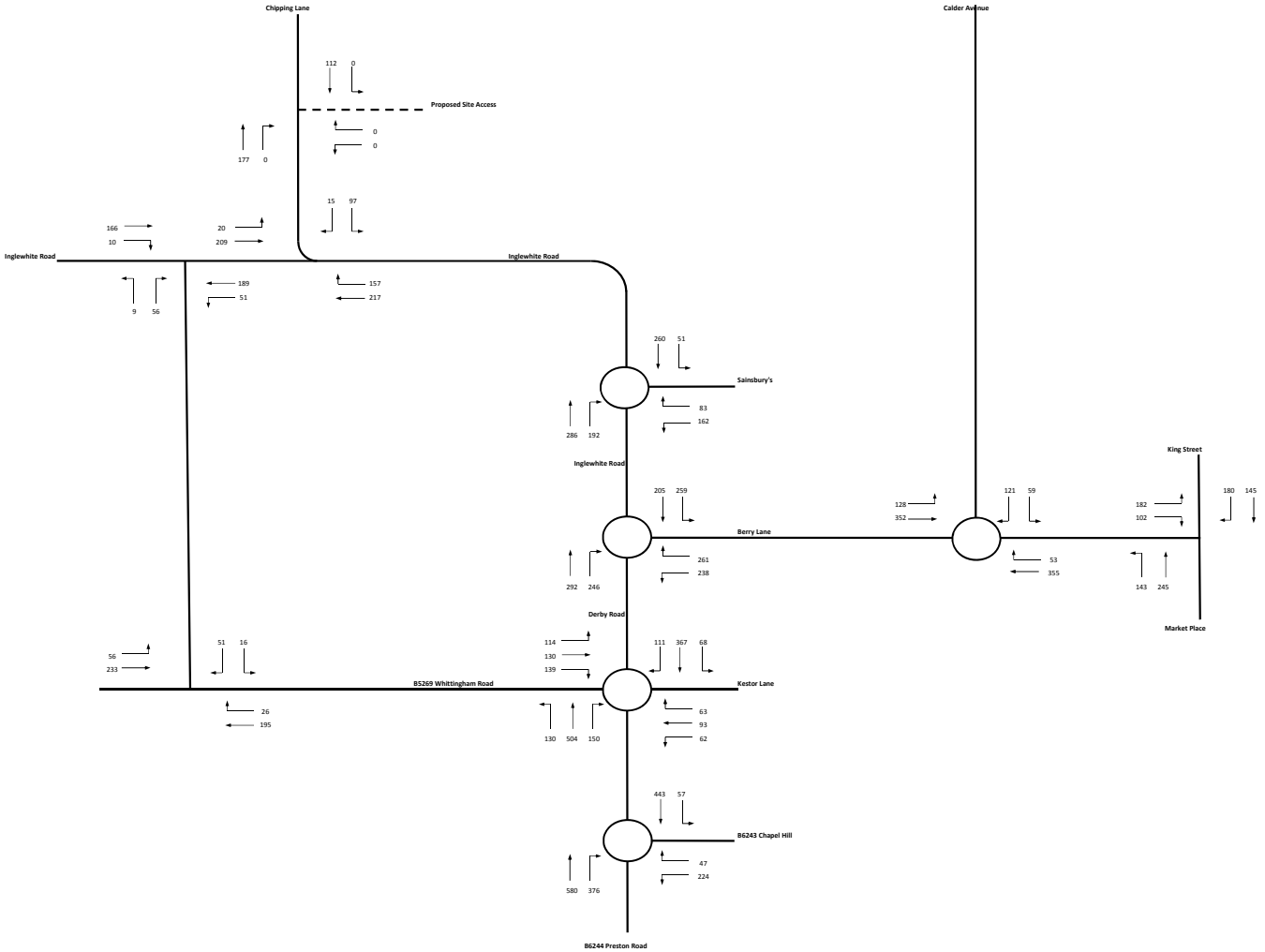
NTM TEMPRO Growth Factor 2010 to 2025 = 1.167
NTM TEMPRO Growth Factor 2013 to 2025 = 1.152
NTM TEMPRO Growth Factor 2014 to 2025 = 1.148

PCUs

Figure 5 **2025 Growthed Flows (Weekday AM Peak 0800 to 0900)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION



NTM TEMPRO Growth Factor 2010 to 2025 = 1.17
NTM TEMPRO Growth Factor 2013 to 2025 = 1.16
NTM TEMPRO Growth Factor 2014 to 2025 = 1.15

PCUs

Figure 6 **2025 Growthed Flows (Weekday PM Peak 1700 to 1800)**

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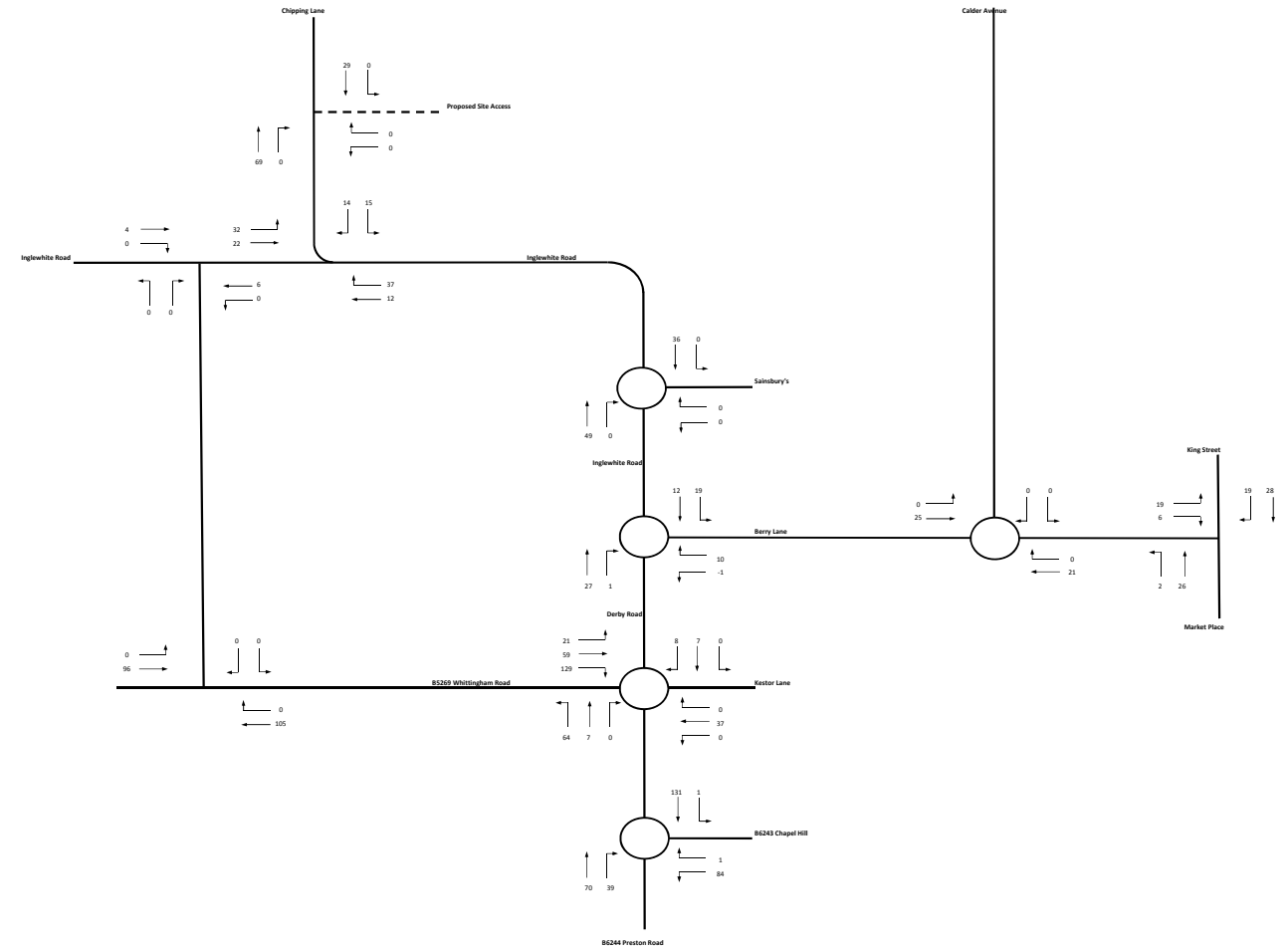
OUTLINE APPLICATION



PCUs

Figure 7 **Committed Developments (Weekday AM Peak 0800 to 0900)**

vectos transport planning specialists
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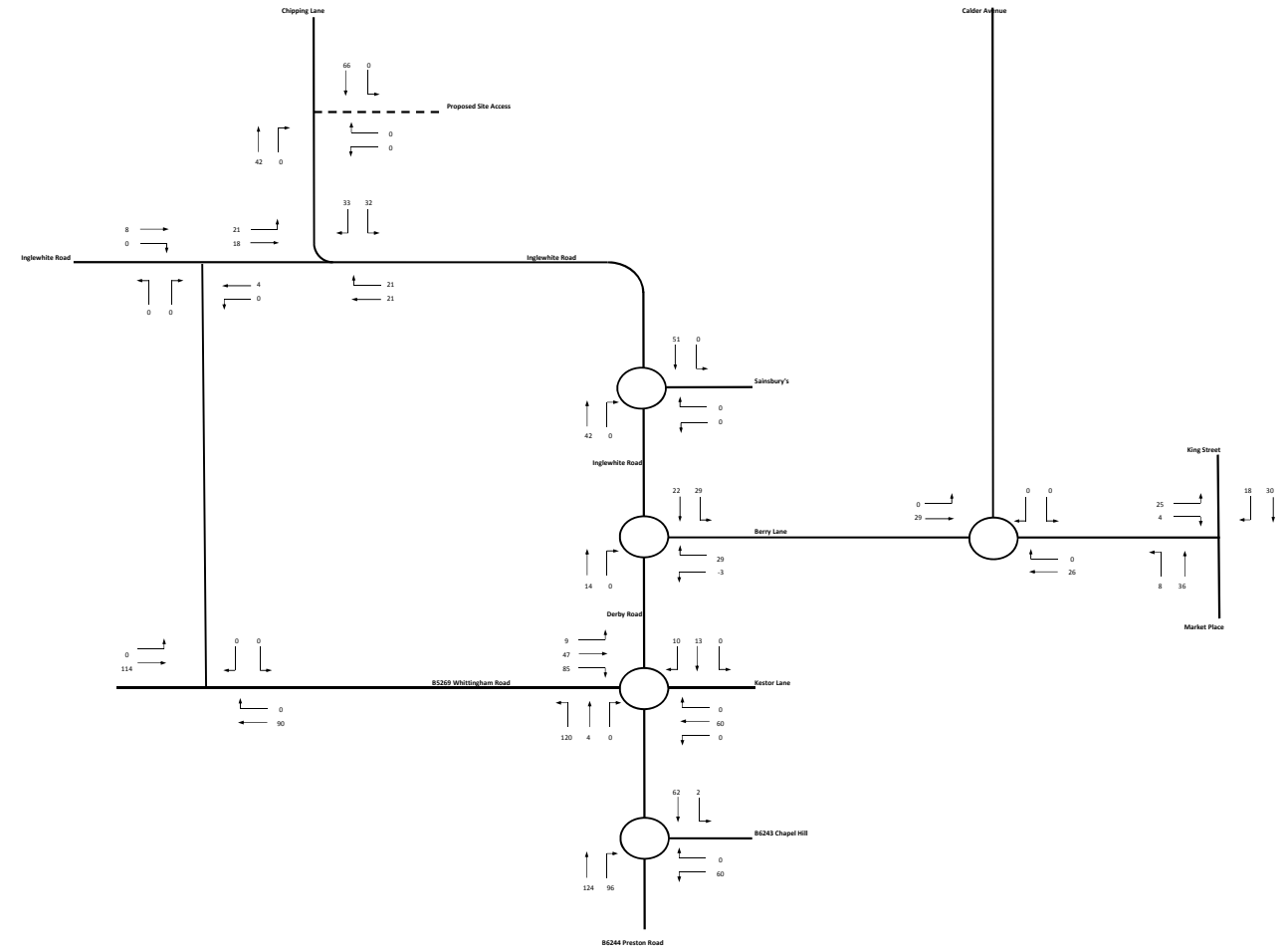
OUTLINE APPLICATION



PCUs

Figure 8 **Committed Developments (Weekday PM Peak 1700 to 1800)**

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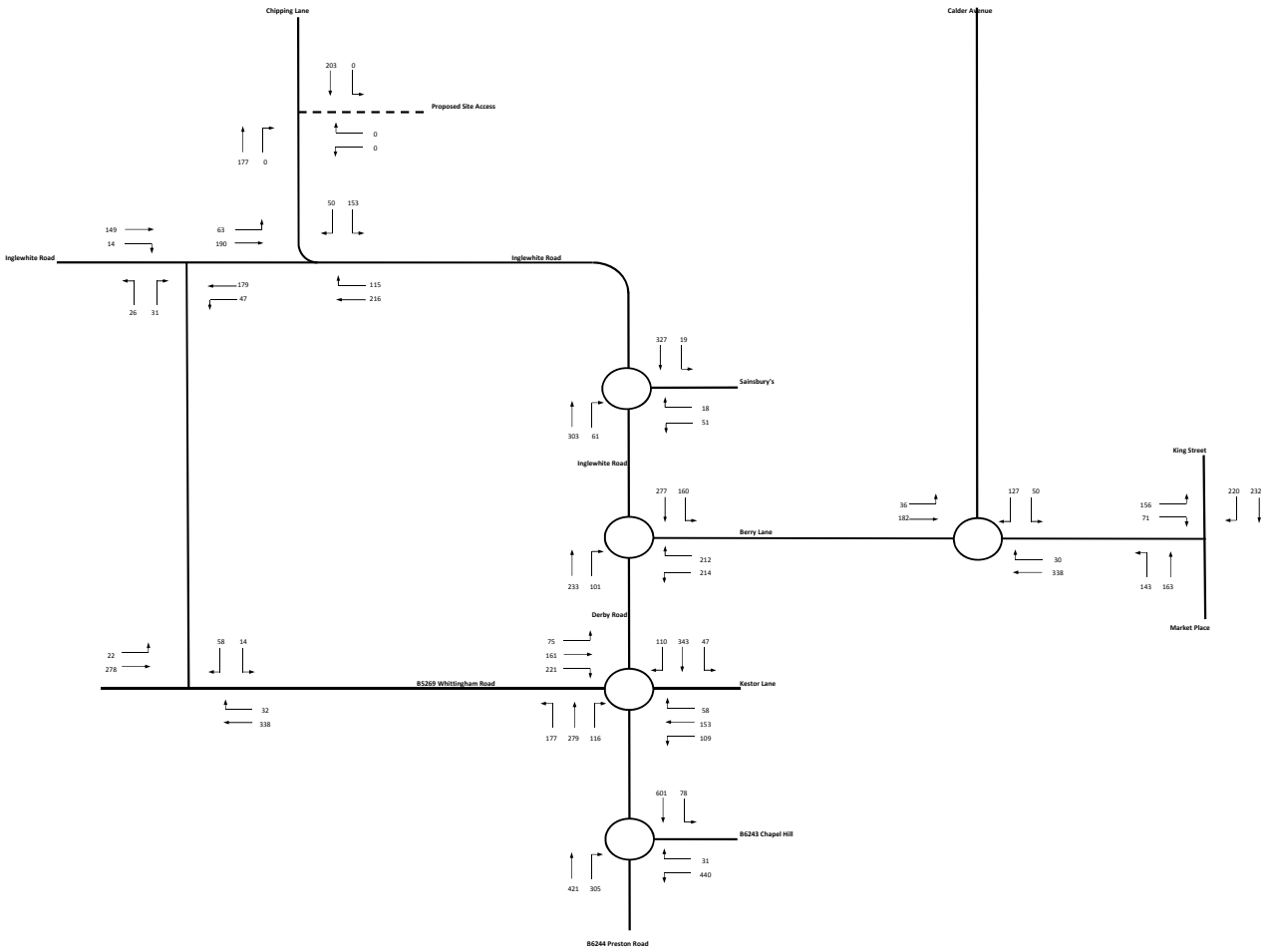
OUTLINE APPLICATION

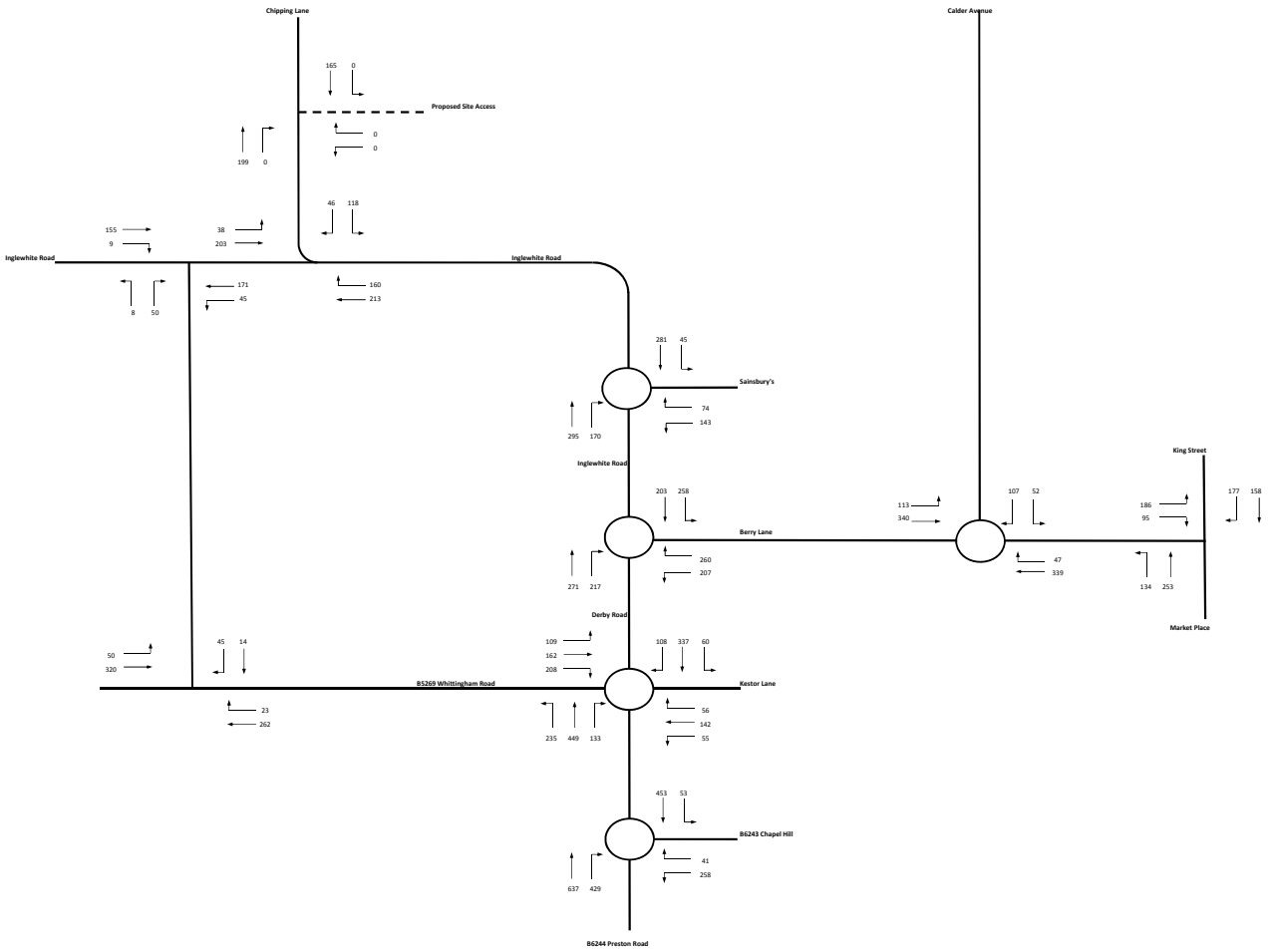


PCUs

Figure 9 **2016 Baseline Flows (Weekday AM Peak 0800 to 0900)**

vectos transport planning specialists
3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

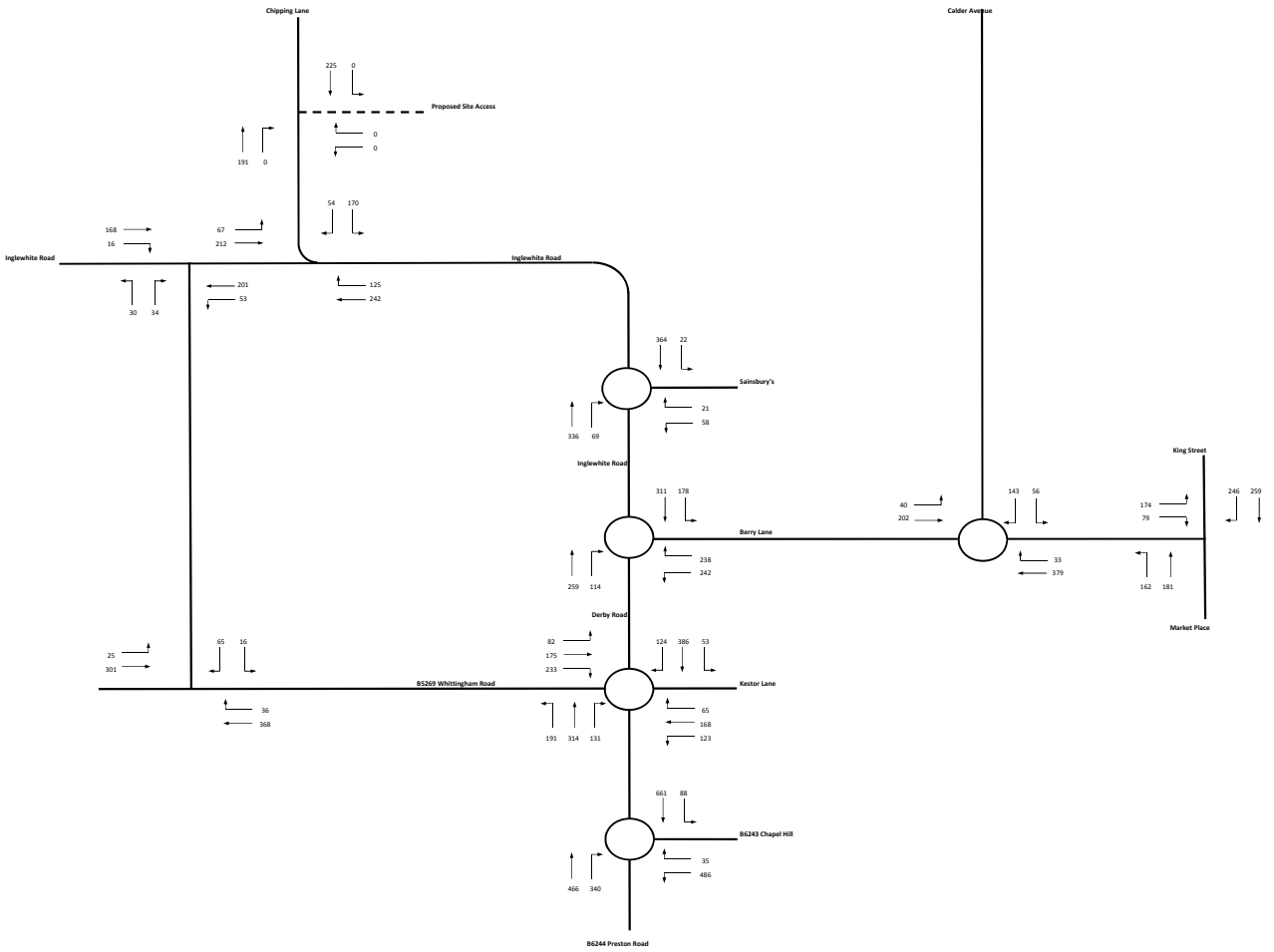


PCUs

Figure 10 **2016 Baseline Flows (Weekday PM Peak 1700 to 1800)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

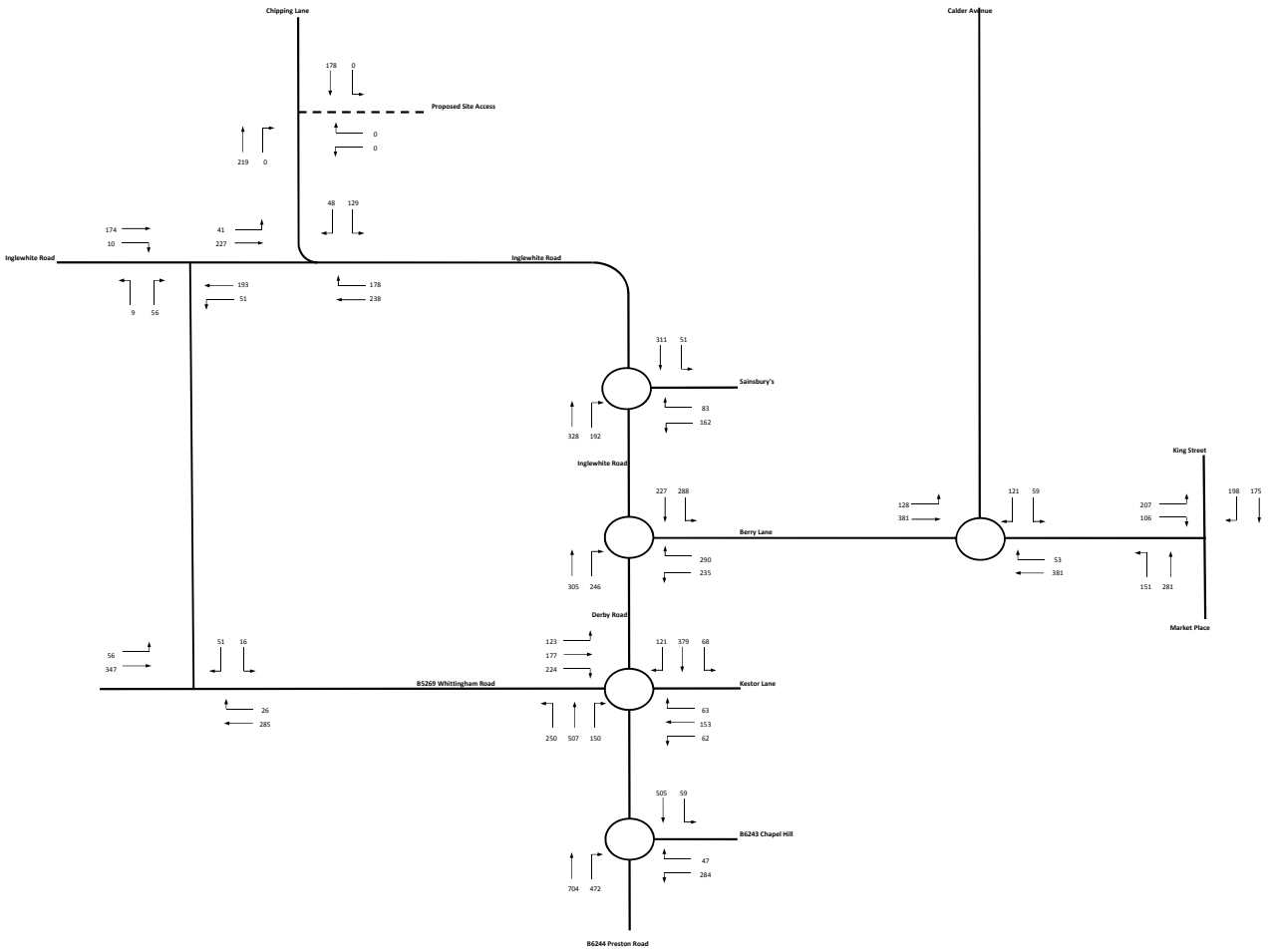


PCUs

Figure 11 **2025 Baseline Flows (Weekday AM Peak 0800 to 0900)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

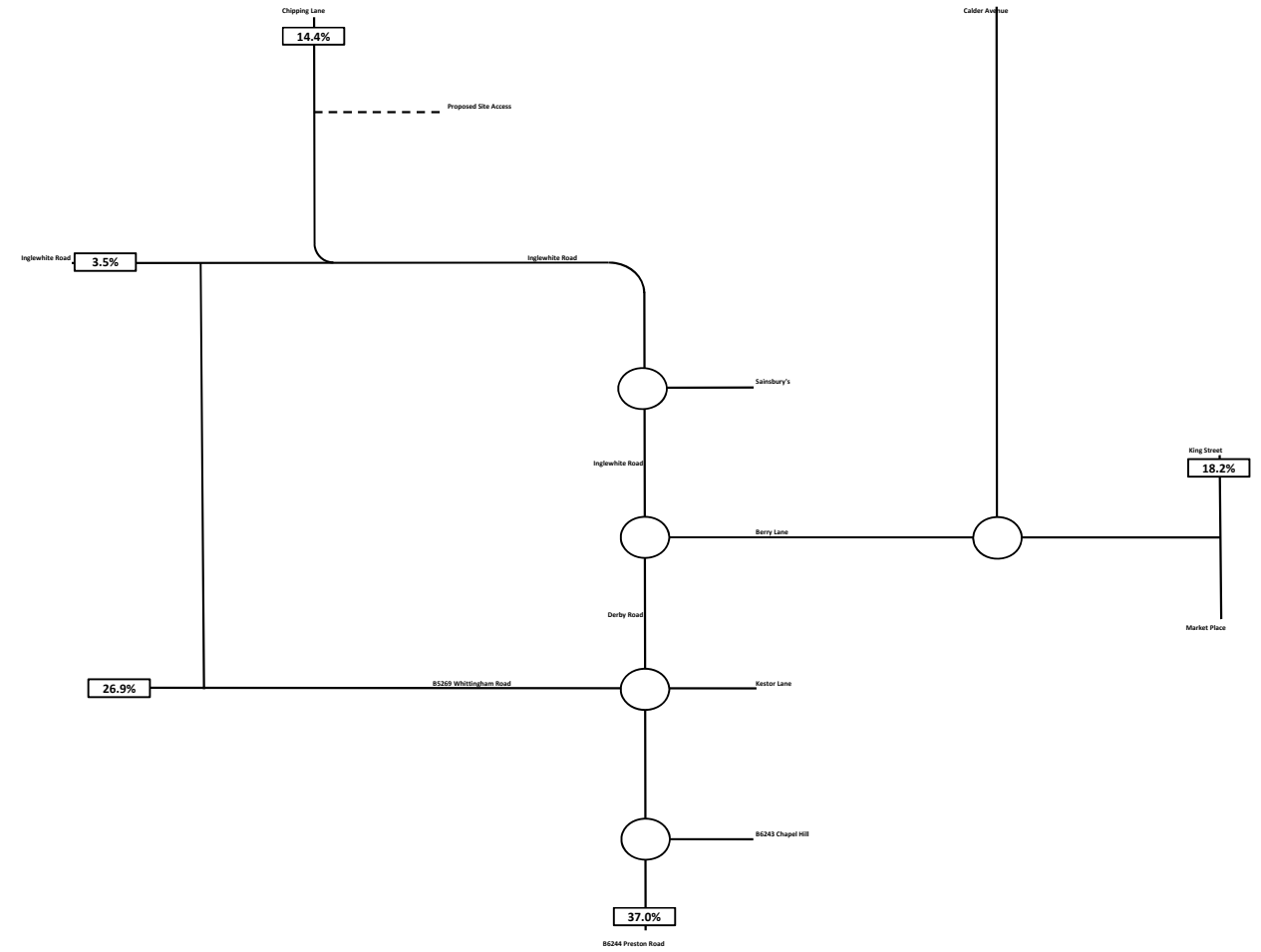


PCUs

Figure 12 **2025 Baseline Flows (Weekday PM Peak 1700 to 1800)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

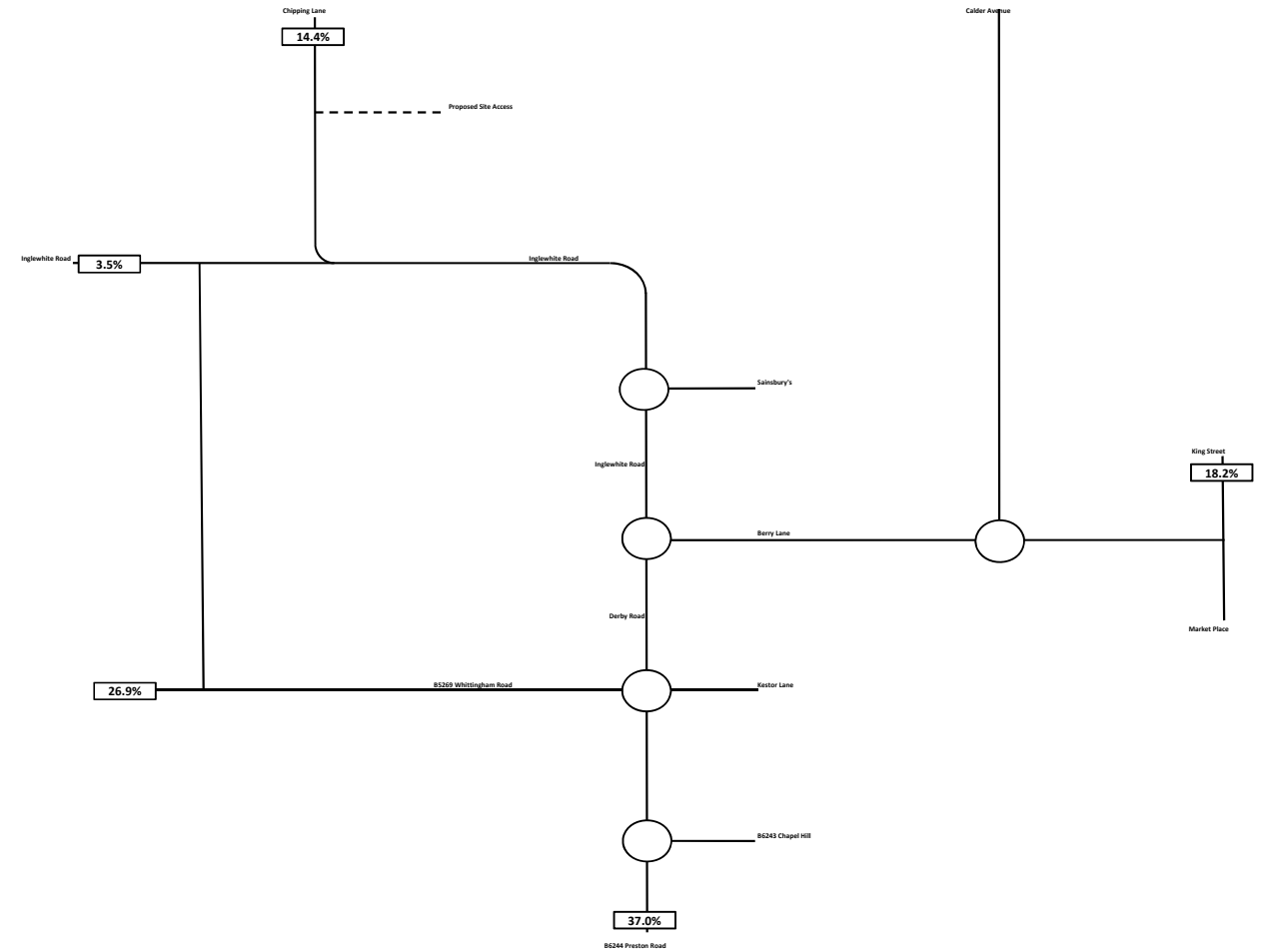


PCUs

Figure 13 **Distribution**
(Weekday AM Peak 0800 to 0900)

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

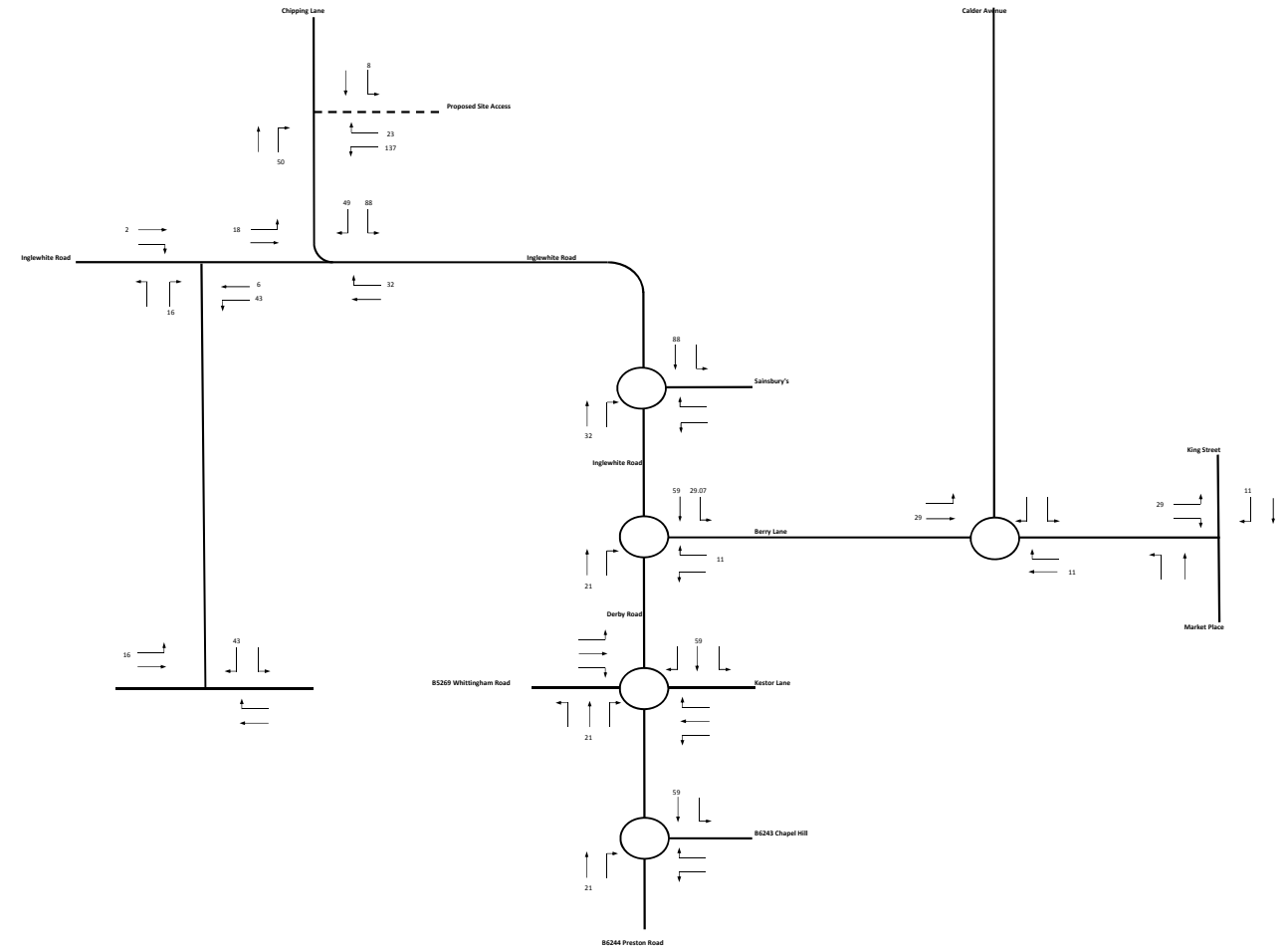


PCUs

Figure 14 **Distribution (Weekday PM Peak 1700 to 1800)**

vectos transport planning specialists
3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

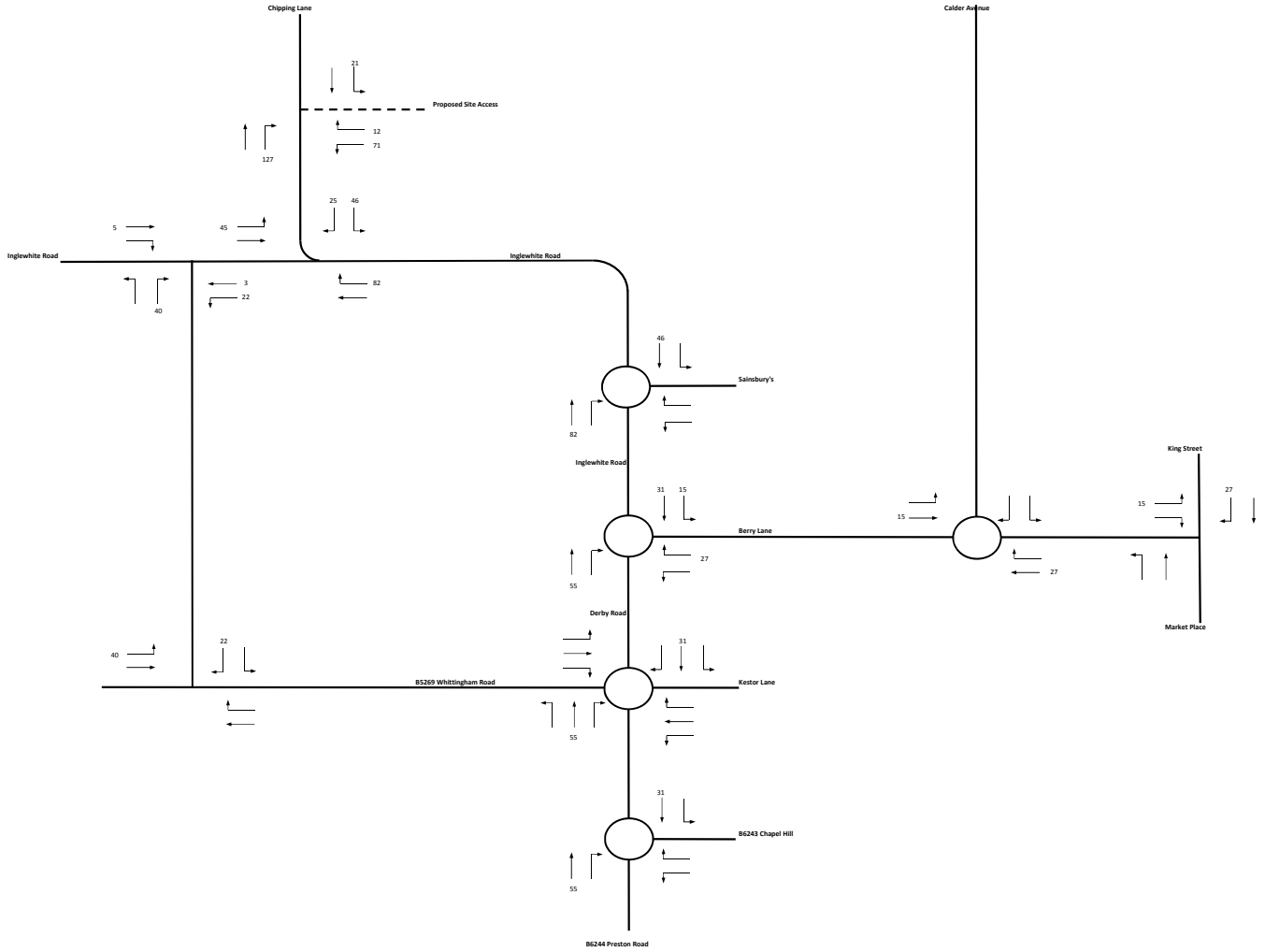


PCUs

Figure 15 **Proposed Residential Development (363 Houses)**
(Weekday AM Peak 0800 to 0900)

vectos transport planning specialists
3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

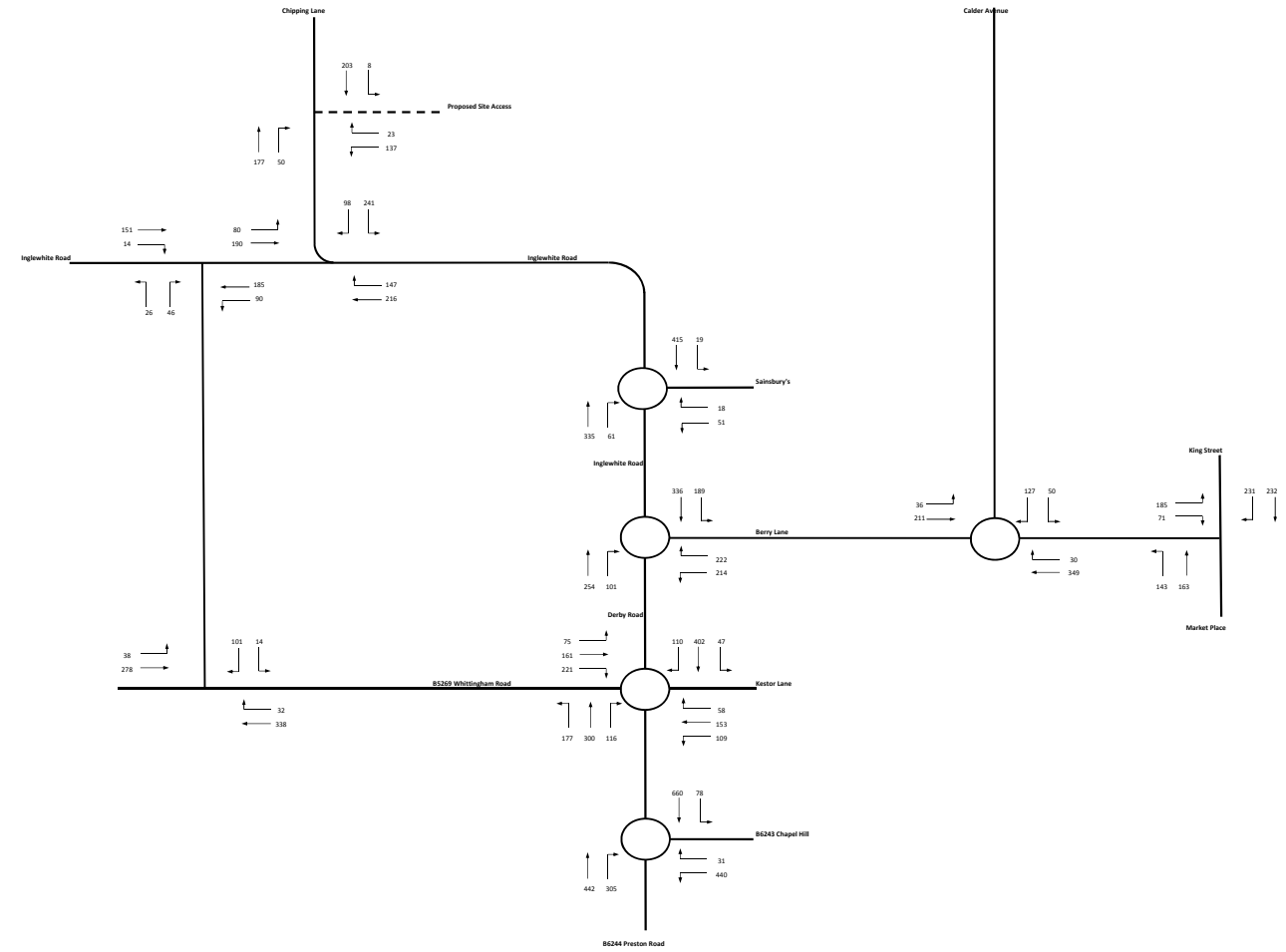


PCUs

Figure 16 **Proposed Residential Development (363 Houses)**
(Weekday PM Peak 1700 to 1800)

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

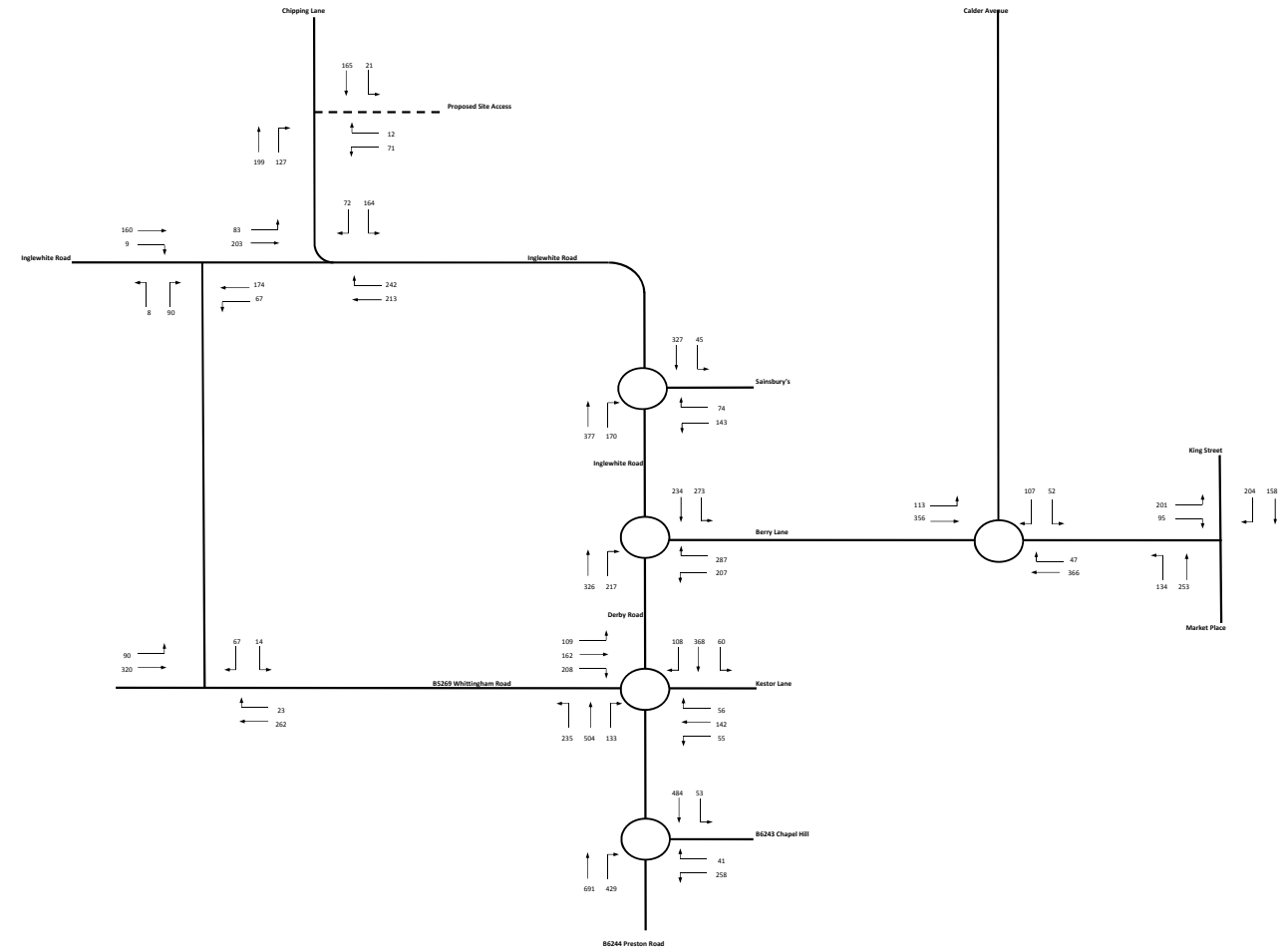


PCUs

Figure 17 **2016 Assessment Flows (Weekday AM Peak 0800 to 0900)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

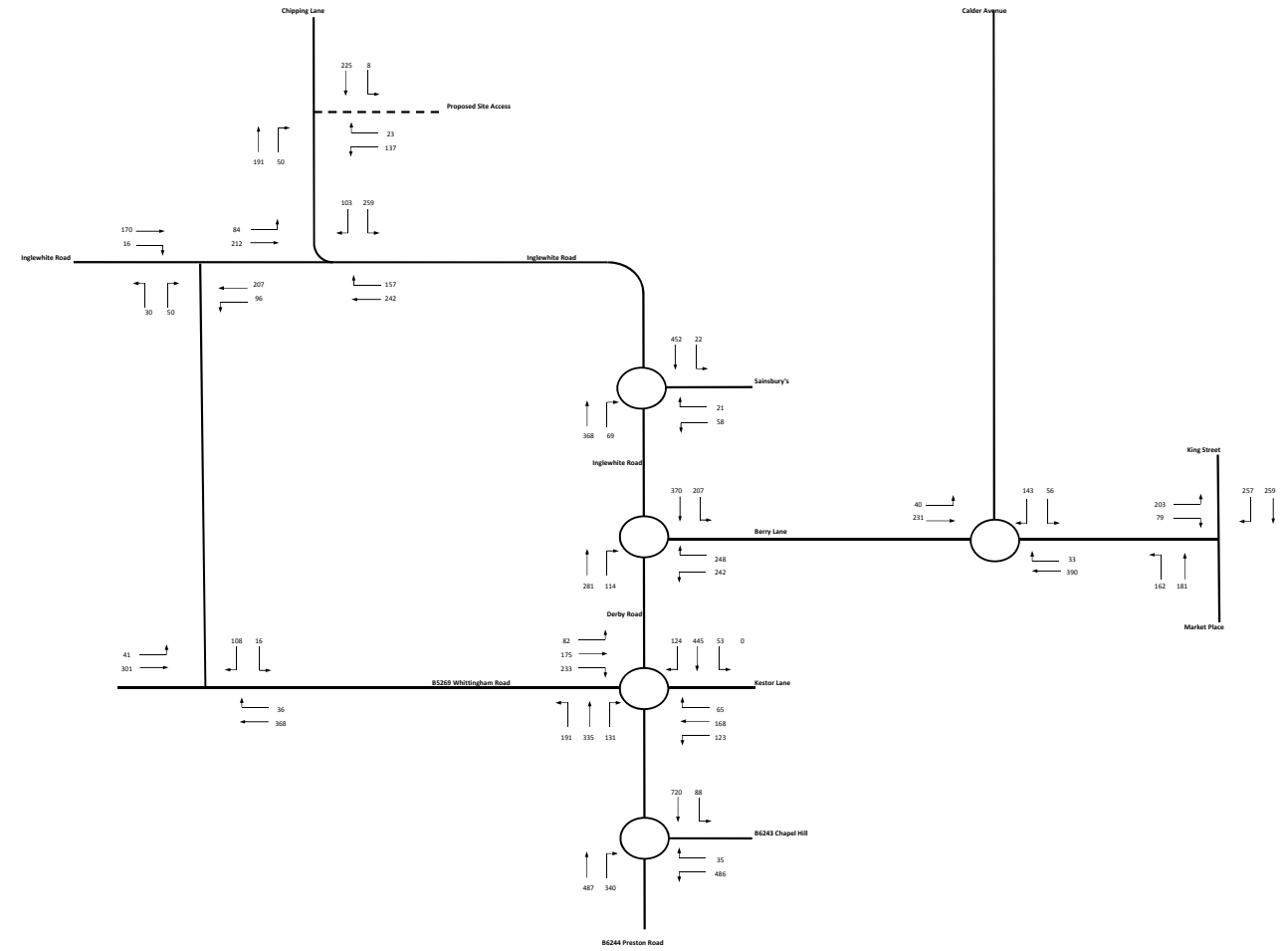


PCUs

Figure 18 **2016 Assessment Flows (Weekday PM Peak 1700 to 1800)**

vectos transport planning specialists
3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION

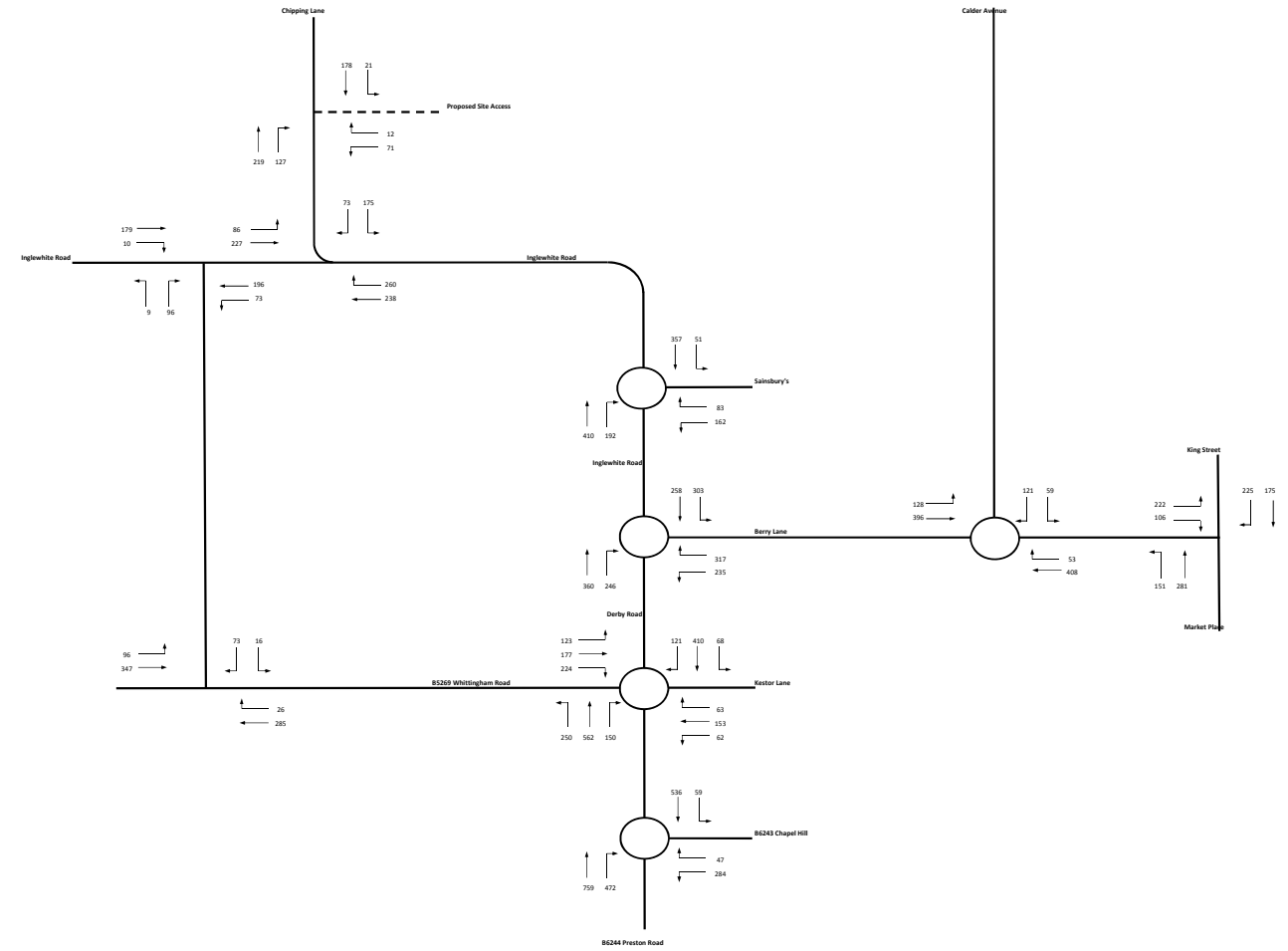


PCUs

Figure 19 **2025 Assessment Flows (Weekday AM Peak 0800 to 0900)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

OUTLINE APPLICATION



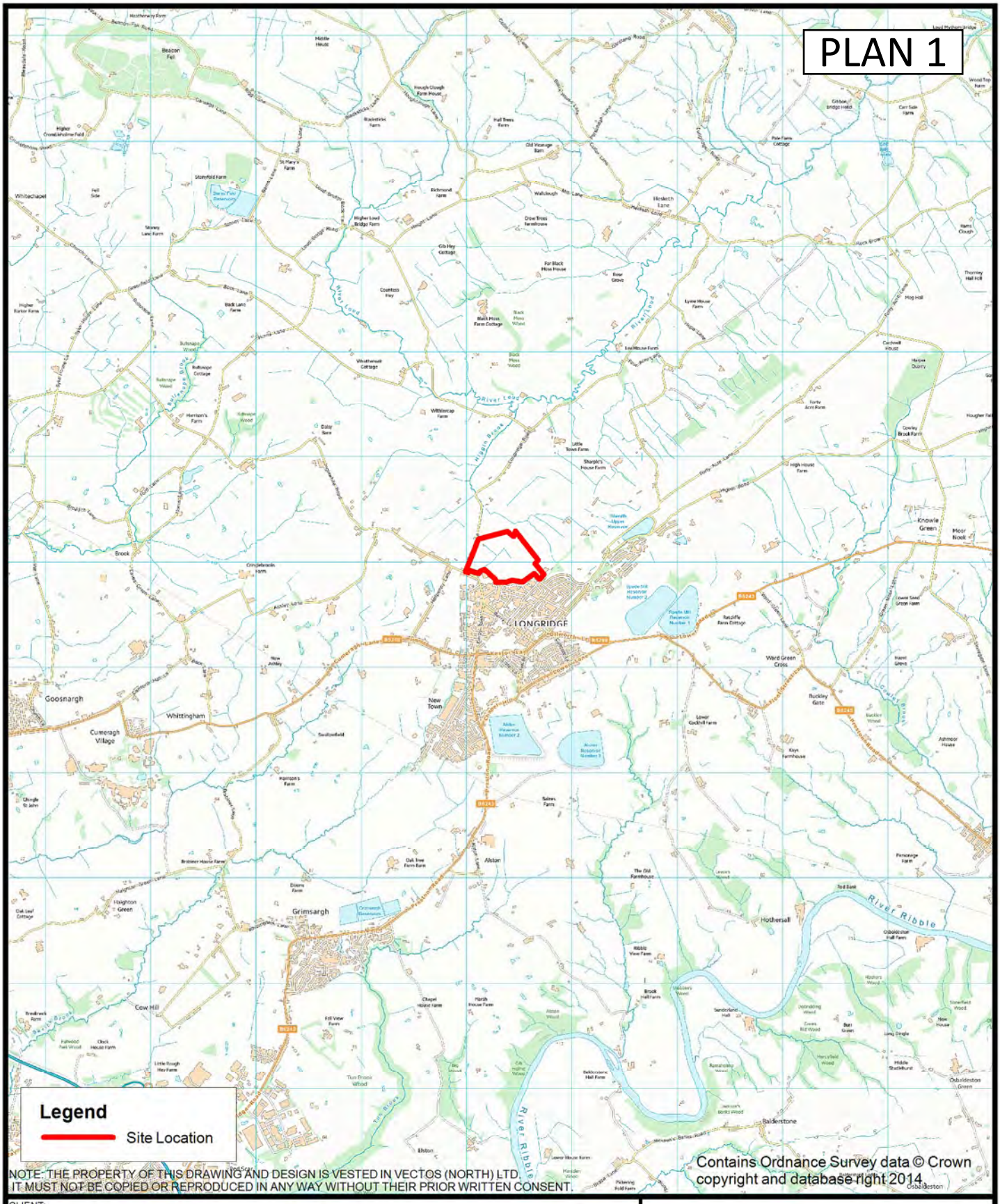
PCUs

Figure 20 **2025 Assessment Flows (Weekday PM Peak 1700 to 1800)**

3rd Floor Oxford Place, 61 Oxford Street, Manchester M1 6EQ Tel: 0161 228 1008 www.vectos.co.uk

PLANS

PLAN 1



CLIENT:
Barratt Homes

DRAWING TITLE:
Site Location

PROJECT TITLE:
Proposed Residential Development
Chipping Lane, Longridge

vectos
transport planning specialists

Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 22801008 e:manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE	SCALE:	DRAWING NO:	REVISION
HF	DL	Mar 15	1:50000 at A4	VN30277-400	.

PLAN 2

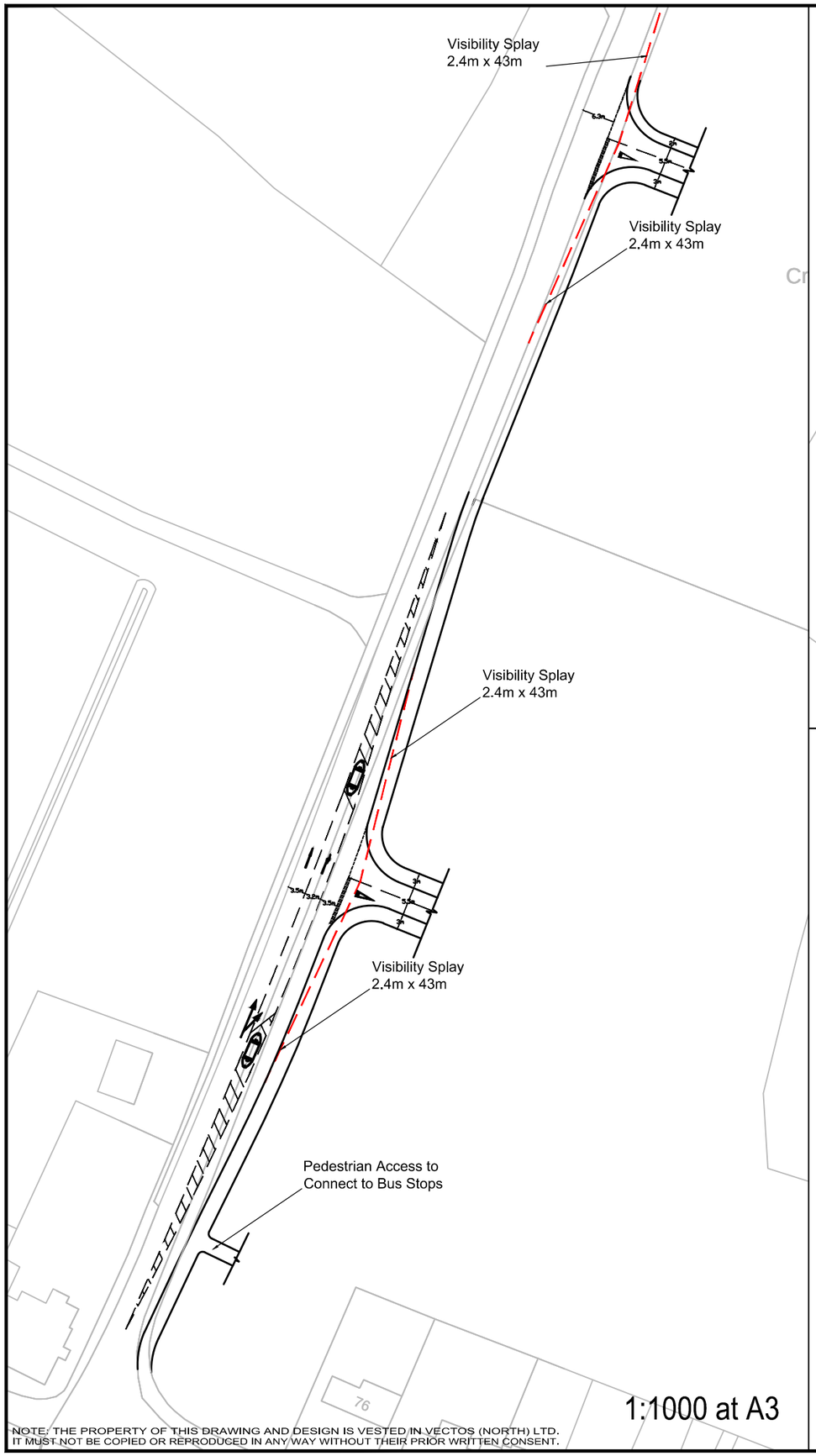
CLIENT:
Barratt Homes

DRAWING TITLE:
Site Location (Local Context)

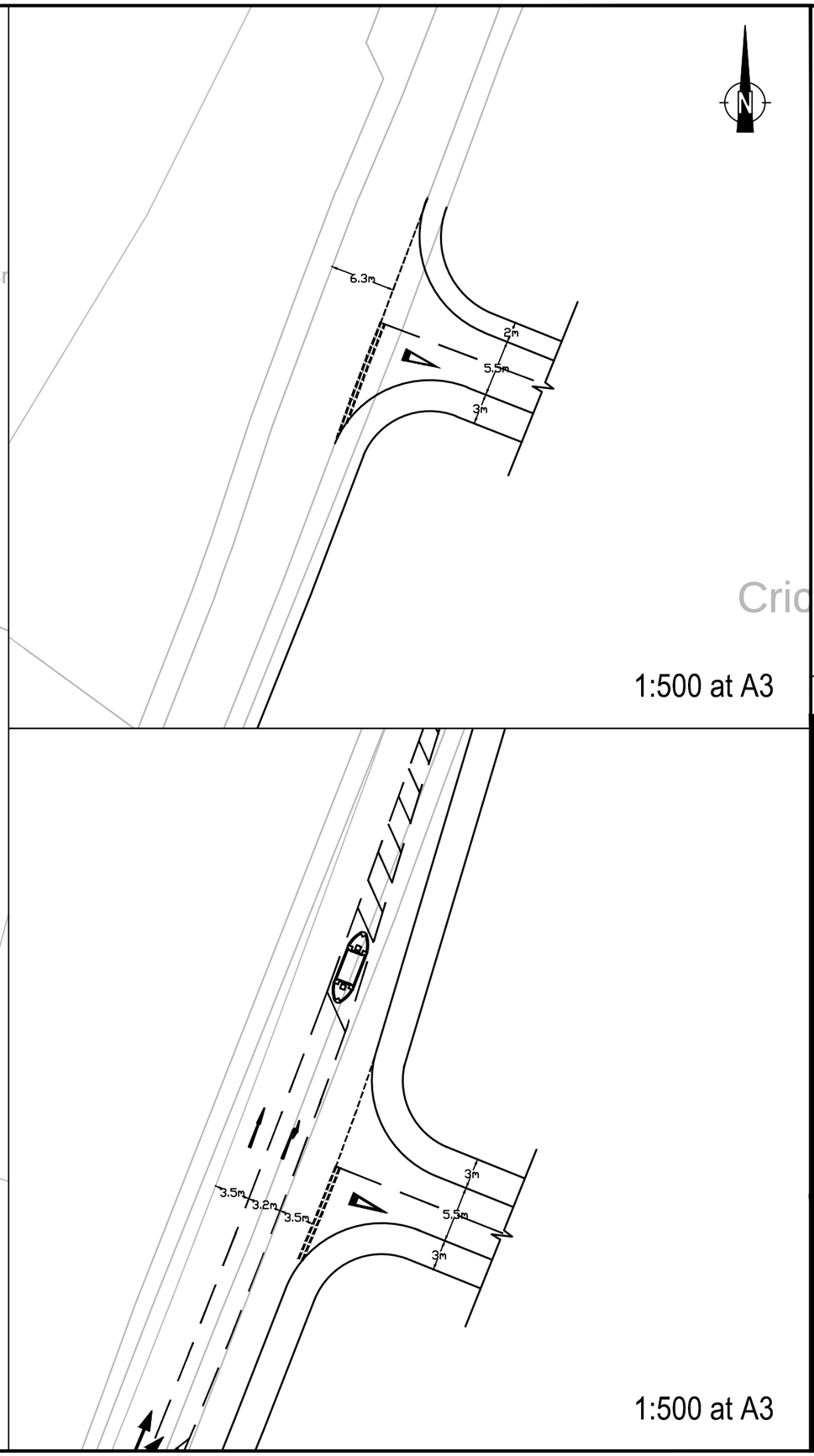
PROJECT TITLE:
Proposed Residential Development
Chipping Lane, Longridge

vectos
transport planning specialists
Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 22801008 e:manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE	SCALE:	DRAWING NO:	REVISION:
HF	DL	Mar 15	N.T.S	VN30277-401	.



1:1000 at A3



1:500 at A3

1:500 at A3

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

PLAN 3

REV.	DETAILS	DRAWN	CHECKED	DATE
.	.	.	.	.

CLIENT:
Barratt Homes

PROJECT:
Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:
Proposed Access Plan

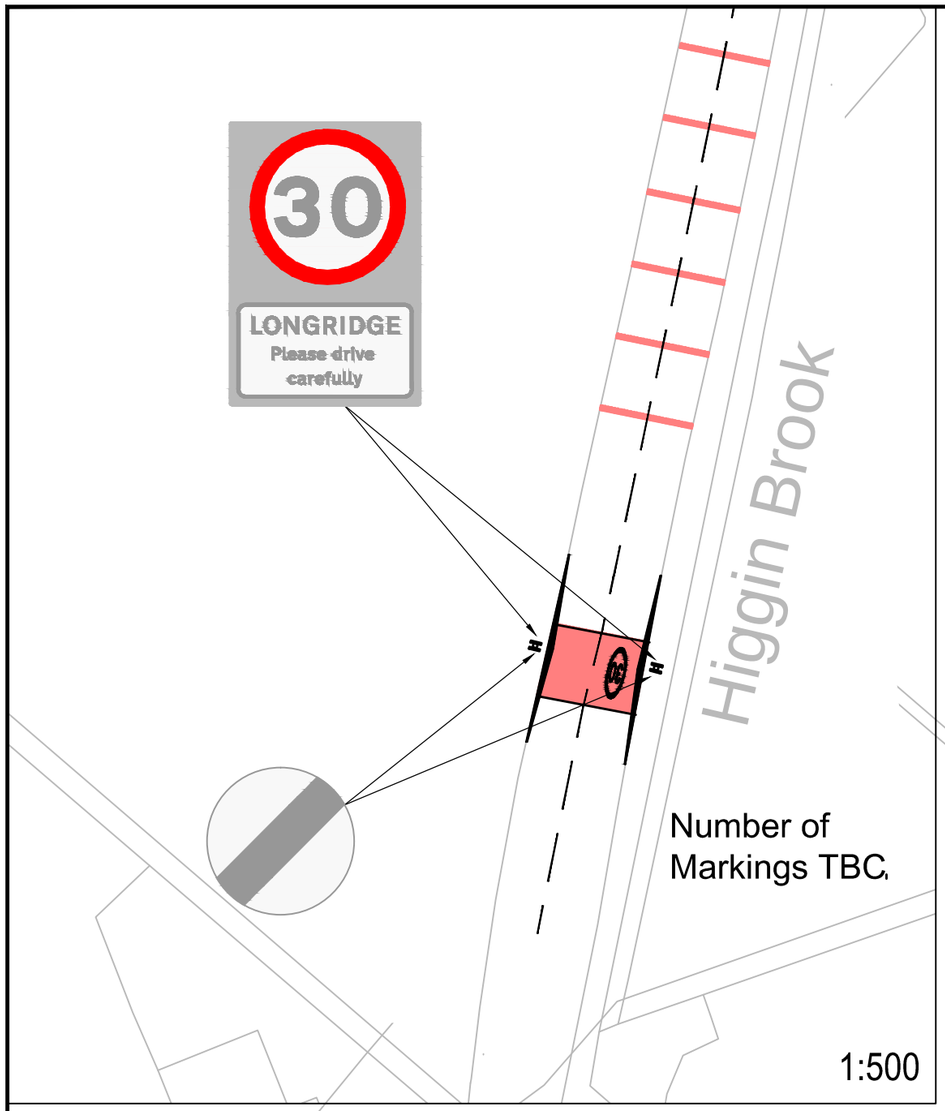
SCALES:
As shown at A3

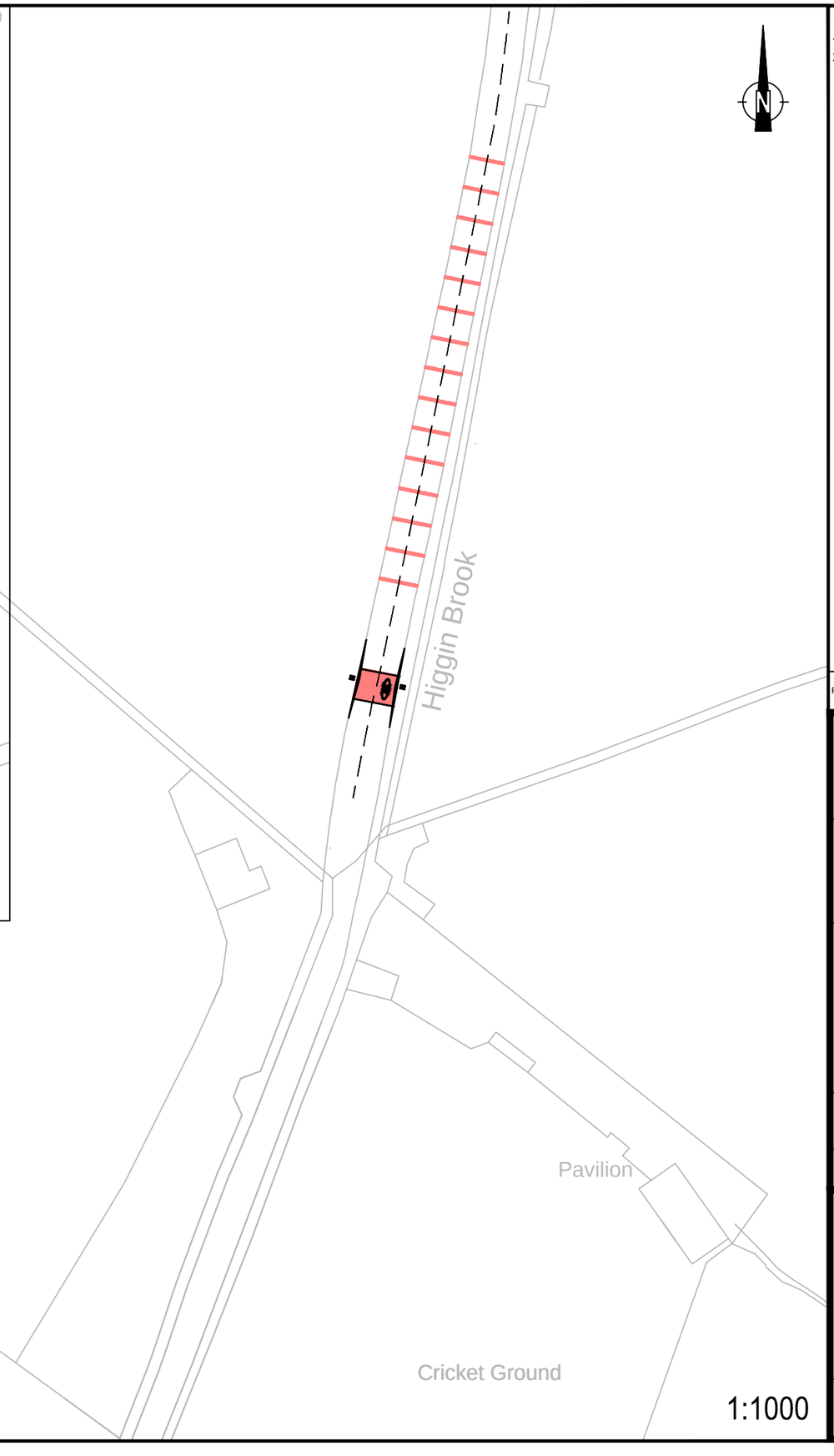
DRAWN:	CHECKED:	DATE:
HS	DL	10.07.13

vectos
transport planning specialists
Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t: 0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER: VN30277-300

REVISION: .





Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

PLAN 4

REV.	DETAILS	DRAWN	CHECKED	DATE
A	Red bar markings replace dragons teeth (LCC comments).	HS	DL	05.12.14

CLIENT:
Barratt Homes

PROJECT:
Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:
Gateway Feature

SCALES:
As shown at A3

DRAWN:	CHECKED:	DATE:
HS	DL	10.07.13

vectos transport planning specialists
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t: 0161 228 1008 e: manchester@vectos.co.uk

DRAWING NUMBER:	REVISION:
VN30277-201	A

Design Revisions

The Revised Illustrative Masterplan

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

PLAN 6

REV.	DETAILS	DRAWN	CHECKED	DATE
B	Layout amendments.	HS	DL	16.08.15
A	Layout amendments.	HS	DL	05.08.14

CLIENT:

Barratt Homes

PROJECT:

Proposed Residential Development, Chipping Lane, Longridge

DRAWING TITLE:

Pedestrian Connection Plan

SCALES:

N.T.S

DRAWN:	CHECKED:	DATE:
HS	DL	May 14

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DRAWING NUMBER: VN30277-110

REVISION: B

Existing Bus Stop to be
Upgraded-Verge to be replaced
with footway

Pedestrian Connection

Existing Bus Stop

Footway alignment splayed to allow
sufficient forward visibility to junction
of Chipping Lane and Inglewhite Road

BUS STOP

BUS STOP

Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

PLAN 7

REV.	DETAILS	DRAWN	CHECKED	DATE
.	.	.	.	.

CLIENT:
Barratt Homes

PROJECT:
Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:
Proposed Connection
to Bus Stops

SCALES:
1:250 at A3

DRAWN:	CHECKED:	DATE:
HS	DL	10.07.13

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DRAWING NUMBER: VN30277-202

REVISION: ·

PLAN 8

Legend

- Site Location
- Bus Stop within 400m
- 5 Bus Service
- 5A Bus Service
- 5B Bus Service
- 35 Bus Service
- 4 Bus Service
- 1 Bus Service

This is not a construction drawing
and is intended for illustrative purposes only.

CLIENT:

Barratt Homes

PROJECT TITLE:

Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:

Bus Routes Local Context

SCALE: N.T.S

DRAWN:	CHECKED:	DATE:
HF	DL	Mar 15

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DRAWING NO: VN30277-G407

REVISION:

PLAN 9

Legend

- Site Location
- Retail
- Health
- Primary School
- secondary School
- Recreation Leisure
- Supermarket
- Community Facilities
- BusStops
- Town Centre
- 800m Catchment
- 2km Catchment

This is not a construction drawing and is intended for illustrative purposes only.

CLIENT:

Barratt Homes

PROJECT TITLE:

Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:

Local Amenities

SCALE:

1:15000 at A3

DRAWN:	CHECKED:	DATE:
HF	DL	Mar 14

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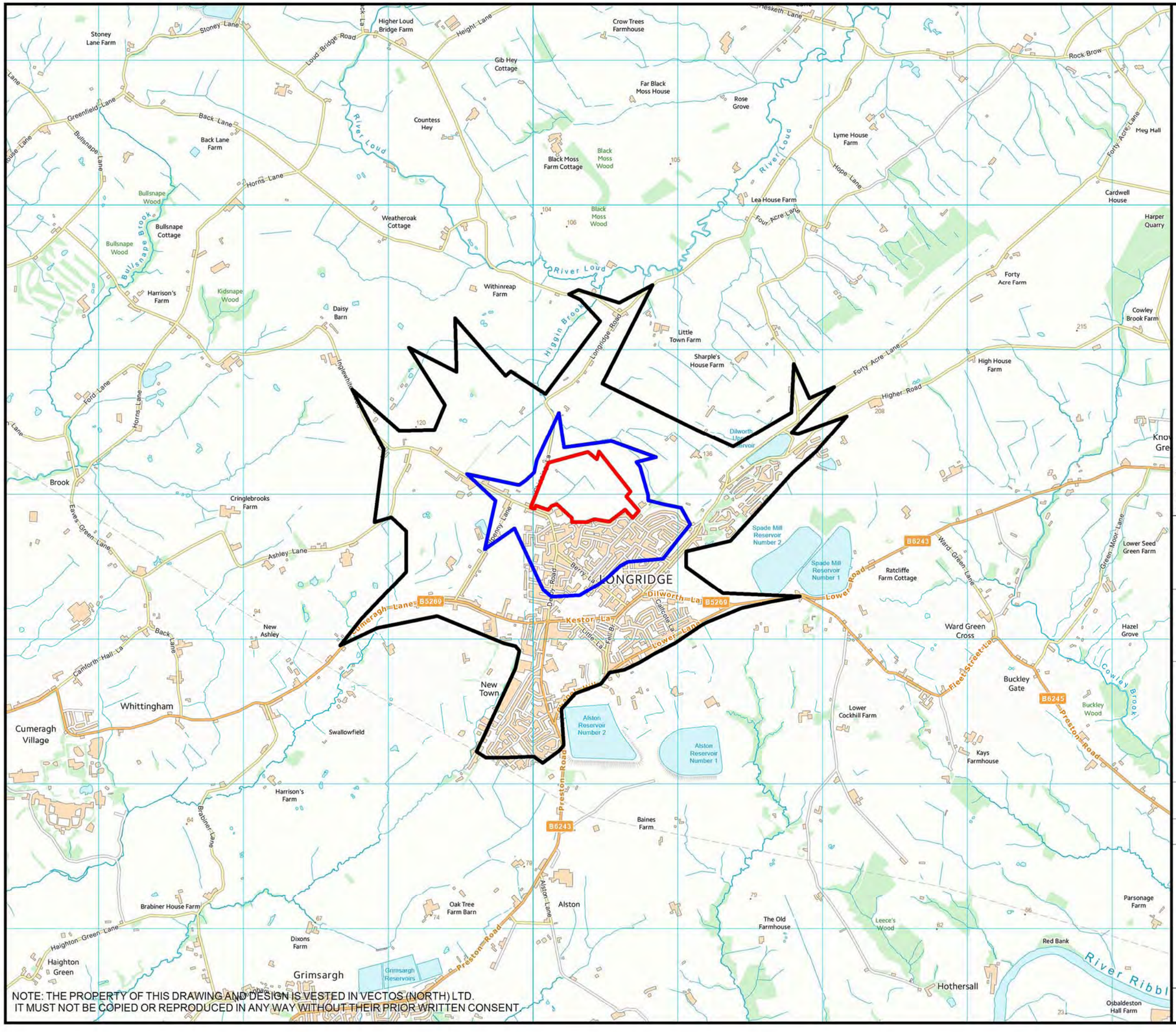
DRAWING NO: VN30277-G405

REVISION:



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Legend

- Site Location
- 800m Catchment
- 2km Catchment

PLAN 10

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CLIENT:

Barratt Homes

PROJECT TITLE:

Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:

800m & 2km Pedestrian Catchment

SCALE:

1:25000 at A3

DRAWN:	CHECKED:	DATE:
HF	DL	Mar 15

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DRAWING NO: VN30277-G402

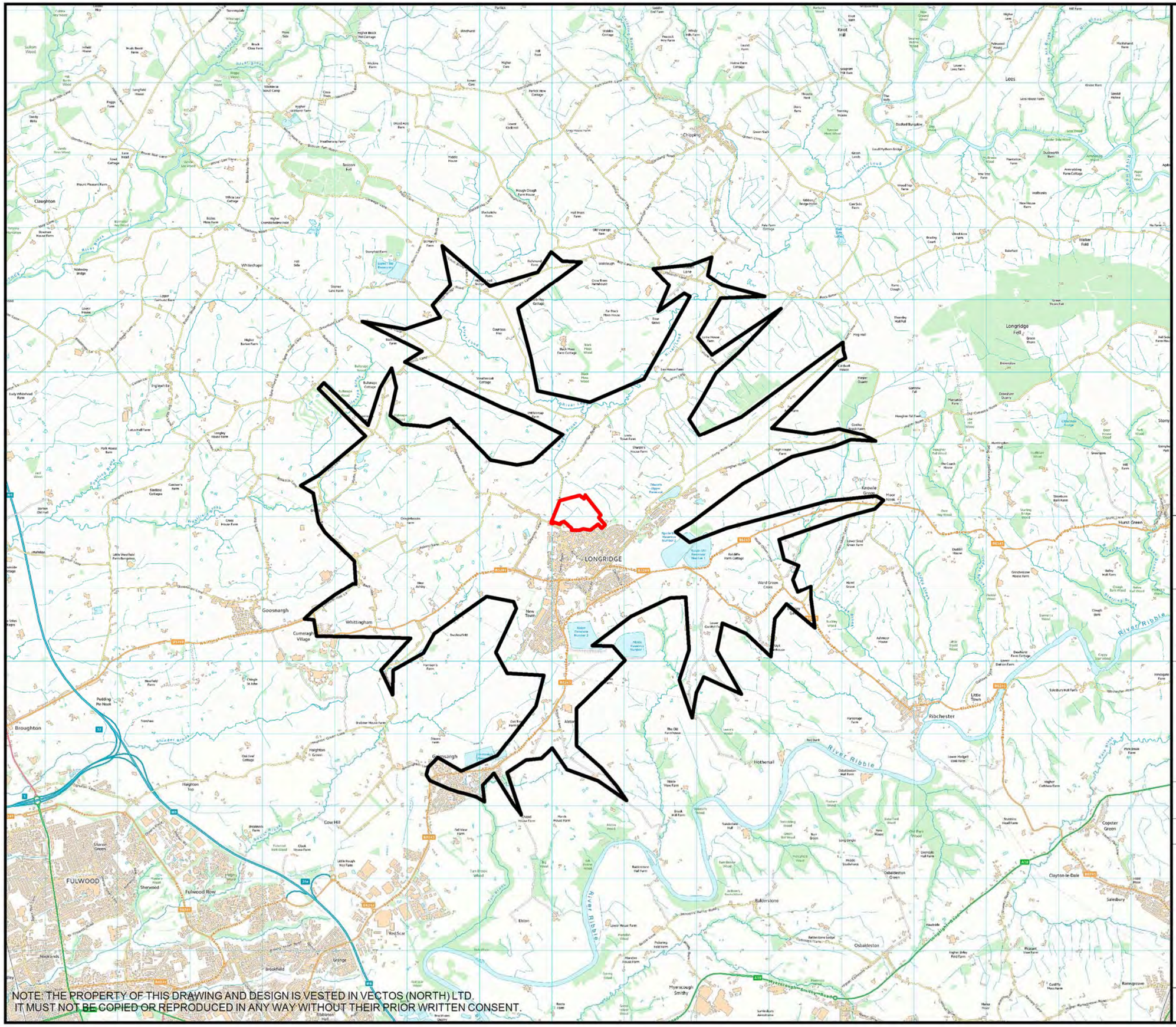
REVISION:

PLAN 11

Legend

Site Location

5km Catchment



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CLIENT:

Barratt Homes

PROJECT TITLE:

Proposed Residential Development
Chipping Lane, Longridge

DRAWING TITLE:

5km Cycle Catchment

SCALE:

1:50000 at A3

DRAWN:	CHECKED:	DATE:
HF	DL	Mar 15

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DRAWING NO: VN30277-G403

REVISION:

PLAN 12

Notes:

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3. Subject to detailed design
4. Based upon digitised OS plan, accuracy can not be guaranteed until checked with topographical survey

Key:

- Proposed kerbline
- Proposed road markings
- Existing road markings
- Double yellow markings

DERBY ROAD
TOWNELEY ROAD WEST
BLACKPOOL ROAD
WHITTINGHAM ROAD
KESTOR LANE
CHATBURN ROAD
PRESTON ROAD
Shelter
Garage
PC
Works
BUS STOP

Existing bus stop
Existing bus stop
Existing footpath route
Introduce 1.8m pedestrian refuge with dropped kerbs and tactile paving
Introduce pedestrian crossing on Derby Road. Precise location and form of crossing (ie Zebra or Puffin/Toucan) to be agreed with highway authority
Introduce 1.8m wide pedestrian refuge with dropped kerb and tactile paving
Maintain existing kerbed island with 1.0m contrasting surface over-run area
Narrow entry of Chatburn Road to reduce pedestrian crossing width
Increase size of thermoplastic splitter island to provide increased standing area for pedestrians

(a) Existing highway arrangements

(b) Proposed highway improvements

Project	WHITTINGHAM ROAD, LONGRIDGE
Client	FOX STRATEGIC LAND & PROPERTY
Title	STONEBRIDGE ROUNDABOUT EXISTING & PROPOSED ARRANGEMENTS

ashleyhelme associates
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Drg No	1242/25
Rev	
Date	JULY 2011
Scale	1:500@A2

APPENDICES

Appendix 1

Accident Data

Corporate Development - Audit & Review
Hutton, Preston, PR4 5SB
Telephone 01772 413626 Fax 01772 412024

Lancashire Constabulary
police and communities together

Our ref: FQ/Vectos
Your ref: VN30277

6 February, 2014

Hannah Fuller
Vectos (North) Limited
3rd Floor, Oxford Place
61 Oxford Street
Manchester
M1 6EQ

Dear Hannah

Re: Collision data for last 5 years for Longridge

Further to your recent correspondence, I have been asked to reply on behalf of the Constabulary.

The information you have requested is shown on the attached sheets. The cost of the searches and information provided is £25.00 + VAT and an invoice will follow shortly.

I hope the information will prove to be of use. Should you require any further assistance, please do not hesitate to contact this office on the above telephone number.

Yours sincerely,

Farhet Quraishi
Data Auditor

Enc.

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP0900006	SLIGHT
DATE & TIME	27/06/2009	17:25
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	UC	DERBY ROAD
MAP REFERENCE	E360099	N437115

NATURE

VEHICLES MOVED PRIOR TO ARRIVAL. VEHICLE 1 APPEARS TO HAVE BEEN TRAVELLING FROM PRESTON ROAD TOWARDS DERBY ROAD, ACROSS MINI ROUNDABOUT AT THIS LOCATION. VEHICLE 2 APPEARS TO HAVE BEEN TRAVELLING FROM KESTOR LANE TOWARDS WHITTINGHAM ROAD ACROSS THE SAME ROUNDABOUT. IT IS NOT KNOWN WHICH VEHICLE WAS FIRST ON ROUNDABOUT BUT VEHICLE 2 SKIDDED AND FELL TO FLOOR SLIDING ON CARRIAGEWAY UNTIL COLLIDING WITH VEHICLE 1.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
2	1	CAR	GOING AHEAD OTHER
	2	MOTORCYCLE 50CC & UNDER	GOING AHEAD OTHER

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EP1000002	SLIGHT
DATE & TIME	11/02/2010	19:44
LOCATION DETAILS	UC	DERBY ROAD
JUNCTION	UC	VICTORIA STREET
MAP REFERENCE	E360116	N437258

NATURE

VEHICLE 1 WAS STATIONARY IN MAIN ROAD INDICATING AND WAITING TO TURN RIGHT, VEHICLE 2 - SCOOTER HAS BEEN APPROACHING FROM THE OPPOSITE DIRECTION. VEHICLE 1 HAS THEN TURNED RIGHT ACROSS THE PATH OF VEHICLE 2 CAUSING IT TO BRAKE HEAVILY, VEHICLE 2 SKIDS AND FALLS OVER CAUSING RIDER TO FALL FROM MACHINE. VEHICLE 2 SCRATCHED NEARSIDE PASSENGER DOOR OF VEHICLE 1 BEFORE COMING TO A STOP.

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
2	1	CAR	TURNING RIGHT
	2	MOTORCYCLE 50CC & UNDER	GOING AHEAD OTHER

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EN1200088	SLIGHT
DATE & TIME	02/08/2012	19:00
LOCATION DETAILS	UC	BERRY LANE
JUNCTION	B5269	MARKET PLACE
MAP REFERENCE	E360643	N437230

NATURE VEHICLE ONE AND VEHICLE TWO WERE TRAVELLING ALONG BERRY LANE LONGRIDGE TOWARDS THE JUNCTION WITH MARKET PLACE. VEHICLE ONE WAS TRAVELLING BEHIND VEHICLE TWO, BOTH VEHICLES STOPPED AT THE JUNCTION. VEHICLE TWO WAS INDICATING TO TURN LEFT, VEHICLE TWO WAS PLACED AT THE NEARSIDE WAITING TO TURN LEFT. VEHICLE TWO IS A DRIVING SCHOOL VEHICLE WITH A PUPIL IN THE DRIVING SEAT AND INSTRUCTOR IN THE PASSENGER SEAT WITH DUAL CONTROLS AND BOTH FOOTBRAKE AND HAND BRAKE ACTIVATED. VEHICLE ONE HITS NEARSIDE OF VEHICLE TWO. BOTH VEHICLES STOP AND WORDS ARE EXCHANGED. VEHICLE TWO PULLS ONTO MARKET PLACE. VEHICLE 1 DRIVES OFF ONTO HIGHER ROAD.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
2	1	CAR	SLOWING OR STOPPING
	2	CAR	WAITING TO TURN RIGHT

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EN1200105	SLIGHT
DATE & TIME	17/09/2012	10:30
LOCATION DETAILS	UC	INGLEWHITE ROAD
JUNCTION	UC	CHIPPING LANE
MAP REFERENCE	E359975	N437909

NATURE

DRIVER OF VEHICLE 1 LEAVES MAIN CARRIAGEWAY AT JUNCTION, INDICATES TO PULL INTO NEARSIDE THEN IMMEDIATELY TURNS RIGHT TO CARRY OUT A U-TURN, NOT SEEING VEHICLE 2 WHICH WAS IN AN OVERTAKE MANOEUVRE

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
2	1	GOODS VEHICLE <=3.5 TONNES MGW	U TURN
	2	CAR	OVERTAKING MOVING VEHICLE ON ITS OFFSIDE

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP1000022	SLIGHT
DATE & TIME	27/09/2010	08:20
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	70 METRES NORTH OF	SHAY LANE
MAP REFERENCE	E360065	N436876
NATURE		

VEHICLE 1 IS DRIVING AT LOW SPEED PAST HIGH SCHOOL, VEHICLE 1 DRIVES DOWN THE OFFSIDE OF BUS PARKED IN NEARSIDE LAYBY. PEDESTRIAN 1 STEPS OUT FROM KERB AND WALKS IN FRONT OF BUS PUTTING LEFT FOOT OUT INTO THE ROAD, VEHICLE 1 DRIVES OVER PEDESTRIANS FOOT.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
1	1	CAR	OVERTAKING STATIONARY VEHICLE ON ITS OFFSIDE

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EP0900008	SLIGHT
DATE & TIME	13/07/2009	15:20
LOCATION DETAILS	UC	PRESTON ROAD
JUNCTION	OUTSIDE	HOUSE NO 89
MAP REFERENCE	E360103	N436527
NATURE		

VEHICLE ONE TRAVELLING FROM PRESTON ALONG PRESTON ROAD IN DIRECTION OF LONGRIDGE. FEMALE CHILD RUNS BETWEEN PARKED VEHICLES ACROSS ROAD INTO PATH OF ONCOMING VEHICLE. DRIVER ATTEMPTS TO BRAKE BUT COLLIDED WITH CHILD, THROWING HER ACROSS NEARSIDE BONNET OF VEHICLE AND ONTO PAVEMENT

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
1	1	OTHER MOTOR VEHICLE	GOING AHEAD OTHER

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP1000004	SLIGHT
DATE & TIME	17/02/2010	15:50
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	OUTSIDE	HOUSE NO 11
MAP REFERENCE	E360151	N436416
NATURE		

THE DRIVER WHO IS A WHEELCHAIR BOUND DISABLED DRIVER HAS BEEN DRIVING ALONG WITH ONE PASSENGER WHEN THE CLAMP WHICH SECURES HER WHEELCHAIR INTO THE VEHICLE HAS FAILED CAUSING HER TO MOVE FORWARD ONTO THE ACCELERATOR PEDAL CAUSING HER TO COLLIDE WITH THE HEDGE.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
1	1	OTHER MOTOR VEHICLE	TURNING RIGHT

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
2	1	SLIGHT
	2	SLIGHT

DIVISION, ACCNO & ACC CLASS	EN1200002	SLIGHT
DATE & TIME	05/01/2012	23:25
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	B6243	CHAPEL HILL
MAP REFERENCE	E360149	N436417
NATURE		

VEHICLE 1 TURNING SHARP RIGHT ACROSS MINI ROUNDABOUT, VEHICLE 2 ENTERS ROUNDABOUT AND MAKES CONTACT WITH FRONT OFFSIDE OF VEHICLE 1.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
2	1	CAR	TURNING RIGHT
	2	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EN1300089	SLIGHT
DATE & TIME	17/08/2013	20:10
LOCATION DETAILS	UC	INGLEWHITE ROAD
JUNCTION	UC	DERBY ROAD
MAP REFERENCE	E360159	N437617
NATURE		

DRIVER OF VEHICLE 1 COLLIDED WITH VEHICLE 2 AS IT WAS ON ROUNDABOUT. AT THE TIME OF THE COLLISION THERE WAS A TORRENTIAL RAIN STORM MAKING VISIBILITY NEXT TO ZERO AS REPORTING OFFICER WAS ALSO DRIVING THROUGH IT ON THE TIME IN THE SAME AREA.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
2	1	CAR	GOING AHEAD OTHER
	2	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
3	1	SLIGHT
	2	SLIGHT
	3	SLIGHT

DIVISION, ACCNO & ACC CLASS	EN1300028	SLIGHT
DATE & TIME	03/04/2013	09:20
LOCATION DETAILS	UC	PRESTON ROAD
JUNCTION	UC	CHAPEL HILL
MAP REFERENCE	E360146	N436421
NATURE		

DRIVER OF VEHICLE 1 HAS APPROACHED MINI ROUNDABOUT FROM DIRECTION OF LONGRIDGE UPON CROSSING THE ROUNDABOUT VISION HAS BEEN OBSTRUCTED BY THE SUN WHICH WAS LOW IN THE SKY ON A CLEAR DAY. THE RIDER OF THE CYCLE HAS MOVED OUT TOWARDS THE CENTRE OF THE ROAD TO AVOID OVERGROWN BUSH/TREES AND COLLIDED WITH THE NEARSIDE DOOR HANDLE/WING MIRROR OF VEHICLE 1.

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
2	1	CAR	GOING AHEAD LEFT HAND BEND
	2	PEDAL CYCLE	GOING AHEAD LEFT HAND BEND

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EN1300087	SLIGHT
DATE & TIME	19/08/2013	14:00
LOCATION DETAILS	UC	WHITTINGHAM LANE
JUNCTION	UC	DERBY ROAD
MAP REFERENCE	E360100	N437120
NATURE		

VEHICLE 1 HAS ENTERED ROUNDABOUT WITH RIGHT OF WAY FROM WHITTINGHAM LANE - VEHICLE 2 ENTERED ROUNDABOUT FROM DERBY ROAD AND COLLIDED WITH VEHICLE 1.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
2	1	CAR	TURNING RIGHT
	2	CAR	MOVING OFF

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EN1100138	SLIGHT
DATE & TIME	19/11/2011	13:55
LOCATION DETAILS	UC	BERRY LANE
JUNCTION	30 METRES WEST OF	DERBY ROAD
MAP REFERENCE	E360195	N437585
NATURE		

VEHICLE 1 HAS PARKED ON ROADSIDE, WHILST DRIVER OPENS DOOR SHE HITS PEDESTRIAN IN SHOULDER WITH SAME CAUSING PAIN TO LEFT SHOULDER.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
1	1	CAR	PARKED

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EN1100115	SERIOUS
DATE & TIME	02/11/2011	10:00
LOCATION DETAILS	UC	DERBY LANE
JUNCTION	B5269	WHITTINGHAM LANE
MAP REFERENCE	E360106	N437149
NATURE		

VEHICLE 1 - CAR PULLS ONTO ROUNDABOUT INTENDING TO GO STRAIGHT AHEAD BUT DOES NOT SEE VEHICLE 2 - CAR, ALREADY ON THE ROUNDABOUT AND COLLIDES WITH ITS NEARSIDE CAUSING VEHICLE 2 TO ROLL OVER.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
2	1	CAR	GOING AHEAD OTHER
	2	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
2	1	SLIGHT
	2	SERIOUS

DIVISION, ACCNO & ACC CLASS	EP0900022	SLIGHT
DATE & TIME	18/12/2009	23:30
LOCATION DETAILS	UC	PRESTON ROAD
JUNCTION	UC	SOUTHERN CLOSE
MAP REFERENCE	E360093	N436563
NATURE		

VEHICLE 2 HAS PULLED OUT OF SIDE STREET (SOUTHERN CLOSE) INTO SIDE OF VEHICLE 1 TRAVELLING ALONG MAIN ROAD. POINT OF CONTACT HAS BEEN THE OFFSIDE OF VEHICLE 2.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
2	1	CAR	GOING AHEAD OTHER
	2	CAR	MOVING OFF

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
2	1	SLIGHT
	2	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP0800018	SLIGHT
DATE & TIME	22/10/2008	16:45
LOCATION DETAILS	UC	KING STREET
JUNCTION	OUTSIDE	HOUSE NO 25
MAP REFERENCE	E360691	N437262
NATURE		

VEHICLE 1 4X4 TRAVELS ALONGSIDE STREET IN URBAN AREA. CASUALTY 1 RUNS OUTS FROM HEDGE ADJACENT TO ROAD AND INTO PATH OF VEHICLE 1 MOVING SLOWLY AT TIME OF COLLISION, CAUSING MINOR INJURY TO CASUALTY1 AND NO DAMAGE TO VEHICLE 1.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
1	1	OTHER NON-MOTOR VEHICLE	SLOWING OR STOPPING

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EN1200034	SERIOUS
DATE & TIME	02/04/2012	19:30
LOCATION DETAILS	UC	BERRY LANE
JUNCTION	OUTSIDE	LONGRIDGE LIBRARY
MAP REFERENCE	E360586	N437279
NATURE		

PEDESTRIAN HAS BEEN CROSSING ROAD WHEN SHE HAS LOOKED ONE WAY THEN RUN ACROSS ROAD INTO PATH OF VEHICLE 1 AND COLLIDED WITH BONNET.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
1	1	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SERIOUS

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP1000029	SLIGHT
DATE & TIME	23/11/2010	08:45
LOCATION DETAILS	UC	INGLEWHITE ROAD
JUNCTION	UC	GEORGE STREET
MAP REFERENCE	E360154	N437668
NATURE		

VEHICLE 2 - CAR WAS TRAVELLING ALONG THE MAIN ROAD TOWARDS LONGRIDGE TOWN CENTRE WHEN VEHICLE 1 - CAR HAS OVERSHOT THE GIVE WAY LINE AND HIT VEHICLE 2 ON THE REAR NEARSIDE WING.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
2	1	CAR	GOING AHEAD OTHER
	2	CAR	WAITING TO GO AHEAD BUT HELD UP

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EP1000012	SERIOUS
DATE & TIME	17/06/2010	15:15
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	OUTSIDE	LONGRIDGE HIGH SCHOOL
MAP REFERENCE	E360064	N436849
NATURE		

CHILD PEDESTRIAN RUNS FROM BETWEEN PARKED BUSES INTO NEARSIDE WING OF VEHICLE 1 - CAR.

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
1	1	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SERIOUS

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EN1100112	SLIGHT
DATE & TIME	04/10/2011	07:20
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	OUTSIDE	LONGRIDGE HIGH SCHOOL
MAP REFERENCE	E360063	N436824

NATURE

THE INJURED PARTY IS A 14 YEAR OLD PAPERBOY AND HE HAS ENTERED ONTO A PELICAN CROSSING ON A MAIN ROAD OUTSIDE A LOCAL HIGH SCHOOL. WHILST ON THE CROSSING ON HIS PEDAL CYCLE A VEHICLE HAS STRUCK HIM CAUSING HIM TO FALL OFF HIS CYCLE AND ONTO THE BONNET OF THE VEHICLE. THE DRIVER HAS STOPPED AND ASKED THE INJURED PARTY IF HE WAS OK. HE HAS REPLIED YES AND THE DRIVER HAS THEN DRIVEN OFF WITHOUT GIVING HIS DETAILS.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
1	1	CAR	SLOWING OR STOPPING

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EP0900005	SLIGHT
DATE & TIME	26/06/2009	17:38
LOCATION DETAILS	UC	MARKET PLACE
JUNCTION	UC	BERRY LANE
MAP REFERENCE	E360644	N437225

NATURE

VEHICLE 1 TRAVELS SOUTH ON MARKET PLACE, LONGRIDGE AS VEHICLE 2 TRAVELS NORTH ON MARKET PLACE. VEHICLE 1 THEN TURNS WEST ACROSS THE PATH OF VEHICLE 2 CAUSING VEHICLE COLLISION

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
2	1	CAR	TURNING RIGHT
	2	MOTORCYCLE OVER 125CC & UPTO 500CC	GOING AHEAD OTHER

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP0900003	SERIOUS
DATE & TIME	02/04/2009	10:20
LOCATION DETAILS	UC	INGLEWHITE ROAD
JUNCTION	UC	BARNACRE ROAD
MAP REFERENCE	E360125	N437793

NATURE

AT THIS TIME IT IS THOUGHT THAT VEHICLE 1 HAS BEEN AT THE JUNCTION GIVING WAY WHEN VEHICLE 2 HAS FLASHED TO ALLOW ELDERLEY FEMALE PEDESTRIAN TO CROSS AT THE JUNCTION FROM HIS OFFSIDE. VEHICLE ONE HAS THEN ASSUMED THAT VEHICLE TWO WAS LETTING HIM OUT AND HAS LEFT THE JUNCTION. IT WAS A VERY SUNNY MORNING AND IT IS A STRONG POSSIBLY IT HAS AFFECTED HIS VISION OF THE DRIVER OF VEHICLE ONE

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
2	1	TAXI/PRIVATE HIRE CAR	MOVING OFF
	2	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SERIOUS

DIVISION, ACCNO & ACC CLASS	DR1100064	SLIGHT
DATE & TIME	18/07/2011	21:52
LOCATION DETAILS	UC	INGLEWHITE ROAD
JUNCTION	OUTSIDE	HOUSE NO 74
MAP REFERENCE	E360039	N437888

NATURE

DRIVER OF VEHICLE 1 WHO IS HEAVILY INTOXICATED APPROACHES LEFT HAND BEND AT SPEED LOSES CONTROL AND CROSSES ONTO OFFSIDE OF ROAD. VEHICLE 1 THEN MOUNTS OFFSIDE FOOTPATH BEFORE CROSSING CARRIAGEWAY AND STRIKING NEARSIDE KERB. VEHICLE 1 THEN COLLIDES WITH EXTERIOR WALL OF NO 74 BEFORE OVERTURNING IN FRONT GARDEN.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
1	1	CAR	GOING AHEAD LEFT HAND BEND

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP0800020	SLIGHT
DATE & TIME	22/11/2008	10:20
LOCATION DETAILS	UC	PRESTON ROAD
JUNCTION	UC	HACKING DRIVE
MAP REFERENCE	E360023	N436621
NATURE		

VEHICLE ONE PULLS OUT OF SIDE ROAD, FAILING TO NOTICE VEHICLE TWO (PEDAL CYCLE) BEING RIDDEN TOWARDS LONGRIDGE COLLISION OCCURS.

NO OF VEHICLES	VEHICLE NO	VEHICLE TYPE	MANOUEVRES
2	1	CAR	TURNING RIGHT
	2	PEDAL CYCLE	TURNING RIGHT

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EN1200109	SLIGHT
DATE & TIME	09/10/2012	14:00
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	UC	LANGDALE ROAD
MAP REFERENCE	E360106	N436486
NATURE		

VEHICLE 1 SHUNTS INTO THE REAR OF VEHICLE 2.

NO OF VEHICLES	VEHICLE NO		MANOUEVRES
2	1	CAR	GOING AHEAD OTHER
	2	CAR	TURNING LEFT

NO OF CASUALTIES:	CASUALTY NO	SEVERITY
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP0900021	SLIGHT
DATE & TIME	29/11/2009	18:00
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	B6243	CHAPEL HILL
MAP REFERENCE	E360152	N436411

NATURE

VEHICLE 1 WAS TRAVELLING FROM PRESTON TOWARDS LONGRIDGE. VEHICLE 2 WAS TRAVELLING ALONG PRESTON ROAD TOWARDS PRESTON. BOTH VEHICLES APPROACHED THE JUNCTION AND MINI ROUNDABOUT AT THE OLD OAK PUBLIC HOUSE. VEHICLE 1 ENTERED THE ROUNDABOUT AND VEHICLE 2 COLLIDED WITH THE REAR DRIVERS SIDE OF VEHICLE 1. IT APPEARS THAT VEHICLE 2 HAD RIGHT OF WAY ALTHOUGH IT IS UNSURE WHO MISJUDGED THE DISTANCE BETWEEN VEHICLES.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
2	1	CAR	TURNING RIGHT
	2	CAR	GOING AHEAD RIGHT HAND BEND

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
2	1	SLIGHT
	2	SLIGHT

DIVISION, ACCNO & ACC CLASS	EP1100009	SLIGHT
DATE & TIME	18/11/2011	08:35
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	UC	MONKS BRIDGE
MAP REFERENCE	E360082	N436594

NATURE

VEHICLE 2 WAS STATIONARY INDICATING TO TURN RIGHT ONTO MONKS DRIVE. VEHICLE 1 FAILED TO REACT IN TIME TO APPLY BRAKING PROCEDURE AND HIT THE REAR END OF VEHICLE 2 CAUSING MINOR DAMAGE AND WHIPLASH INJURY TO DRIVER OF VEHICLE 2.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
2	1	CAR	SLOWING OR STOPPING
	2	CAR	WAITING TO TURN RIGHT

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
2	1	SLIGHT
	2	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EN1300054	SLIGHT
DATE & TIME	16/06/2013	00:35
LOCATION DETAILS	B6244	PRESTON ROAD
JUNCTION	OUTSIDE	HOUSE NO 70
MAP REFERENCE	E360097	N436522
NATURE		

VEHICLE 1 WHICH IS UNKNOWN HAS BEEN TRAVELLING SOUTH IN DIRECTION OF PRESTON AND HIT PEDESTRIAN WHO HAS JUST ALIGHTED FROM A BUS AT THE BUS STOP. VEHICLE HAS MADE OFF FROM SCENE MAKING NO ATTEMPT TO STOP.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
1	1	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	EP1100002	SLIGHT
DATE & TIME	04/04/2011	09:40
LOCATION DETAILS	UC	BERRY LANE
JUNCTION	OUTSIDE	CO-OP LATE SHOP
MAP REFERENCE	E360403	N437420
NATURE		

VEHICLE 1 STRIKES PEDESTRIAN WHILST CROSSING ROAD ON ZEBRA CROSSING. CCTV SHOWS THAT BRAKES ON VEHICLE WERE APPLIED AFTER THE COLLISION.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
1	1	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

COLLISION DATA FOR LONGRIDGE

DIVISION, ACCNO & ACC CLASS	EP0900018	SLIGHT
DATE & TIME	19/10/2009	09:30
LOCATION DETAILS	B6244	DERBY ROAD
JUNCTION	UC	BERRY LANE
MAP REFERENCE	E360168	N437604

NATURE

CASUALTY IS A BIN MAN WORKING FOR RIBBLE VALLEY BOROUGH COUNCIL. THE VEH HE WAS WORKING WITH HAS STOPPED AT A MINI ROUNDABOUT, CASUALTY HAS WAITED UNTIL VEH 1 TRAVELLING BEHIND HAD STOPPED. WHILST CASUALTY WAS LOADING BIN AT REAR OF BIN WAGON VEH 1 CREPT FORWARD SLOWLY TRAPPING CASUALTY BETWEEN THE 2 VEHICLES. VEH 1 REVERSED IMMEDIATELY, STATED FOOT HAD SLIPPED OFF BRAKE.

NO OF VEHICLES	**VEHICLE NO**	**VEHICLE TYPE**	**MANOUEVRES**
2	1	CAR	WAITING TO GO AHEAD BUT HELD UP
	2	OTHER MOTOR VEHICLE	PARKED

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

DIVISION, ACCNO & ACC CLASS	DR1100022	SLIGHT
DATE & TIME	08/03/2011	06:55
LOCATION DETAILS	B5269	CUMERAGH LANE
JUNCTION	UC	HALFPENNY LANE
MAP REFERENCE	E359459	N437274

NATURE

VEHICLE 1 SALOON FAILS TO CONFORM TO GIVE WAY MARKINGS AT T-JUNCTION. VEHICLE 1 EMERGES & COLLIDES WITH VEHICLE 2 SALOON WHICH IS TRAVELLING ALONG MAJOR ROAD. VEHICLE 2 THEN HITS LAMPPOST.

NO OF VEHICLES	**VEHICLE NO**		**MANOUEVRES**
2	1	CAR	TURNING LEFT
	2	CAR	GOING AHEAD OTHER

NO OF CASUALTIES:	**CASUALTY NO**	**SEVERITY**
1	1	SLIGHT

Appendix 2

Email from Sainsbury's stating In-principle Agreement to Footpath Link

Darren Lovell

From: Vincent Ryan <Vincent.Ryan@bartonwillmore.co.uk>
Sent: 09 September 2014 16:53
To: Darren Lovell
Subject: FW: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS
Attachments: 013_008_008_RevC_Illustrative_Masterplan_Lowres.pdf; 106 Site Layout_Rev J.PDF

Darren

Please see below from Sainsbury's, and CBRE on their behalf, confirming in-principle agreement to the link.

Regards

Vincent Ryan
Associate

Planning . Design . Delivery
Barton Willmore
Tower 12,
18/22 Bridge St,
Spinningfields,
Manchester
M3 3BZ

t: 0161 817 4903
f: 0161 870 1083
www.bartonwillmore.co.uk
-----Original Message-----
From: Brown, Andrew [mailto:andrew.brown@barratthomes.co.uk]
Sent: 20 August 2014 14:48
To: Dan Mitchell; Lorraine Davison; Vincent Ryan
Cc: Artiss, Simon
Subject: FW: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Further confirmation from Sainsburys.

Regards

Andrew E Brown Ba(Hons) Dip EP MRTPI
Senior Land Manager

Barratt Homes (a trading name of BDW Trading Ltd)
4 Brindley Road, City Park, Manchester M16 9HQ Direct Line Tel: 0161 855 2829 :|: Mob: 07785 740652
Switchboard: 0161 872 0161 :|: Fax: 0161 855 2828
Email: andrew.brown@barratthomes.co.uk
Web (corporate): www.barrattdevelopments.co.uk Web (sales): www.barratthomes.co.uk

We are actively acquiring housing land in the North West and need more - can you help?

-----Original Message-----
From: White, Richard @ Manchester [mailto:Richard.White@cbre.com]

Sent: 20 August 2014 10:29
To: Brown, Andrew
Subject: FW: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Andrew

I've had confirmation from Sainsburys that they are in agreement in principle with the location of the foot path as shown in the attached plans, This is however strictly without prejudice and subject to contract depending on how they wish any accessway to be documented. Furthermore as you state in your email this will also be subject to agreement of the exact specification of the pathway and gate such as may be required.

I note your proposed timescale for start on site so let me know when the plans have progressed further.

Best regards

Richard

Richard White | Associate Director

CBRE | Portfolio Services
Global Corporate Services
Belvedere | 5th Floor | 12 Booth Street | Manchester | M2 4AW DDI 0161 233 5636 | M 07921061213 | T 0161 455 7666 richard.white@cbre.com | www.cbre.com

-----Original Message-----
From: White, Richard @ Manchester
Sent: 14 August 2014 12:46
To: 'Brown, Andrew'
Subject: RE: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Andrew, apologies for the delay in responding. The plans have been sent onto Sainsburys for their consideration and I'll get back to you shortly.

Best regards

Richard

Richard White | Associate Director

CBRE | Portfolio Services
Global Corporate Services
Belvedere | 5th Floor | 12 Booth Street | Manchester | M2 4AW DDI 0161 233 5636 | M 07921061213 | T 0161 455 7666 richard.white@cbre.com | www.cbre.com

-----Original Message-----
From: Brown, Andrew [mailto:andrew.brown@barratthomes.co.uk]
Sent: 12 August 2014 10:14
To: White, Richard @ Manchester
Subject: FW: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS
Importance: High

Dear Richard,

I refer to the above and my recent email of the 6 August 2014.

I would be grateful if you could confirm that this is something that can be accepted by Sainsburys.

Such a confirmation will be without prejudice to your client going forward and subject to future agreement in terms of specification, location, etc of the path and gateway is required.

I would be grateful for your assistance with this.

Regards

Andrew E Brown Ba(Hons) Dip EP MRTPI
Senior Land Manager

Barratt Homes (a trading name of BDW Trading Ltd)
4 Brindley Road, City Park, Manchester M16 9HQ Direct Line Tel: 0161 855 2829 :|: Mob: 07785 740652
Switchboard: 0161 872 0161 :|: Fax: 0161 855 2828
Email: andrew.brown@barratthomes.co.uk
Web (corporate): www.barrattdevelopments.co.uk Web (sales): www.barratthomes.co.uk

-----Original Message-----
From: Brown, Andrew
Sent: 06 August 2014 09:28
To: 'White, Richard @ Manchester'
Subject: RE: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Richard,

I refer to our discussions in relation to the above store and the email trail below.

As we previously discussed Barratt Homes control the land to the north and are in the process of discussing a planning application with the Local Planning Authority. Attached is an updated version of our Phase 1 application, with the later phases programmed for submission on a larger masterplan application for submission next week. The masterplan is also attached.

You previously asked me for additional detail, which hopefully the attached detailed plan provides. The location of the proposed footpath link will connect to the existing footpath that runs across the edge of the care park and the front of the store. There will be no loss of parking as a result of the proposed link. There will be no disruption to the trading of the store as the works, compound, etc will all be located on the Barratt's site.

In terms of timescales it is anticipated that we are likely to be on site in the next 12 - 18 months (Aug/Sept 2015 - Feb/Mar 2016), with the proposed footpath being one of the first elements of the development to be installed.

I would like to report to the Council that we have an in principle agreement to the proposed footpath link at the earliest opportunity.

Do not hesitate to contact me if you wish to discuss further.

Regards

Andrew E Brown Ba(Hons) Dip EP MRTPI

Senior Land Manager

Barratt Homes (a trading name of BDW Trading Ltd)
4 Brindley Road, City Park, Manchester M16 9HQ

Direct Line Tel: 0161 855 2829 :|: Mob: 07785 740652
Switchboard: 0161 872 0161 :|: Fax: 0161 855 2828
Email: andrew.brown@barratthomes.co.uk
Web (corporate): www.barrattdevelopments.co.uk Web (sales): www.barratthomes.co.uk

We are actively acquiring housing land in the North West and need more - can you help?

-----Original Message-----
From: White, Richard @ Manchester [mailto:Richard.White@cbre.com]
Sent: 11 April 2014 10:31
To: Brown, Andrew
Subject: RE: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Andrew, can you let me know the details of the location of the access and estimated timescales and I'll look into this.

Thanks

Richard

Richard White | Associate Director

CBRE | Portfolio Services
Global Corporate Services
Belvedere | 5th Floor | 12 Booth Street | Manchester | M2 4AW DDI 0161 233 5636 | M 07921061213 | T 0161 455 7666 richard.white@cbre.com | www.cbre.com

-----Original Message-----
From: Janet Peto [mailto:Janet.Peto@sainsburys.co.uk]
Sent: 09 April 2014 14:53
To: Brown, Andrew
Cc: White, Richard @ Manchester
Subject: RE: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Andrew,

Sorry I haven't been back to you. I have received an in principle yes to the suggestion so can you please liaise with Richard White of CBRE to progress.

Janet

-----Original Message-----
From: Brown, Andrew [mailto:andrew.brown@barratthomes.co.uk]
Sent: 09 April 2014 12:17
To: Christian Wakelin; Peter Round; Janet Peto
Subject: RE: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Hello All,

Is there any follow up to the below request to form a footpath to and from your store at the above location?

Regards

Andrew E Brown Ba(Hons) Dip EP MRTPI
Senior Land Manager

Barratt Homes (a trading name of BDW Trading Ltd)
4 Brindley Road, City Park, Manchester M16 9HQ

Direct Line Tel: 0161 855 2829 :|: Mob: 07785 740652
Switchboard: 0161 872 0161 :|: Fax: 0161 855 2828
Email: andrew.brown@barratthomes.co.uk
Web (corporate):
http://cp.mcafee.com/d/5fHCNEi6h0SyOqehRS4QNRPtPqqdS3hOOCyejdFETspuushjdFETvKMeupodEThud7bNEVd7bbNIhQ6YJYWwGCOxgwT4JjHlVIGrFIEk8dNbkWRuraCTDX9LIcLZvDbCzBOX_nKnhd7b3_6zB5NNxDBHFShjlKevVkffGhBrwqrhdK6XYDuZXTLuZPtPpjy6NzIVEupY-GOLMDjHlVIGrS24vcsgzkN054dz7pP9Rl-DmHPpkSe7nd79I5zihEw610d1wMcxc5wsod40M2gM2NE0Ph06wM91kq0kbxE96zh02MM81M1Cy0axw6185xEs4xE0Ph05h062gMrvvdE-4F
Web (sales):
http://cp.mcafee.com/d/avndz8w71NJ5AQszHI9FzHCXCQQrI6zBBd4sCrjhKUOYYUyCrjhK_twsYOMrhKyYqenzhOqemnzozEdVrVR1ldB2x1K9qDmHPpkTjpgEgrymFRGYSldLfSjvopvW_end7bBT-LsKyqem7-d7abzz3fbnjIyCHss_OEuvkzaT0QSCrsdTVeZXTLuZXCXCOD4dz7pP9Rl-DmHPpkTI48-oUx6Fy0a8r6ePCjGHZeJnCOFIseKqejob6Azh0c20q31wp2ob0UMq81w4xw5zg1Cy0d1wi2EQ0En3gid6y05xwg3w3d40l30c2gb3gU93g1Cy0ay0c4xwS--rPy6M

We are actively acquiring housing land in the North West and need more - can you help?

-----Original Message-----
From: Christian Wakelin [mailto:Christian.Wakelin@sainsburys.co.uk]
Sent: 14 March 2014 16:32
To: Peter Round; Janet Peto
Cc: Brown, Andrew
Subject: FW: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Hi Janet / Peter,
Could you please review the attached and advise Andrew if this is something we'd be interested in doing.

Many thanks
Chris

Christian Wakelin | Senior Acquisitions Manager | North Sainsbury's Supermarkets Ltd | Beech Building, Draken Drive, Ansty Park, Ansty | CV7 9RD Christian.Wakelin@sainsburys.co.uk | 07733014941

If you have a Convenience Store location that you think we'd be interested in then let us know at
http://cp.mcafee.com/d/5fHCN0q4wUSyOqehRS4QNRPtPqqdS3hOOCyejdFETspuushjdFETvKMeupodEThud7bNEVd7bbNIhQ6YJYWwGCOxgwT4JjHlVIGrFIEk8dNbkWRuraCTDX9LIcLZvDbCzBOX_nKnhd7b3_6zB5NNxDBHFShjlKevVkffGhBrwqrpdK6XYDuZXTLuZPtPpjGra523siR2ZGMc_2nMJ_mHPpkTI48-oUx6Fy0a8r6ePCjGHZeJnCOFIseKqejob6Azh0c20q31wp2ob0UMq81w4xw5zg1Cy0d1wi2EQ0En3gid6y05xwg3w3d40l30c2gb3gU93g1Cy0ay0c4xwS--rANOZ

-----Original Message-----
From: Brown, Andrew [mailto:andrew.brown@barratthomes.co.uk]
Sent: 11 March 2014 15:14
To: Christian Wakelin
Cc: Artiss, Simon; Darren Lovell (darren.lovell@vectos.co.uk)
Subject: SAINSBURYS STORE, INGLEWHITE ROAD, LONGRIDGE, LANCS

Christian,

Please see the attached masterplan. As we discussed the site adjoins the existing store in Longridge. C500 plots are proposed. A planning application is to be submitted shortly.

What we'd like to do is form a link from our site to the store.

Can you please advise if there would be any objection in principle, and if not what the process is for agreeing the implementation of the footpath?

Regards

Andrew E Brown Ba(Hons) Dip EP MRTPI
Senior Land Manager

Barratt Homes (a trading name of BDW Trading Ltd)
4 Brindley Road, City Park, Manchester M16 9HQ

Direct Line Tel: 0161 855 2829 :|: Mob: 07785 740652
Switchboard: 0161 872 0161 :|: Fax: 0161 855 2828
Email: andrew.brown@barratthomes.co.uk
Web (corporate):
http://cp.mcafee.com/d/FZsSd38Orhpd7b3XZPhPtMTsSCztwQsIFEzAPqqdT6nDD4kPqqdTXI3DCm3qqdT1MVVNUsrIjzaAVr3z6BvfB05kSka46UBGtqLdBjtdB2x1K9qDmHPpkSyeujthpvW_9IFCzCXPfnKnjpoLPbb5QjhOVORQr8FGTKDOEuvkzaT0QSyrjdTVeZXTLuZXCXCOD4dz7pPgYPVZlBvxeDmHPpkTI48-oUx6Fy0a8r6ePCjGHZeJnCOFJ4sUOVtwSc20q31wp2ob0UMq81w4xw5zg1Cy0d1wi2EQ0En3gid6y05xwg3w3d40l30c2gb3gU93g1Cy0ay0c4xwS-yrHtuH
Web (sales): http://cp.mcafee.com/d/k-Kr3zqb9EVovvKqerK6XCQQrI6zBBd4sCrjhKUOYYUyCrjhK_twsYOMrjhKUe7fef3ztyspkDbosoQHVYE0GCOxgwT4JjHlVIGrFIEk8dNbkWRuraCQhPOrGbb_nVdBcQsTupWZOWrb5-ppoKyqenemKzp5dmZQ-l3PWApmU6CQPqpK_9TLuZXTLsTsSkUxIoXepeGLQWRuraCZwx7P748Rcg1h3oNSsOtlvFRGYSldEzD6nbI6Nwg3goc38j1o763h0c0Ac0Iq0cQg1Ec2gl6w52Uq2hEQg0Ic20s0pEw2Eo1wi1oq718q0cQg1kg1wAc6TQjvsfB

We are actively acquiring housing land in the North West and need more - can you help?

Your message is ready to be sent with the following file or link attachments:

013_008_008_RevA_Illustrative_Masterplan_Lowres (3)

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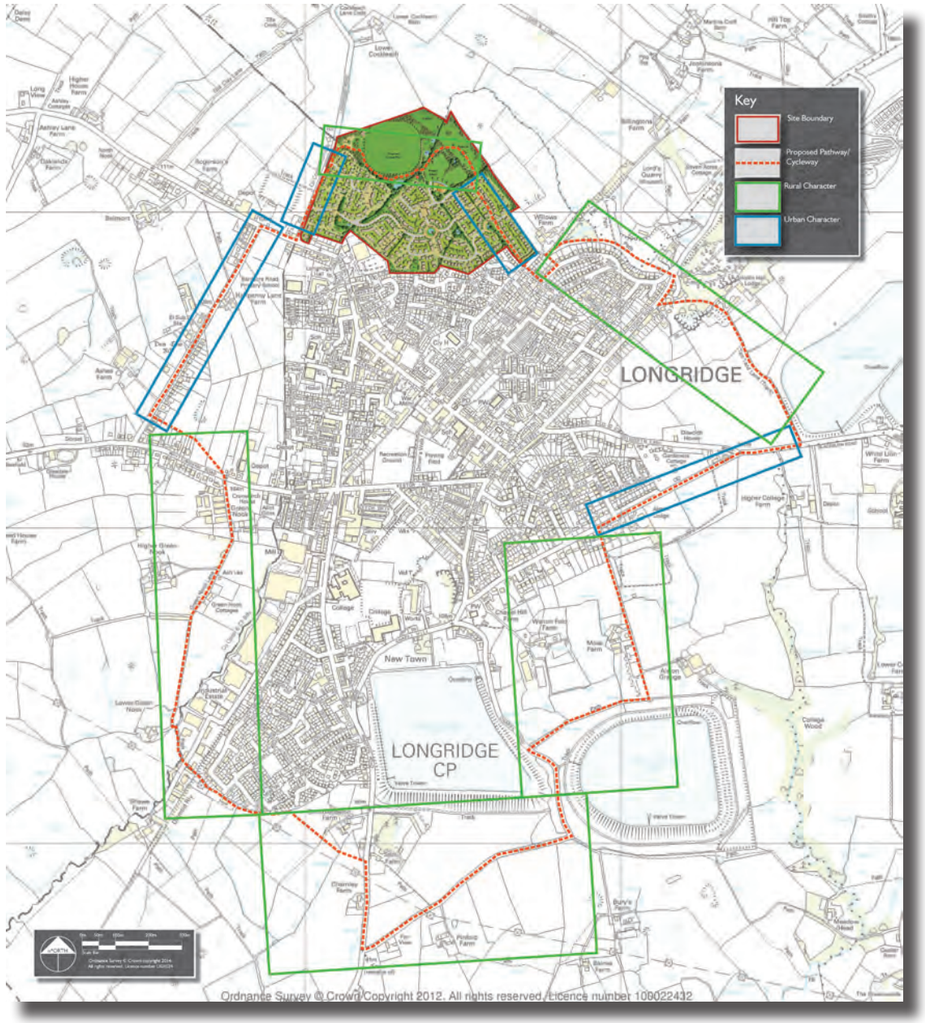
Appendix 3

Longridge Loop

The Longridge Loop - Strategic Cycleway & Footpath

e*SCAPE urbanists



Higgins Brook at Longridge

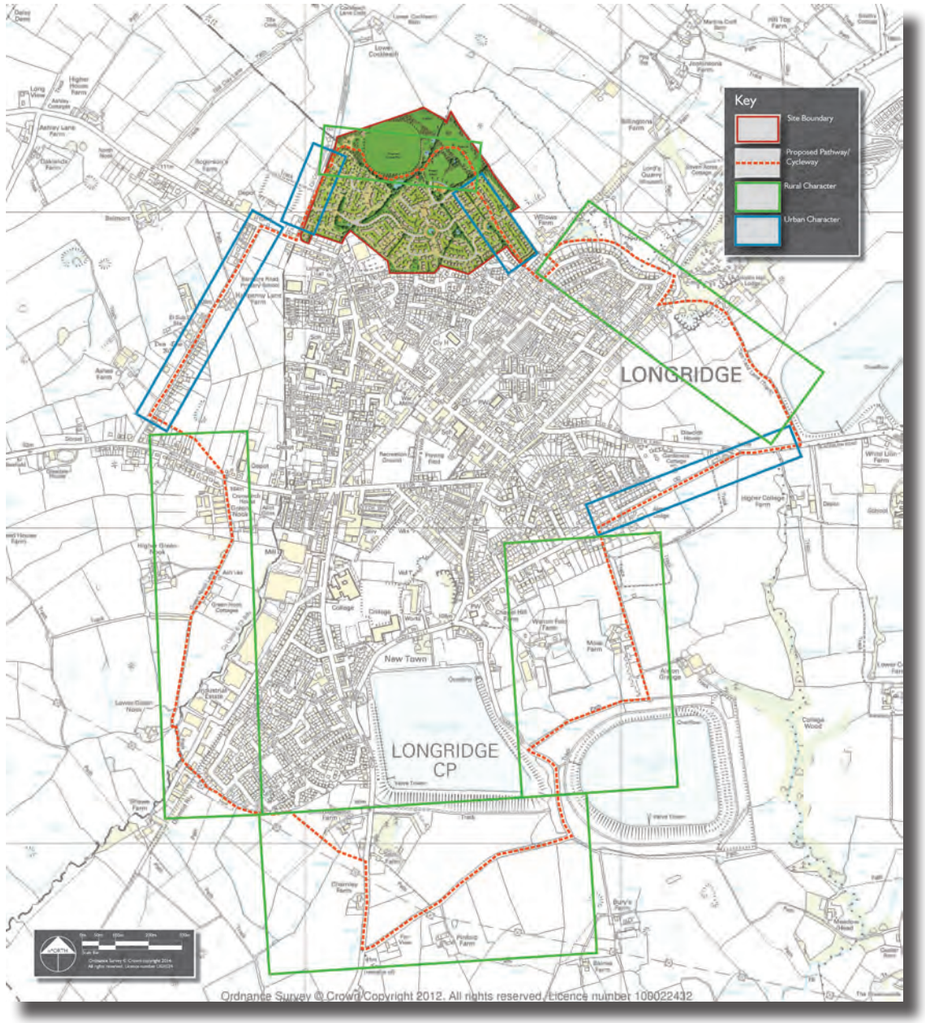
RURAL CHARACTER ZONES

Signage & Wayfinding

Surfacing

The Longridge Loop- Strategic Cycleway & Footpath

e*SCAPE urbanists



Higgins Brook at Longridge

URBAN CHARACTER ZONES

Signage & Wayfinding

Surfacing

Appendix 4

LCC Residential Development Accessibility Questionnaire Results

Planning Obligations

Planning Obligations

Calculate Residential Development Accessibility Score

Calculate Commericial Development Accessibility Score

Lancashire County Council's Mapping System (MARIO)

Contacts

Residential Development Accessibility Score *(09/03/2015 16:13:49)*

Entered Values

Score for distance to nearest bus stop: **3**
Score for distance to nearest railway station: **1**
Score for distance to nearest Primary School: **5**
Score for distance to nearest food shop: **5**
Score for distance to defined cycle routes: **2**
Score for distance to nearest Secondary School: **0**
Score for distance to nearest Town Centre: **3**
Score for distance to nearest Business Park or employment concentration: **2**
Score for bus frequency of principal service (Urban or Rural): **1**
Score for train frequency from nearest station: **3**
Score for Accessibility to other basic services (GP, Post Office, Library, Bank): **1**
Score for distance to nearest play area or park: **3**

Your Score

Your Residential Development Accessibility Score is: 29

Appendix 5

LCC Accessibility Distance to Local Amenities Table

Facility Type	Name of Facility	Location	Distance from centre of site (m)	Acceptable Journey on foot (m)
Health	(Optician)	Stephen Taylor Opticians, 13 Berry Lane, Longridge, PR3 3JA	778	800
	(Dentist)	Dental Surgery, 79 Berry Lane, Longridge, PR3 3WH	460	800
	(Pharmacy)	Lloyds Pharmacy, 40 Berry Lane, Longridge, PR3 3JJ	568	800
	(Hospital)	Longridge Community Hospital, St Wilfrid's Terrace,Longridge, PR3 3WQ	710	800
Faith Organisations	(Anglican)	St Lawerence and St Paul's C of E Church, Church Street, Longridge, PR3 3WA	770	800
	(Catholic)	St Wilfrid's RC Church, 44 Derby Road, Longridge, PR3 3JT	595	800
	(Synagogue)	Blackpool United Hebrew Congregation, The Synagogue, Leamington Road, Blackpool, FY1 4HD	33796	800
	(Mosque)	Masjid-E-Aqsa,101 Fishwick Parade, Preston, PR1 4XR	10783	800
Public Houses/ Restaurants	(Pub)	The Alston Arms, Inglewhite Road, Longridge, PR3 2NA	50	800
	(Sandwich & Coffee Bar)	No 65, 65 Berry Lane, Longridge, PR3 3NH	544	800
	(Restaurant)	Hamadan, 1-3 Inglewhite Road, Longridge, PR3 3JR	422	800
Local Food Retail	(Bakery)	Barm-Cakes, 4 Inglewhite Road, Longridge, PR3 3JR	390	800
	(Newsagent)	Berry Lane News, 69-71 Berry Lane, Longridge, PR3 3NH	532	800
Major food Retail	(Supermarket)	Sainsbury's, Inglewhite Road, Longridge, PR3 2NA	28	800
Sports/Leisure Facilities	(Football Ground)	Longridge Town Football Club, The Mike Riding Ground, Inglewhite Road, Longridge, PR3 2NA	196	800
	(Sports Club)	Longridge Sports Centre, Preston Road, Longridge, PR3 3AN	902	800
	(Recreation Ground)	Kestor Lane Recreation Ground, Kestor Lane, Longridge, PR3 3JX	646	800
Education	(Nursery)	St Wilfrids Nursery, 1 St Wilfrids Terrace, Longridge, PR3 3WQ	617	1000
	(C of E Primary School)	Longridge Church of England Primary School, Berry Lane, Longridge, PR3 3JA	665	1000
	(Catholic Primary School)	St Wilfrid's Roman Catholic Primary School, St Wilfrid's Terrace, Longridge, PR3 3WQ	720	1000
	(High School)	Longridge High School, Preston Road, Longridge, PR3 3AR	1113	1000
	(Grammar School)	Queen Elizabeth's Grammar School, West Park Road, Blackburn, BB2 6DF	16600	1000
	(College)	Stonyhurst College, Stonyhurst, Clitheroe, BB7 9PZ	10600	1000
Employment		Berry Lane, Longridge	449	1000
		Shay Lane Industrial Estate, Longridge	1195	
Public Transport	(Bus stop)	O/S Alston Arms	10	400
	(Railway Station)	Preston Rail Station	12700	800
Other	(Post Office)	24 Berry Lane, Longridge, PR3 3JA	596	800
	(Community Centre)	Longridge Youth & Community Centre, Berry Lane, Longridge, PR3 3JP	632	800
	(Fuel Station)	Booths Petrol, Berry Lane, Longridge PR3 3NH	534	800
	(Library)	Longridge Library, Berry Lane, Longridge, PR3 3JA	743	800
	(Hair Studio)	A Touch of Class, 74 Berry Lane, Longridge, PR3 3WH	480	800

Appendix 6

Multi-Modal Trip Rates - Residential

Calculation Reference: AUDIT-715001-150313-0308

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	BD	BEDFORDSHIRE	1 days
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	LC	LANCASHIRE	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: 101 to 491 (units:)
Range Selected by User: 100 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/00 to 20/05/14

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

Selected survey days:

Monday	3 days
Tuesday	4 days
Wednesday	1 days
Thursday	5 days
Friday	1 days

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

Selected survey types:

Manual count	14 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)	3
Edge of Town	11

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.

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	14 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	1 days
5,001 to 10,000	1 days
10,001 to 15,000	3 days
15,001 to 20,000	7 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	7 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:

Not Known	3 days
No	11 days

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

LIST OF SITES relevant to selection parameters

1 BD-03-A-01 SEMI DETACHED BEDFORDSHIRE
NEW BEDFORD ROAD

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 CA-03-A-01 SEMI D./TERRACED CAMBRIDGESHIRE
FALLOWFIELD
CHESTERTON
CAMBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 124
Survey date: TUESDAY 06/02/01 Survey Type: MANUAL

3 ES-03-A-01 MIXED HOUSES/FLATS EAST SUSSEX
OLD MALLING WAY
SOUTH MALLING
LEWES
Edge of Town
Residential Zone
Total Number of dwellings: 491
Survey date: THURSDAY 29/03/01 Survey Type: MANUAL

4 EX-03-A-01 SEMI-DET. ESSEX
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

5 LC-03-A-29 DETACHED/SEMI D. LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

6 LN-03-A-01 MIXED HOUSES LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 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 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK

SCUNTHORPE
Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY 12/05/14 Survey Type: MANUAL

9 NT-03-A-03 SEMI DETACHED NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

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

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

11 SF-03-A-02 SEMI DET./TERRACED SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

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

13 ST-03-A-03 MIXED HOUSES STAFFORDSHIRE
QUEENSVILLE

STAFFORD
Edge of Town
No Sub Category
Total Number of dwellings: 224
Survey date: TUESDAY 04/07/00 Survey Type: MANUAL

14 WO-03-A-06 DET./TERRACED WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CH-03-A-06	-
GM-03-A-07	-
GM-03-A-08	-
MS-03-A-01	-
SH-03-A-04	-
TV-03-A-01	-
WO-03-A-03	-

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
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	14	215	0.010	14	215	0.013	14	215	0.023
08:00 - 09:00	14	215	0.011	14	215	0.026	14	215	0.037
09:00 - 10:00	14	215	0.006	14	215	0.004	14	215	0.010
10:00 - 11:00	14	215	0.003	14	215	0.006	14	215	0.009
11:00 - 12:00	14	215	0.005	14	215	0.005	14	215	0.010
12:00 - 13:00	14	215	0.009	14	215	0.006	14	215	0.015
13:00 - 14:00	14	215	0.005	14	215	0.004	14	215	0.009
14:00 - 15:00	14	215	0.006	14	215	0.004	14	215	0.010
15:00 - 16:00	14	215	0.022	14	215	0.013	14	215	0.035
16:00 - 17:00	14	215	0.018	14	215	0.011	14	215	0.029
17:00 - 18:00	14	215	0.018	14	215	0.014	14	215	0.032
18:00 - 19:00	14	215	0.012	14	215	0.009	14	215	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.125			0.115			0.240

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:	101 - 491 (units:)
Survey date date range:	01/01/00 - 20/05/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
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	14	215	0.021	14	215	0.046	14	215	0.067
08:00 - 09:00	14	215	0.039	14	215	0.197	14	215	0.236
09:00 - 10:00	14	215	0.050	14	215	0.056	14	215	0.106
10:00 - 11:00	14	215	0.033	14	215	0.036	14	215	0.069
11:00 - 12:00	14	215	0.038	14	215	0.037	14	215	0.075
12:00 - 13:00	14	215	0.044	14	215	0.031	14	215	0.075
13:00 - 14:00	14	215	0.032	14	215	0.033	14	215	0.065
14:00 - 15:00	14	215	0.042	14	215	0.041	14	215	0.083
15:00 - 16:00	14	215	0.190	14	215	0.068	14	215	0.258
16:00 - 17:00	14	215	0.084	14	215	0.046	14	215	0.130
17:00 - 18:00	14	215	0.069	14	215	0.049	14	215	0.118
18:00 - 19:00	14	215	0.045	14	215	0.046	14	215	0.091
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.687			0.686			1.373

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:	101 - 491 (units:)
Survey date date range:	01/01/00 - 20/05/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
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	14	215	0.000	14	215	0.013	14	215	0.013
08:00 - 09:00	14	215	0.003	14	215	0.033	14	215	0.036
09:00 - 10:00	14	215	0.006	14	215	0.010	14	215	0.016
10:00 - 11:00	14	215	0.006	14	215	0.006	14	215	0.012
11:00 - 12:00	14	215	0.005	14	215	0.009	14	215	0.014
12:00 - 13:00	14	215	0.009	14	215	0.004	14	215	0.013
13:00 - 14:00	14	215	0.007	14	215	0.004	14	215	0.011
14:00 - 15:00	14	215	0.005	14	215	0.004	14	215	0.009
15:00 - 16:00	14	215	0.035	14	215	0.004	14	215	0.039
16:00 - 17:00	14	215	0.018	14	215	0.003	14	215	0.021
17:00 - 18:00	14	215	0.016	14	215	0.006	14	215	0.022
18:00 - 19:00	14	215	0.007	14	215	0.003	14	215	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.117			0.099			0.216

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:	101 - 491 (units:)
Survey date date range:	01/01/00 - 20/05/14
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	7

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.

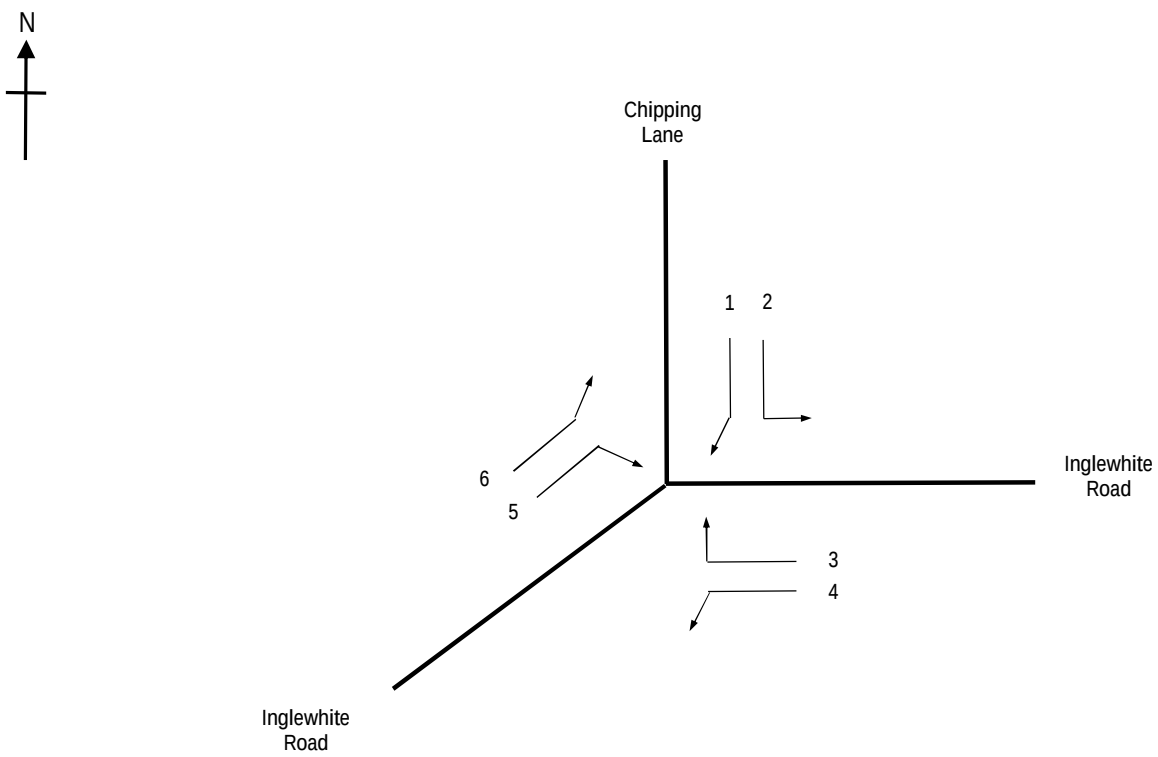
Appendix 7

Traffic Survey Data

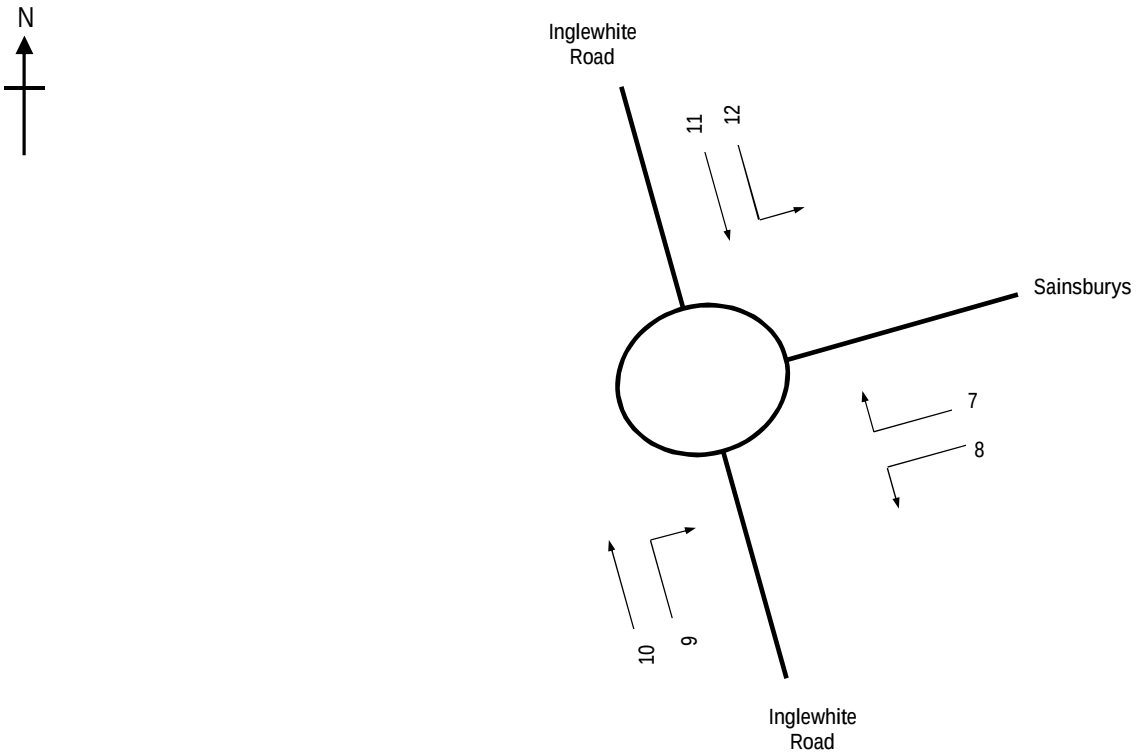
SURVEY CONTROL

Client:	Vectos
Client Contact:	Darren Lovell
Survey Location:	Longridge
Date(s) of Survey:	3 December 2013
Notes:	
On Site Supervisor:	David Cheng
Data Checking:	Richard Adams
Survey Reference:	2014.007 Longridge
Status:	Final
Date of Issue:	5 December 2013

JUNCTION 1



JUNCTION 2



DRAWING TITLE

TRAFFIC MOVEMENT REFERENCE

JOB TITLE

2014.007 LONGRIDGE

DRAWN BY	DATE	SCALE	REF
RA	DEC 2013	NTS	FIGURE 1

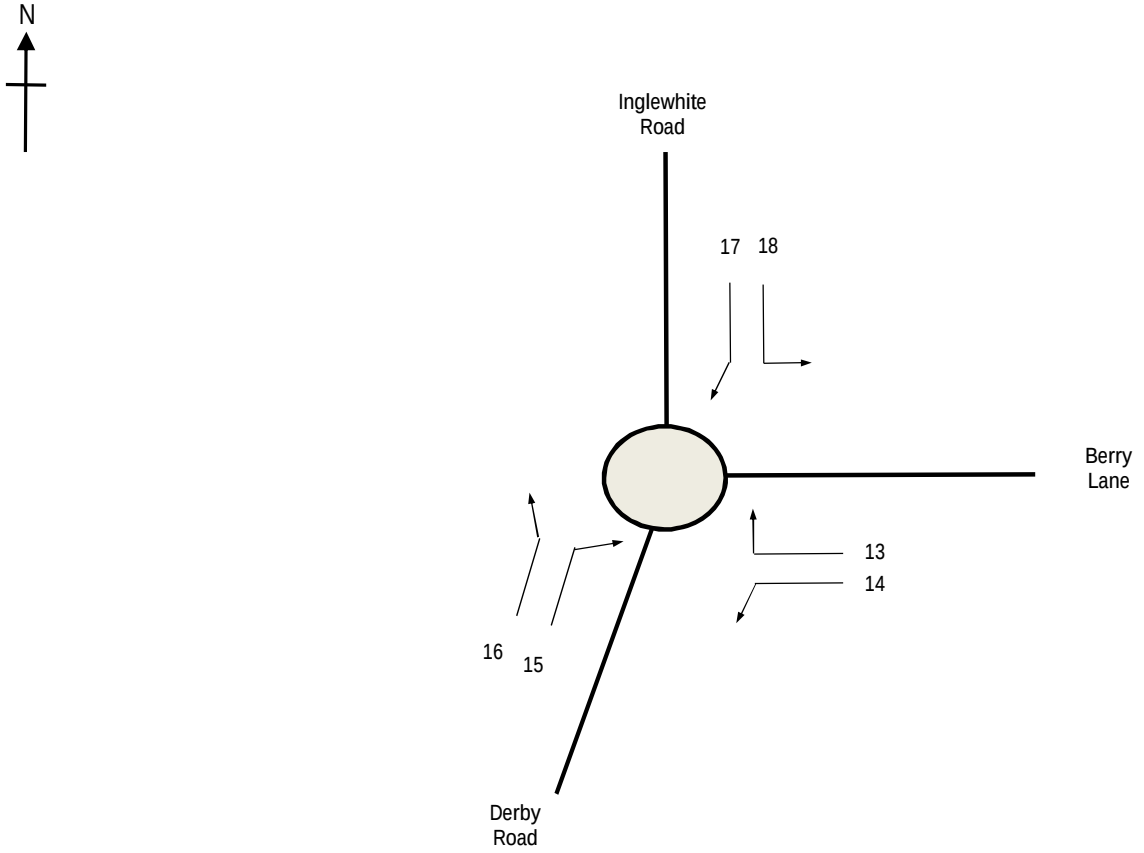
signal surveys

Traffic Counts and Car Park Surveys

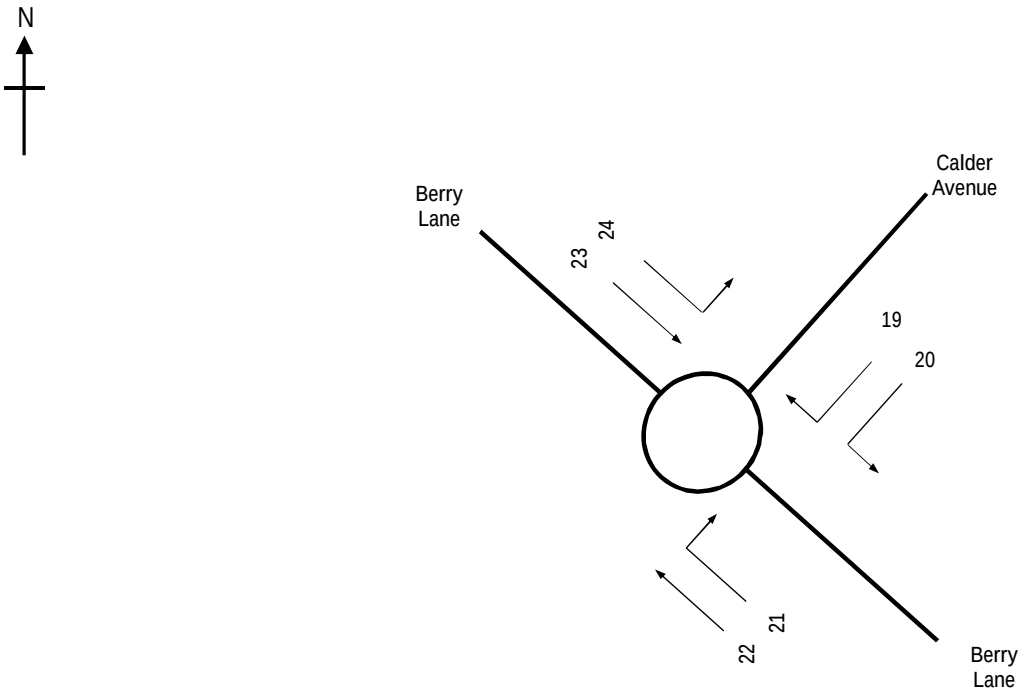
Parkway House, Palatine Road, Northenden, Manchester, M22 4DB

Tel 0161 998 4226 Fax 0161 998 1189

JUNCTION 3



JUNCTION 4



DRAWING TITLE: TRAFFIC MOVEMENT REFERENCE			
JOB TITLE: 2014.007 LONGRIDGE			
DRAWN BY: RA	DATE: DEC 2013	SCALE: NTS	REF: FIGURE 2

signal surveys
Traffic Counts and Car Park Surveys
Parkway House, Palatine Road, Northenden, Manchester, M22 4DB
Tel 0161 998 4226 Fax 0161 998 1189

Time Beginning	Inglewhite Road/Chipping Lane - Tuesday 3rd December 2013											
	1		2		3		4		5		6	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	8	0	26	2	8	5	32	2	31	1	2	0
0745	7	0	30	1	18	1	51	3	37	1	5	1
0800	13	0	32	4	19	1	46	1	33	2	5	0
0815	9	1	30	2	11	2	41	1	36	1	4	0
0830	6	0	30	2	12	4	55	0	45	0	4	1
0845	5	0	25	1	14	3	52	1	41	2	5	0
0900	4	0	18	1	12	0	40	3	25	3	1	0
0915	5	0	21	0	10	4	26	3	27	1	3	1

Time Beginning	Inglewhite Road/Chipping Lane - Tuesday 3rd December 2013											
	1		2		3		4		5		6	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	6	0	23	3	28	2	41	1	50	1	2	0
1645	7	0	16	1	26	0	55	1	45	0	9	0
1700	4	0	17	0	32	1	51	1	42	0	5	0
1715	4	0	18	1	25	0	47	1	48	3	2	0
1730	3	1	25	3	35	1	55	0	44	1	3	0
1745	0	0	16	0	36	2	31	0	39	0	7	0
1800	3	0	22	1	38	0	35	1	38	0	5	0
1815	2	0	13	2	24	2	27	0	29	0	3	0

Time Beginning	Inglewhite Road/Sainsburys - Tuesday 3rd December 2013											
	7		8		9		10		11		12	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	3	0	5	0	3	0	37	7	54	3	4	0
0745	6	0	10	0	13	0	71	4	60	1	6	0
0800	3	0	7	0	9	0	53	2	62	6	4	1
0815	5	0	5	1	10	1	46	3	63	3	3	0
0830	5	0	11	1	16	0	63	5	71	2	5	0
0845	5	0	23	0	23	0	61	3	61	3	5	0
0900	6	0	13	0	20	0	47	4	34	4	8	0
0915	8	0	19	0	9	0	29	6	41	1	8	0

Time Beginning	Inglewhite Road/Sainsburys - Tuesday 3rd December 2013											
	7		8		9		10		11		12	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	13	0	31	0	30	0	56	3	58	4	10	0
1645	17	0	27	0	42	0	66	2	52	1	12	0
1700	17	0	37	0	48	0	62	1	50	0	9	0
1715	19	0	31	0	45	0	55	1	55	4	12	0
1730	23	0	36	0	37	0	68	1	61	3	10	1
1745	13	0	36	0	36	0	53	2	45	0	11	0
1800	13	0	25	0	33	0	61	1	51	1	10	0
1815	15	0	33	0	23	0	36	2	33	2	3	0

Time Beginning	Inglewhite Road/Berry Lane/Derby Road - Tuesday 3rd December 2013											
	13		14		15		16		17		18	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	19	5	35	2	13	1	31	2	41	1	20	2
0745	55	1	43	4	21	4	34	3	43	1	40	0
0800	44	1	35	1	15	1	25	2	50	4	28	1
0815	39	2	40	3	21	0	28	2	55	4	25	1
0830	45	2	50	4	26	2	59	4	69	2	26	1
0845	55	1	61	3	27	1	63	4	60	1	47	2
0900	44	1	42	2	51	1	34	3	34	3	30	1
0915	22	4	52	2	29	1	27	2	35	2	31	0

Time Beginning	Inglewhite Road/Berry Lane/Derby Road - Tuesday 3rd December 2013											
	13		14		15		16		17		18	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	56	1	47	3	62	0	50	1	47	2	53	1
1645	57	2	36	2	46	0	52	0	35	1	55	1
1700	62	0	48	3	50	0	53	1	39	0	57	0
1715	49	0	50	2	40	3	60	1	46	2	51	1
1730	58	0	43	1	54	0	65	1	47	2	61	2
1745	50	2	44	3	56	2	65	0	35	0	46	0
1800	51	0	61	1	43	1	58	1	46	0	48	1
1815	25	0	48	3	46	0	44	2	30	1	44	1

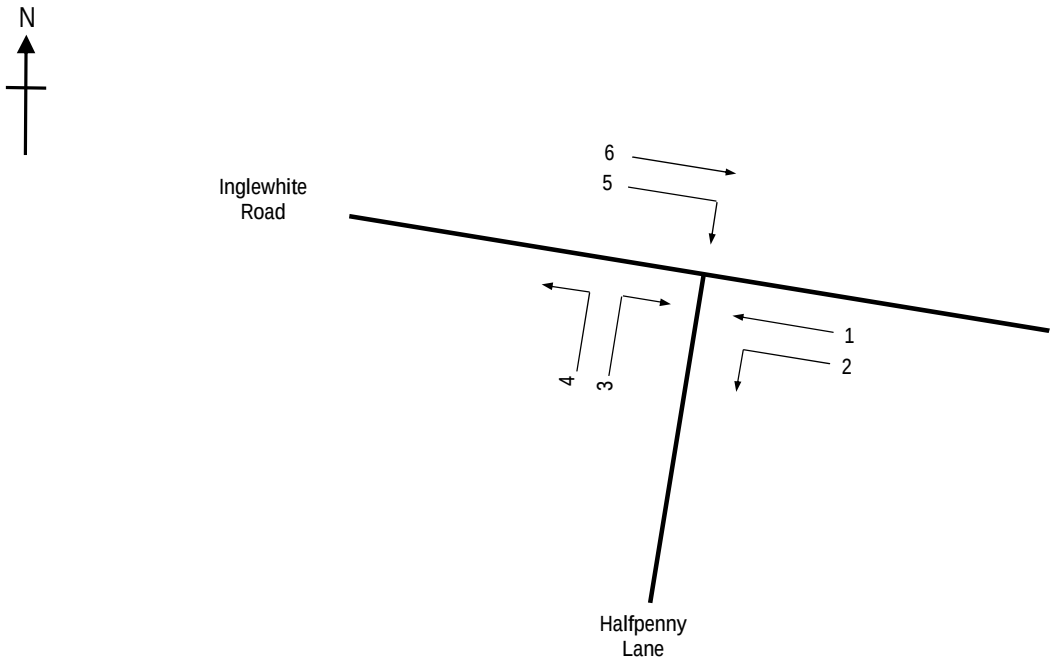
Time Beginning	Calder Avenue/Berry Lane - Tuesday 3rd December 2013											
	19		20		21		22		23		24	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	25	0	4	0	3	1	25	8	22	0	5	0
0745	27	1	6	0	4	0	64	4	42	2	5	0
0800	35	0	12	2	4	0	55	3	38	2	6	0
0815	27	0	11	0	10	1	55	2	33	1	9	0
0830	28	0	10	0	8	0	74	6	29	2	11	0
0845	34	0	12	0	5	0	101	2	42	1	9	0
0900	22	0	7	1	8	1	58	3	39	0	11	0
0915	16	0	11	0	7	1	53	6	35	1	9	0

Time Beginning	Calder Avenue/Berry Lane - Tuesday 3rd December 2013											
	19		20		21		22		23		24	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	21	0	10	0	7	0	71	4	70	0	34	0
1645	25	0	16	0	14	0	71	5	61	2	27	0
1700	33	0	12	0	9	1	68	3	76	0	21	0
1715	33	0	19	0	15	0	66	2	63	3	26	1
1730	17	0	13	0	7	0	72	1	80	2	32	1
1745	22	0	7	0	13	0	79	5	74	1	26	1
1800	27	0	9	0	11	1	78	1	55	1	27	0
1815	19	0	10	0	9	0	46	4	51	1	29	0

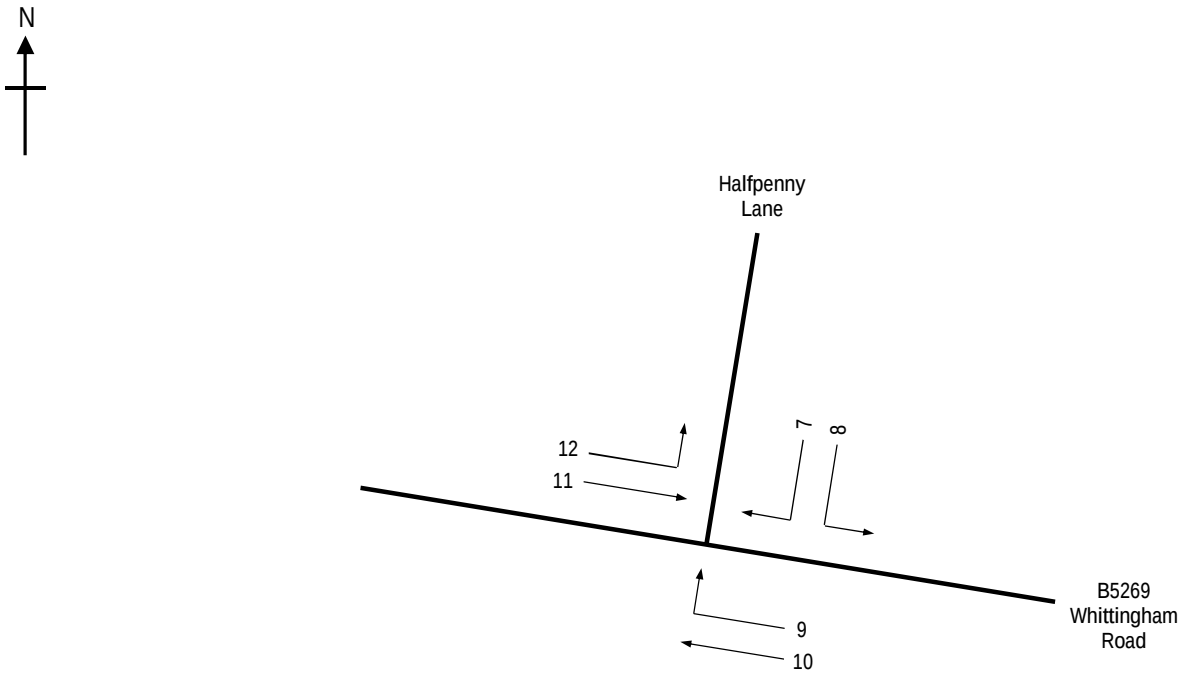
SURVEY CONTROL

Client:	Vectos
Client Contact:	Darren Lovell
Survey Location:	Longridge
Date(s) of Survey:	Tuesday 14 January 2014
Notes:	
On Site Supervisor:	David Cheng
Data Checking:	David Cheng
Survey Reference:	2014.020 Longridge 2
Status:	Final
Date of Issue:	15 January 2014

JUNCTION 1



JUNCTION 2

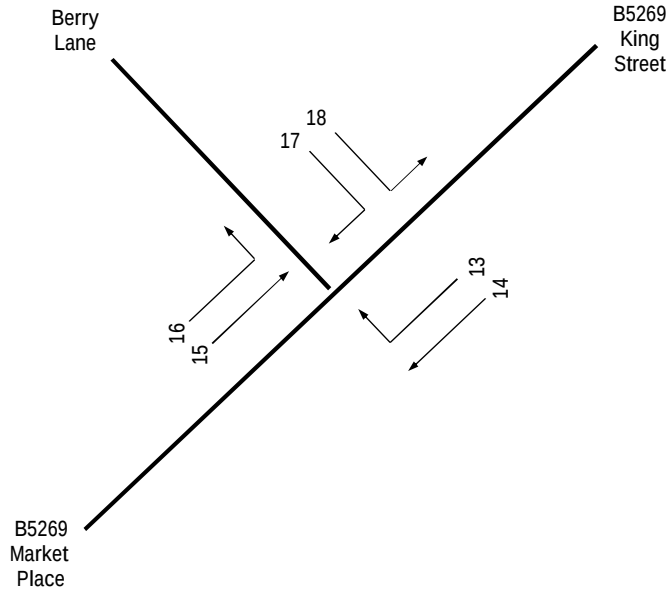


DRAWING TITLE: TRAFFIC MOVEMENT REFERENCE			
JOB TITLE: 2014.020 LONGRIDGE 2			
DRAWN BY: DC	DATE: JAN 2014	SCALE: NTS	REF: FIGURE 1

signal surveys
Traffic Counts and Car Park Surveys
Parkway House, Palatine Road, Northenden, Manchester, M22 4DB
Tel 0161 998 4226 Fax 0161 998 1189

N

JUNCTION 3



DRAWING TITLE: TRAFFIC MOVEMENT REFERENCE			
JOB TITLE: 2014.020 LONGRIDGE 2			
DRAWN BY: DC	DATE: JAN 2014	SCALE: NTS	REF: FIGURE 2

signal surveys
Traffic Counts and Car Park Surveys
Parkway House, Palatine Road, Northenden, Manchester, M22 4DB
Tel 0161 998 4226 Fax 0161 998 1189

Time Beginning	Inglewhite Road/Halfpenny Lane - Tuesday 14 January 2014											
	1		2		3		4		5		6	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	39	2	9	0	3	0	2	0	2	0	32	0
0745	29	0	16	0	8	0	6	0	0	0	34	4
0800	37	1	11	0	3	2	2	0	1	0	34	1
0815	27	1	5	0	4	0	2	1	2	1	28	2
0830	52	2	17	0	7	0	5	1	3	0	35	4
0845	44	1	13	0	10	1	11	1	6	0	30	1
0900	17	1	2	0	3	0	2	0	2	0	12	1
0915	12	0	5	1	5	0	3	0	0	0	19	1

Time Beginning	Inglewhite Road/Halfpenny Lane - Tuesday 14 January 2014											
	1		2		3		4		5		6	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	27	1	10	0	16	0	5	0	6	0	37	1
1645	28	0	10	0	15	0	4	0	6	0	42	0
1700	43	2	13	0	11	0	2	0	4	0	38	1
1715	31	1	11	0	10	0	1	0	0	0	38	0
1730	45	2	16	0	17	0	3	0	2	1	41	0
1745	33	1	4	0	11	0	2	0	1	0	25	0
1800	19	0	8	0	16	0	4	0	2	0	21	0
1815	16	0	4	0	14	0	1	0	1	0	18	0

Time Beginning	B5269 Whittingham Road/Halfpenny Lane - Tuesday 14 January 2014											
	7		8		9		10		11		12	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	8	0	4	0	2	0	43	5	39	3	3	0
0745	16	0	2	0	4	0	60	3	42	10	9	0
0800	13	0	3	0	4	0	53	4	36	1	4	2
0815	11	1	3	0	2	2	59	3	35	3	2	0
0830	14	0	3	0	11	0	48	2	35	6	4	1
0845	17	0	5	0	10	0	41	5	45	4	6	0
0900	6	1	6	0	4	0	36	2	27	3	9	0
0915	5	0	4	0	1	0	30	1	31	2	8	0

Time Beginning	B5269 Whittingham Road/Halfpenny Lane - Tuesday 14 January 2014											
	7		8		9		10		11		12	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	10	0	3	0	9	0	38	3	59	1	18	0
1645	6	0	10	0	2	0	45	2	61	5	12	0
1700	13	0	7	0	6	0	49	2	46	5	10	0
1715	11	0	0	0	4	0	43	1	57	1	9	0
1730	9	0	2	1	5	0	34	2	58	0	15	0
1745	11	0	3	0	8	0	33	0	29	0	15	0
1800	7	0	2	0	7	0	28	1	39	2	14	0
1815	5	0	2	0	7	0	27	0	27	1	12	0

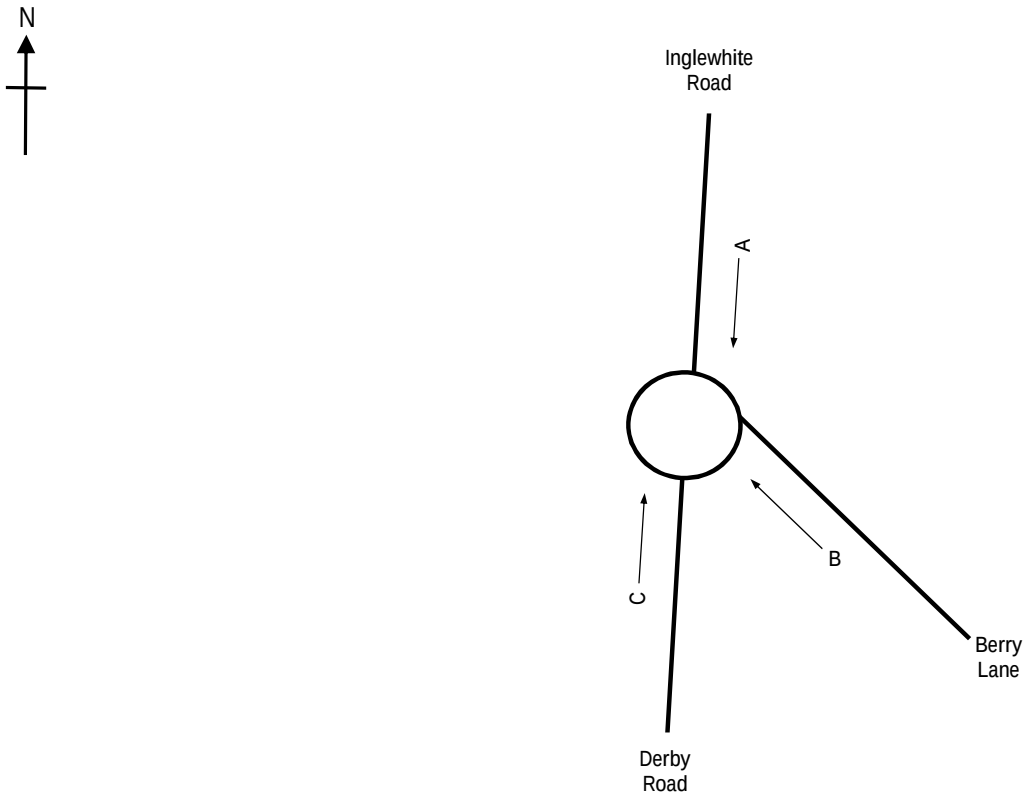
Time Beginning	B5269 Market Place/B5269 King Street/Berry Lane - Tuesday 14January 2014											
	13		14		15		16		17		18	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0730	22	3	34	5	29	0	9	1	15	0	24	0
0745	38	2	56	1	30	4	12	5	14	0	29	3
0800	38	0	53	0	30	1	8	1	13	1	40	0
0815	48	0	55	2	30	1	16	4	15	1	24	2
0830	57	3	38	0	24	3	49	2	12	0	25	2
0845	47	1	49	1	35	3	46	3	18	1	36	1
0900	37	1	25	0	32	1	23	1	19	3	29	0
0915	23	1	24	2	22	0	21	1	16	1	17	1

Time Beginning	B5269 Market Place/B5269 King Street/Berry Lane - Tuesday 14January 2014											
	13		14		15		16		17		18	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1630	36	1	26	1	35	1	27	0	28	0	34	1
1645	46	2	22	0	54	1	17	3	17	0	40	0
1700	40	0	33	0	56	2	38	2	29	2	43	0
1715	29	1	30	1	52	1	30	1	17	0	33	1
1730	34	0	28	2	52	2	24	1	20	1	50	0
1745	45	3	29	0	43	0	20	2	17	0	30	0
1800	39	0	31	1	40	0	22	3	23	0	19	1
1815	36	1	27	0	32	0	29	2	15	1	26	1

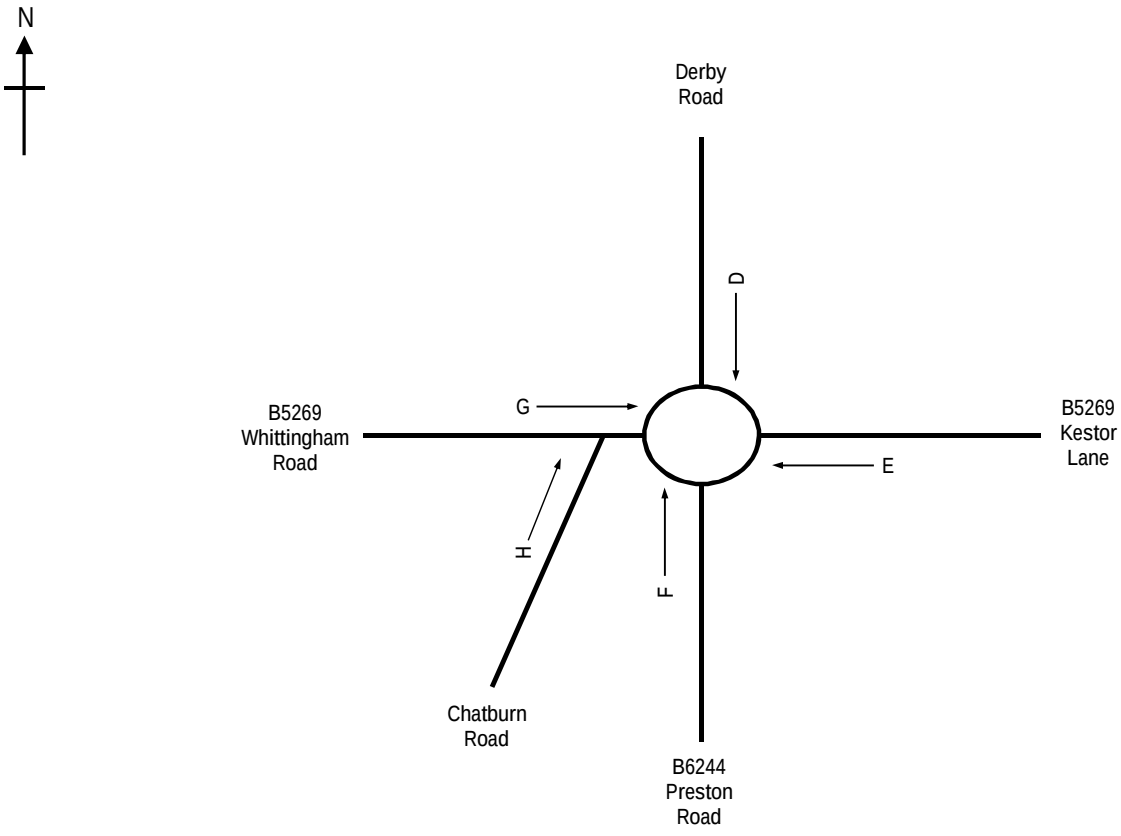
SURVEY CONTROL

Client:	Vectos
Client Contact:	Rory Murtagh
Survey Location:	Longridge
Date(s) of Survey:	Tuesday 11 November 2014 Wednesday 12 November 2014
Notes:	
On Site Supervisor:	David Cheng
Data Checking:	David Cheng
Survey Reference:	2014.154 Longridge Queues
Status:	Final
Date of Issue:	12 November 2014

JUNCTION 1



JUNCTION 2



DRAWING TITLE

QUEUE REFERENCE

JOB TITLE

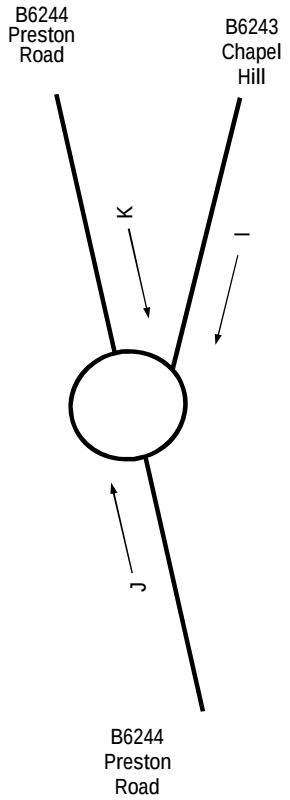
2014.154 LONGRIDGE QUEUES

DRAWN BY	DATE	SCALE	REF
DC	NOV 2014	NTS	FIGURE 1

signal surveys
Traffic Counts and Car Park Surveys
Parkway House, Palatine Road, Northenden, Manchester, M22 4DB
Tel 0161 998 4226 Fax 0161 998 1189

N

JUNCTION 1



DRAWING TITLE: QUEUE REFERENCE			
JOB TITLE: 2014.154 LONGRIDGE QUEUES			
DRAWN BY: DC	DATE: NOV 2014	SCALE: NTS	REF: FIGURE 2

signal surveys
Traffic Counts and Car Park Surveys
Parkway House, Palatine Road, Northenden, Manchester, M22 4DB
Tel 0161 998 4226 Fax 0161 998 1189

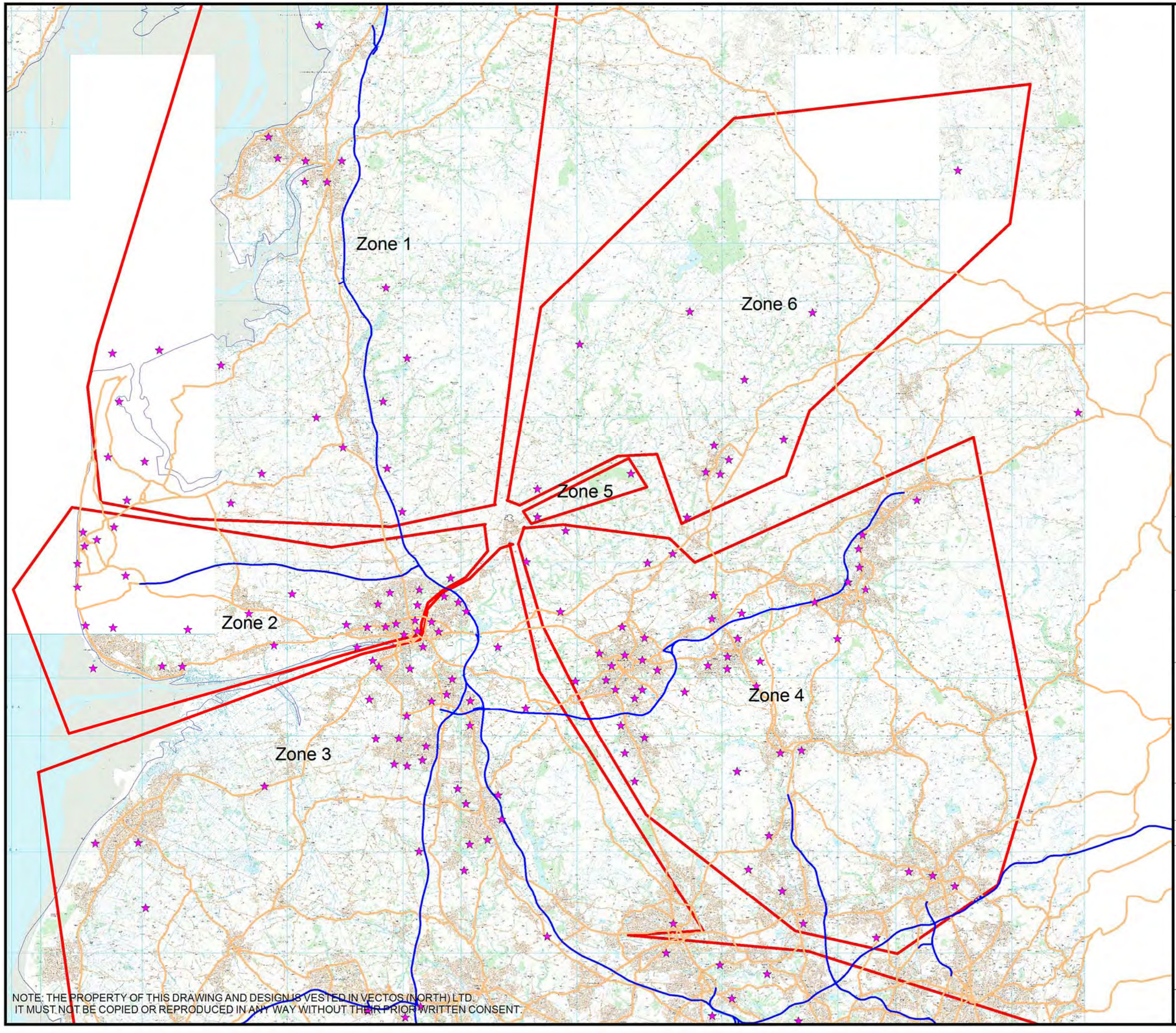
Time Beginning	Inglewhite Road/Berry Lane/Derby Road, Queues (vehs) - Tuesday 11 November 2014			Time Beginning	Inglewhite Road/Berry Lane/Derby Road, Queues (vehs) - Wednesday 12 November 2014		
	A	B	C		A	B	C
1645	2	0	4	0745	0	0	0
1650	3	7	3	0750	0	1	1
1655	0	0	0	0755	0	1	0
1700	0	0	0	0800	0	0	0
1705	0	0	3	0805	0	0	0
1710	2	8	7	0810	0	0	0
1715	3	3	0	0815	0	0	0
1720	0	4	0	0820	1	1	0
1725	1	2	3	0825	0	0	0
1730	0	0	0	0830	0	1	0
1735	1	0	0	0835	0	0	0
1740	0	0	2	0840	3	0	3
1745	3	1	5	0845	0	1	0
1750	0	0	0	0850	0	0	0
1755	0	2	0	0855	2	0	2
1800	0	0	0	0900	0	0	0
1805	0	0	0	0905	0	0	0
1810	0	1	1	0910	0	0	0
1815	0	1	0	0915	0	0	0

Time Beginning	Derby Road/B5269 Kestor Lane/B6244 Preston Road/B5269 Whhittingham Road, Queues (vehs) Tuesday 11 November 2014					Time Beginning	Derby Road/B5269 Kestor Lane/B6244 Preston Road/B5269 Whhittingham Road, Queues (vehs) Wednesday 12 November 2014				
	D	E	F	G	H		D	E	F	G	H
1645	4	2	8	2	0	0745	0	2	0	3	0
1650	3	2	3	0	0	0750	2	0	0	2	0
1655	2	0	2	0	0	0755	0	2	0	0	0
1700	3	2	2	2	0	0800	0	2	0	0	0
1705	4	0	4	2	0	0805	0	0	0	0	0
1710	3	0	3	4	0	0810	0	0	0	0	0
1715	2	0	6	3	0	0815	0	0	0	0	0
1720	0	0	0	1	0	0820	6	2	3	0	0
1725	1	0	3	0	0	0825	0	4	0	3	0
1730	7	0	0	0	0	0830	0	3	4	1	0
1735	6	1	1	1	0	0835	4	5	6	3	0
1740	4	1	0	3	0	0840	3	0	8	2	0
1745	0	4	2	2	0	0845	0	4	10	3	0
1750	0	0	0	0	0	0850	2	0	0	0	0
1755	3	0	1	1	0	0855	0	0	0	0	0
1800	4	2	2	3	0	0900	3	0	0	0	0
1805	2	0	0	0	0	0905	0	0	1	0	0
1810	3	0	0	0	0	0910	0	0	0	0	0
1815		0	0	1	0	0915	0	2	2	0	0

Time Beginning	B6244 Preston Road/B6243 Chapel Hill, Queues (vehs) - Tuesday 11 November 2014			Time Beginning	B6244 Preston Road/B6243 Chapel Hill, Queues (vehs) - Wednesday 12 November 2014		
	I	J	K		I	J	K
1645	1	4	3	0745	1	0	0
1650	1	6	2	0750	0	0	2
1655	1	2	2	0755	1	0	3
1700	1	0	3	0800	2	2	2
1705	0	0	4	0805	0	0	0
1710	5	4	2	0810	0	0	0
1715	3	7	4	0815	0	0	2
1720	1	5	2	0820	0	0	0
1725	0	3	1	0825	0	0	0
1730	1	1	2	0830	0	0	4
1735	1	0	1	0835	3	0	6
1740	1	5	2	0840	1	0	4
1745	2	0	1	0845	0	0	0
1750	1	0	2	0850	0	0	3
1755	4	0	3	0855	0	0	0
1800	4	4	4	0900	0	0	0
1805	0	0	2	0905	0	0	3
1810	0	0	1	0910	0	0	0
1815	2	0	1	0915	1	1	1

Appendix 8

Distribution



This is not a construction drawing
and is intended for illustrative purposes only.

CLIENT:

Barratt Homes

PROJECT TITLE:

Longridge

DRAWING TITLE:

Distribution Zone Map

SCALE:
N.T.S

DRAWN:	CHECKED:	DATE:
RM	DL	11.04.14

vectos
transport planning specialists

Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 22801008 e:manchester@vectos.co.uk

DRAWING NO: VN30277-G200

REVISION:

Zone 1		
Origin	Destination	Car_Drivers
30ULGC	30UHHL	3
30ULGC	30UKGK	42
30ULGC	30UQGG	5
30ULGC	30UQGJ	3
30ULGC	30UQGN	4
30ULGC	30UQGU	3
30ULGC	30UQHA	3
30ULGC	30UQHE	3
30ULGC	30UQHG	3
30ULGJ	30UFGD	3
30ULGJ	30UHGJ	3
30ULGJ	30UHGL	3
30ULGJ	30UHGM	3
30ULGJ	30UHGZ	3
30ULGJ	30UHHE	0
30ULGJ	30UKGK	47
30ULGJ	30UQGG	11
30ULGJ	30UQGJ	3
30ULGJ	30UQGL	3
30ULGJ	30UQGN	5
30ULGJ	30UQGP	3
30ULGJ	30UQGU	0
30ULGJ	30UQGY	3
30ULGJ	30UQGZ	3
30ULGJ	30UQHC	3
30ULGJ	30UQHD	3
30ULGJ	30UQHG	3
30ULGK	16UGJB	3
30ULGK	30UHGM	3
30ULGK	30UHGN	3
30ULGK	30UHHK	3
30ULGK	30UKGK	23
30ULGK	30UQGG	9
30ULGK	30UQGJ	3
30ULGK	30UQGN	3
30ULGK	30UQGP	0
30ULGK	30UQHG	3
Total		224

Whitingham Road

Zone 2		
Origin	Destination	Car_Drivers
30ULGC	00EYNC	3
30ULGC	00EYNE	3
30ULGC	00EYNR	3
30ULGC	00EYNW	3
30ULGC	30UFGC	3
30ULGC	30UFGL	0
30ULGC	30UFGN	10
30ULGC	30UFGW	30
30ULGC	30UKFW	7
30ULGC	30UKFZ	11
30ULGC	30UKGD	3
30ULGC	30UKGE	6
30ULGC	30UKGF	0
30ULGC	30UKGG	3
30ULGC	30UKGH	10
30ULGC	30UKGJ	15
30ULGC	30UKGM	28
30ULGC	30UKGN	13
30ULGC	30UKGQ	30
30ULGC	30UKGS	6
30ULGC	30UKGT	15
30ULGJ	00EYNR	3
30ULGJ	30UFGC	3
30ULGJ	30UFGN	6
30ULGJ	30UFGS	3
30ULGJ	30UFGW	16
30ULGJ	30UKFW	3
30ULGJ	30UKFZ	12
30ULGJ	30UKGD	3
30ULGJ	30UKGF	3
30ULGJ	30UKGH	9
30ULGJ	30UKGJ	4
30ULGJ	30UKGM	21
30ULGJ	30UKGN	7
30ULGJ	30UKGQ	36
30ULGJ	30UKGS	10
30ULGJ	30UKGT	14
30ULGK	00EYNB	3
30ULGK	00EYND	3
30ULGK	00EYNE	4
30ULGK	00EYNN	6
30ULGK	00EYNR	3
30ULGK	00EYNW	3
30ULGK	30UFGB	3
30ULGK	30UFGC	3
30ULGK	30UFGF	3
30ULGK	30UFGJ	3
30ULGK	30UFGL	3
30ULGK	30UFGN	4
30ULGK	30UFGR	3
30ULGK	30UFGW	25
30ULGK	30UKFW	3
30ULGK	30UKFZ	15
30ULGK	30UKGD	0
30ULGK	30UKGE	3
30ULGK	30UKGF	3
30ULGK	30UKGH	4
30ULGK	30UKGJ	10
30ULGK	30UKGM	30
30ULGK	30UKGN	6
30ULGK	30UKGQ	31
30ULGK	30UKGS	15
30ULGK	30UKGT	18
Total		562

Zone 3		
Origin	Destination	Car_Drivers
30ULGC	00BLFB	3
30ULGC	00BLFK	3
30ULGC	00BLFR	3
30ULGC	00BLFS	3
30ULGC	00BMFK	0
30ULGC	00BNFK	3
30ULGC	00BRFD	3
30ULGC	00BTFJ	3
30ULGC	00BUFG	3
30ULGC	00BWFD	3
30ULGC	00BWFZ	3
30ULGC	13UBGT	3
30ULGC	30UEGA	0
30ULGC	30UEGB	3
30ULGC	30UEGF	7
30ULGC	30UEGG	3
30ULGC	30UEGH	3
30ULGC	30UKFX	19
30ULGC	30UKGA	9
30ULGC	30UKGC	3
30ULGC	30UKGL	34
30ULGC	30UKGP	23
30ULGC	30UKGR	43
30ULGC	30UNFZ	9
30ULGC	30UNGA	6
30ULGC	30UNGB	7
30ULGC	30UNGF	3
30ULGC	30UNGH	3
30ULGC	30UNGK	0
30ULGC	30UNGM	3
30ULGC	30UNGT	3
30ULGC	30UNGU	3
30ULGC	30UNGX	5
30ULGC	30UNGY	3
30ULGC	30UPHD	3
30ULGJ	00BLFB	6
30ULGJ	00BMFN	3
30ULGJ	00BNFA	0
30ULGJ	00BNFK	3
30ULGJ	00BRFL	3
30ULGJ	00BUFG	3
30ULGJ	00BUFL	3
30ULGJ	00BUFT	3
30ULGJ	00CAGK	3
30ULGJ	00CAGL	3
30ULGJ	00ETND	3
30ULGJ	00EUND	3
30ULGJ	30UEGA	6
30ULGJ	30UEGB	3
30ULGJ	30UEGE	3
30ULGJ	30UEGF	5
30ULGJ	30UEGG	6
30ULGJ	30UEGM	3
30ULGJ	30UKFX	24
30ULGJ	30UKGA	5
30ULGJ	30UKGC	5
30ULGJ	30UKGL	25
30ULGJ	30UKGP	19
30ULGJ	30UKGR	49
30ULGJ	30UNFZ	15
30ULGJ	30UNGA	3
30ULGJ	30UNGB	3
30ULGJ	30UNGH	4
30ULGJ	30UNGK	0
30ULGJ	30UNGU	3
30ULGJ	30UNGX	0
30ULGJ	30UNGY	8
30ULGJ	30UNGZ	3
30ULGJ	30UNHC	3
30ULGJ	30UPGN	3
30ULGJ	30UPHC	3
30ULGK	00BLFG	3
30ULGK	00BNFA	3
30ULGK	00BNFK	7
30ULGK	00BNFM	0
30ULGK	00BRFF	3
30ULGK	00BRFR	3
30ULGK	00BWFU	3
30ULGK	00BYFA	3
30ULGK	00BYFG	3
30ULGK	00BYFQ	3
30ULGK	00CAGG	3
30ULGK	00EUNC	0
30ULGK	00EUND	3
30ULGK	13UBGL	3
30ULGK	13UHHT	0
30ULGK	30UEGA	3
30ULGK	30UEGC	3
30ULGK	30UEGD	3
30ULGK	30UEGF	6
30ULGK	30UEGH	3
30ULGK	30UEGK	3
30ULGK	30UKFX	6
30ULGK	30UKGA	7
30ULGK	30UKGC	3
30ULGK	30UKGL	18
30ULGK	30UKGP	11
30ULGK	30UKGR	63
30ULGK	30UNFZ	8
30ULGK	30UNGA	3
30ULGK	30UNGB	3
30ULGK	30UNGF	3
30ULGK	30UNGP	3
30ULGK	30UNGS	3
30ULGK	30UNGW	3
30ULGK	30UNGX	7
30ULGK	30UNGY	8
Total		675

Zone 4		
Origin	Destination	Car_Drivers
30ULGC	00BMFD	3
30ULGC	00BMFL	3
30ULGC	00BMFM	3
30ULGC	00BQFD	3
30ULGC	00EXMZ	6
30ULGC	00EXNB	3
30ULGC	00EXNH	3
30ULGC	00EXNJ	8
30ULGC	00EXNK	3
30ULGC	00EXNR	3
30ULGC	00EXNT	12
30ULGC	00EXNU	3
30ULGC	00EXNW	3
30ULGC	00EXNX	8
30ULGC	30UDGQ	3
30ULGC	30UDGU	3
30ULGC	30UDHB	3
30ULGC	30UGFT	3
30ULGC	30UGFU	6
30ULGC	30UGFW	3
30ULGC	30UGFX	3
30ULGC	30UGFZ	0
30ULGC	30UGGC	3
30ULGC	30UJGQ	3
30ULGC	30ULGC	135
30ULGC	30ULGQ	16
30ULGC	30ULGT	11
30ULGC	30UMFT	3
30ULGC	30UMFY	3
30ULGC	30UMGA	3
30ULGJ	00BMFQ	3
30ULGJ	00BQFG	3
30ULGJ	00BQFR	3
30ULGJ	00EXMZ	8
30ULGJ	00EXNF	3
30ULGJ	00EXNH	3
30ULGJ	00EXNJ	3
30ULGJ	00EXNK	3
30ULGJ	00EXNQ	3
30ULGJ	00EXNS	3
30ULGJ	00EXNT	11
30ULGJ	00EXNW	3
30ULGJ	00EXNX	4
30ULGJ	30UDGW	3
30ULGJ	30UDHC	3
30ULGJ	30UGFT	3
30ULGJ	30UGFZ	3
30ULGJ	30UGGC	3
30ULGJ	30UGGD	3
30ULGJ	30UGGK	3
30ULGJ	30UJGA	3
30ULGJ	30ULGC	82
30ULGJ	30ULGQ	15
30ULGJ	30ULGT	8
30ULGK	00BMFD	3
30ULGK	00BQFU	3
30ULGK	00EXMZ	3
30ULGK	00EXNB	3
30ULGK	00EXND	3
30ULGK	00EXNH	3
30ULGK	00EXNJ	9
30ULGK	00EXNK	3
30ULGK	00EXNN	3
30ULGK	00EXNQ	5
30ULGK	00EXNR	3
30ULGK	00EXNT	5
30ULGK	00EXNX	9
30ULGK	00EXNY	3
30ULGK	30UDHB	3
30ULGK	30UGFT	3
30ULGK	30UGFX	3
30ULGK	30UGFZ	3
30ULGK	30UGGH	0
30ULGK	30UGGJ	3
30ULGK	30UJGA	6
30ULGK	30UJGL	3
30ULGK	30UJGQ	3
30ULGK	30ULGC	72
30ULGK	30ULGD	3
30ULGK	30ULGN	3
30ULGK	30ULGQ	13
30ULGK	30ULGT	12
Total		635

Preston Road

Zone 5		
Origin	Destination	Car_Drivers
30ULGC	30ULGB	6
30ULGC	30ULGK	12
30ULGJ	30ULGB	11
30ULGJ	30ULGK	12
30ULGK	30ULGB	9
30ULGK	30ULGK	69
Total		119

Zone 6		
Origin	Destination	Car_Drivers
30ULGC	30ULGG	9
30ULGC	30ULGJ	64
30ULGC	30ULGM	3
30ULGC	30ULGP	3
30ULGC	30ULGR	3
30ULGC	30ULGW	3
30ULGC	30ULGX	3
30ULGC	30ULGZ	7
30ULGJ	30ULGE	6
30ULGJ	30ULGF	3
30ULGJ	30ULGG	13
30ULGJ	30ULGJ	130
30ULGJ	30ULGP	0
30ULGJ	30ULGR	4
30ULGJ	30ULGW	5
30ULGJ	30ULGX	12
30ULGJ	30ULGZ	3
30ULGK	30ULGE	3
30ULGK	30ULGG	3
30ULGK	30ULGJ	55
30ULGK	30ULGP	3
30ULGK	30ULGR	8
30ULGK	30ULGW	9
30ULGK	30ULGX	6
30ULGK	30ULGY	6
30ULGK	30ULGZ	6
30ULGK	36UBGG	3
Total		373

Traffic Distribution

Zone	Route	No. of Car Drivers	%
Zone 1	Inglewhite Road	91	3.5%
Zone 1	Whittingham Road	133	5.1%
Zone 2	Whittingham Road	562	21.7%
Zone 3	Preston Road	675	26.1%
Zone 4	Preston Road	50	1.9%
Zone 4	King Street	585	22.6%
Zone 5	Calder Avenue	119	4.6%
Zone 6	Chipping Lane	373	14.4%
Total		2588	100.0%

Appendix 9

Agreed 106 Dwelling Application Trip Rates – Residential

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	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: 77 to 150 (units:)
Range Selected by User: 75 to 150 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 22/10/12

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	3 days
Tuesday	1 days
Wednesday	1 days
Friday	3 days

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

Selected survey types:

Manual count	8 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)	3
Edge of Town	5

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	6
Out of Town	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out

Filtering Stage 3 selection:

Use Class:

C3	8 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	1 days
5,001 to 10,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days

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

Travel Plan:

No	8 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 CB-03-A-04 SEMI DETACHED CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

2 LN-03-A-01 MIXED HOUSES LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

3 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

4 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

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

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

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

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

LIST OF SITES relevant to selection parameters (Cont.)

8 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CH-03-A-06	-
LC-03-A-22	-
NF-03-A-02	-
SH-03-A-04	-
WM-03-A-01	-

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	106	0.064	8	106	0.306	8	106	0.370
08:00 - 09:00	8	106	0.160	8	106	0.440	8	106	0.600
09:00 - 10:00	8	106	0.194	8	106	0.252	8	106	0.446
10:00 - 11:00	8	106	0.168	8	106	0.199	8	106	0.367
11:00 - 12:00	8	106	0.201	8	106	0.178	8	106	0.379
12:00 - 13:00	8	106	0.225	8	106	0.194	8	106	0.419
13:00 - 14:00	8	106	0.214	8	106	0.190	8	106	0.404
14:00 - 15:00	8	106	0.204	8	106	0.216	8	106	0.420
15:00 - 16:00	8	106	0.300	8	106	0.215	8	106	0.515
16:00 - 17:00	8	106	0.333	8	106	0.183	8	106	0.516
17:00 - 18:00	8	106	0.408	8	106	0.229	8	106	0.637
18:00 - 19:00	8	106	0.270	8	106	0.223	8	106	0.493
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.741			2.825			5.566

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:	77 - 150 (units:)
Survey date date range:	01/01/05 - 22/10/12
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	5

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 10

TRICs Trip Rate Comparison – Residential

Calculation Reference: AUDIT-715001-150312-0344

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	BD	BEDFORDSHIRE	1 days
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	LC	LANCASHIRE	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: 101 to 491 (units:)
Range Selected by User: 100 to 500 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/00 to 20/05/14

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

Selected survey days:

Monday	3 days
Tuesday	5 days
Wednesday	1 days
Thursday	5 days
Friday	1 days

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

Selected survey types:

Manual count	15 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)	3
Edge of Town	12

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.

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

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

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	8 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:

Not Known	3 days
No	12 days

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

LIST OF SITES relevant to selection parameters

1 BD-03-A-01 SEMI DETACHED BEDFORDSHIRE
NEW BEDFORD ROAD

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 CA-03-A-01 SEMI D./TERRACED CAMBRIDGESHIRE
FALLOWFIELD
CHESTERTON
CAMBRIDGE
Edge of Town
Residential Zone
Total Number of dwellings: 124
Survey date: TUESDAY 06/02/01 Survey Type: MANUAL

3 CH-03-A-02 HOUSES/FLATS CHESHIRE
SYDNEY ROAD

CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 174
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

4 ES-03-A-01 MIXED HOUSES/FLATS EAST SUSSEX
OLD MALLING WAY
SOUTH MALLING
LEWES
Edge of Town
Residential Zone
Total Number of dwellings: 491
Survey date: THURSDAY 29/03/01 Survey Type: MANUAL

5 EX-03-A-01 SEMI-DET. ESSEX
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

6 LC-03-A-29 DETACHED/SEMI D. LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

7 LN-03-A-01 MIXED HOUSES LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 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

9 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK

SCUNTHORPE
Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY 12/05/14 Survey Type: MANUAL

10 NT-03-A-03 SEMI DETACHED NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

11 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

12 SF-03-A-02 SEMI DET./TERRACED SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

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

14 ST-03-A-03 MIXED HOUSES STAFFORDSHIRE
QUEENSVILLE

STAFFORD
Edge of Town
No Sub Category
Total Number of dwellings: 224
Survey date: TUESDAY 04/07/00 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 WO-03-A-06 DET./TERRACED WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CH-03-A-06	-
GM-03-A-07	-
GM-03-A-08	-
MS-03-A-01	-
SH-03-A-04	-
TV-03-A-01	-
WO-03-A-03	-

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	212	0.078	15	212	0.285	15	212	0.363
08:00 - 09:00	15	212	0.139	15	212	0.441	15	212	0.580
09:00 - 10:00	15	212	0.165	15	212	0.204	15	212	0.369
10:00 - 11:00	15	212	0.141	15	212	0.179	15	212	0.320
11:00 - 12:00	15	212	0.175	15	212	0.167	15	212	0.342
12:00 - 13:00	15	212	0.203	15	212	0.189	15	212	0.392
13:00 - 14:00	15	212	0.170	15	212	0.166	15	212	0.336
14:00 - 15:00	15	212	0.186	15	212	0.181	15	212	0.367
15:00 - 16:00	15	212	0.301	15	212	0.211	15	212	0.512
16:00 - 17:00	15	212	0.326	15	212	0.207	15	212	0.533
17:00 - 18:00	15	212	0.395	15	212	0.233	15	212	0.628
18:00 - 19:00	15	212	0.305	15	212	0.241	15	212	0.546
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.584			2.704			5.288

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:	101 - 491 (units:)
Survey date date range:	01/01/00 - 20/05/14
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	8

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 11

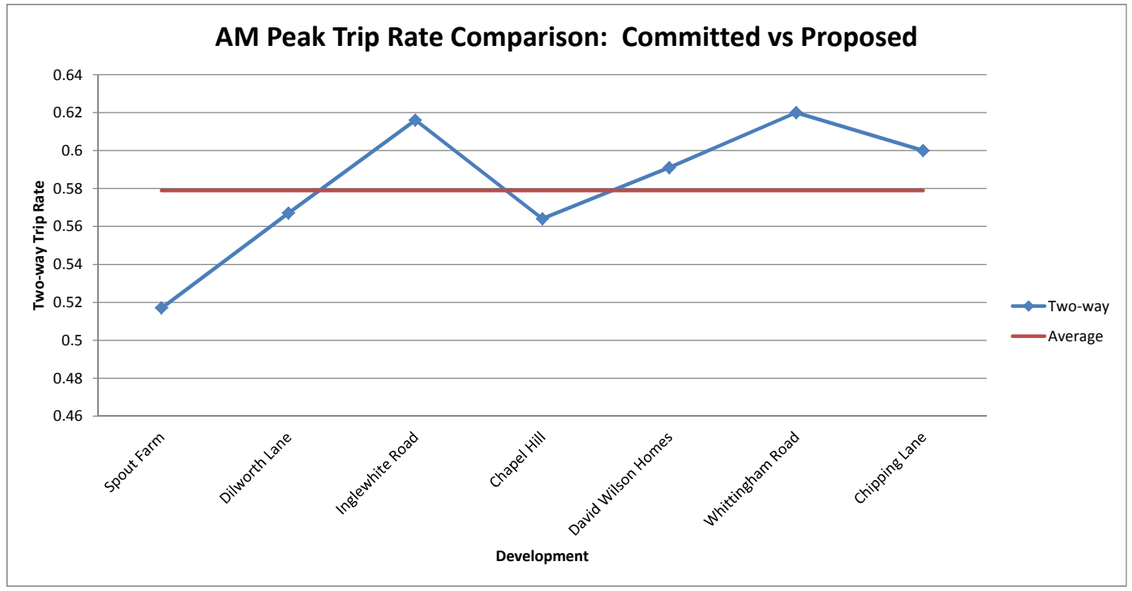
Longridge Committed Development Trip Rate Comparison

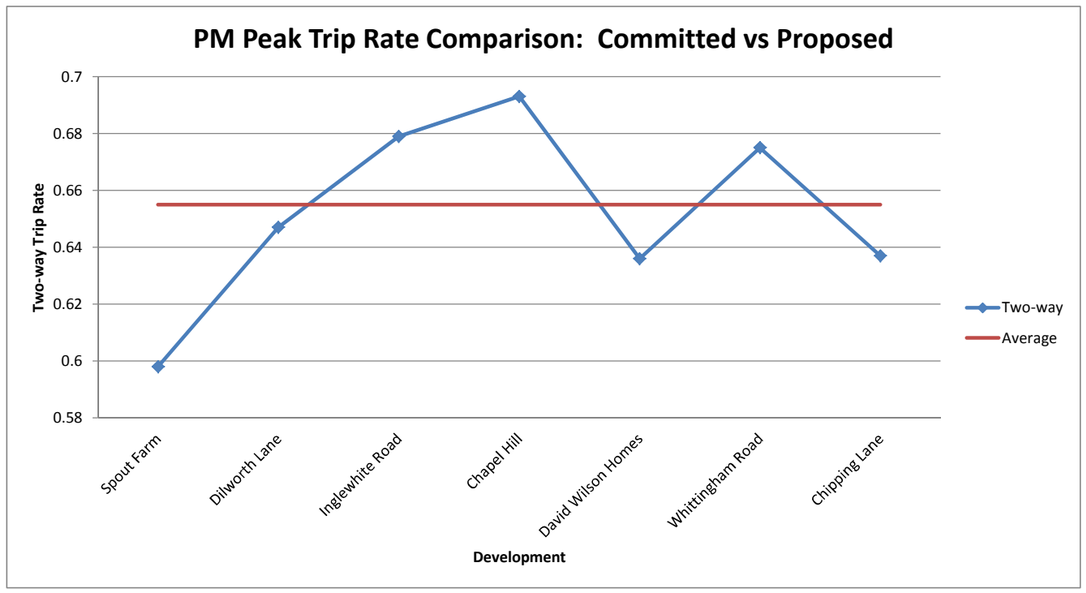
AM Peak				
Development	Dwellings	Arrivals	Departures	Two-way
Spout Farm	32	0.14	0.377	0.517
Dilworth Lane	49	0.173	0.394	0.567
Inglewhite Road	190	0.153	0.463	0.616
Chapel Hill	52	0.162	0.402	0.564
David Wilson Homes	78	0.153	0.438	0.591
Whittingham Road	200	0.155	0.465	0.62
Average	100	0.156	0.423	0.579
Chipping Lane	363	0.160	0.440	0.600

PM Peak				
Development	Dwellings	Arrivals	Departures	Two-way
Spout Farm	32	0.383	0.215	0.598
Dilworth Lane	49	0.409	0.238	0.647
Inglewhite Road	190	0.437	0.242	0.679
Chapel Hill	52	0.449	0.244	0.693
David Wilson Homes	78	0.41	0.226	0.636
Whittingham Road	200	0.435	0.24	0.675
Average	100	0.421	0.234	0.655
Chipping Lane	363	0.408	0.229	0.637

AM Peak				
Development	Dwellings	Arrivals	Departures	Two-way
Spout Farm	32	0.140	0.377	0.517
Chapel Hill	52	0.162	0.402	0.564
Dilworth Lane	49	0.173	0.394	0.567
David Wilson Homes	78	0.153	0.438	0.591
Chipping Lane	363	0.160	0.440	0.600
Inglewhite Road	190	0.153	0.463	0.616
Whittingham Road	200	0.155	0.465	0.620

PM Peak				
Development	Dwellings	Arrivals	Departures	Two-way
Spout Farm	32	0.383	0.215	0.598
David Wilson Homes	78	0.410	0.226	0.636
Chipping Lane	363	0.408	0.229	0.637
Dilworth Lane	49	0.409	0.238	0.647
Whittingham Road	200	0.435	0.240	0.675
Inglewhite Road	190	0.437	0.242	0.679
Chapel Hill	52	0.449	0.244	0.693





Appendix 12

PICADY Outputs – Chipping Lane Site Access

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

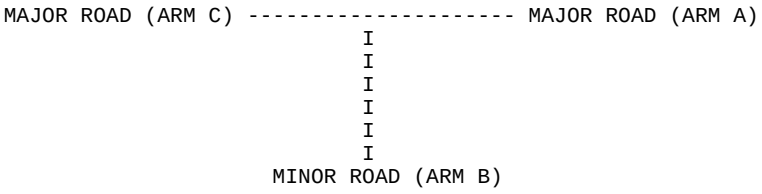
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Proposed Site Access 2016 Assessment Flows-AM.vpi"
(drive-on-the-left) at 11:11:31 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Proposed Site Access off Chipping Lane-2016 Assessment Flows AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Chippings Lane North
ARM B IS Proposed Site Access
ARM C IS Chippings Lane South

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	6.80 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	3.10 M.
- VISIBILITY	(VC-B)	100.00 M.
- BLOCKS TRAFFIC (SPACES)		NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	38.0 M.
- VISIBILITY TO RIGHT	(VB-A)	28.0 M.
- LANE 1 WIDTH	(WB-C)	2.75 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
625.51	0.23	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
491.06	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.77	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Proposed Site Access off Chipping Lanes-Ass AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.64	3.96	2.64
ARM B	15.00	45.00	75.00	2.00	3.00	2.00
ARM C	15.00	45.00	75.00	2.84	4.26	2.84

Demand set: Proposed Site Access off Chipping Lanes-Ass AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.038	0.962
		0.0	8.0	203.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.144	0.000	0.856
		23.0	0.0	137.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.780	0.220	0.000
		177.0	50.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00										
	B-AC	2.01	9.31	0.216		0.00	0.27	3.9		0.14
	C-A	2.22								
	C-B	0.63	10.88	0.058		0.00	0.06	0.9		0.10
	A-B	0.10								
	A-C	2.55								
08.00-08.15										
	B-AC	2.40	9.17	0.261		0.27	0.35	5.1		0.15
	C-A	2.65								
	C-B	0.75	10.74	0.070		0.06	0.07	1.1		0.10
	A-B	0.12								
	A-C	3.04								
08.15-08.30										
	B-AC	2.94	8.97	0.327		0.35	0.48	6.9		0.17
	C-A	3.25								
	C-B	0.92	10.56	0.087		0.07	0.09	1.4		0.10
	A-B	0.15								
	A-C	3.73								
08.30-08.45										
	B-AC	2.94	8.97	0.327		0.48	0.48	7.2		0.17
	C-A	3.25								
	C-B	0.92	10.56	0.087		0.09	0.09	1.4		0.10
	A-B	0.15								
	A-C	3.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	2.40	9.17	0.261		0.48	0.36	5.5		0.15
C-A	2.65								
C-B	0.75	10.74	0.070		0.09	0.08	1.2		0.10
A-B	0.12								
A-C	3.04								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	2.01	9.31	0.216		0.36	0.28	4.3		0.14
C-A	2.22								
C-B	0.63	10.88	0.058		0.08	0.06	0.9		0.10
A-B	0.10								
A-C	2.55								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.3
08.15	0.3
08.30	0.5
08.45	0.5
09.00	0.4
09.15	0.3

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	220.2	146.8	33.0	0.15	33.0	0.15
C-A	243.6	162.4				
C-B	68.8	45.9	6.9	0.10	6.9	0.10
A-B	11.0	7.3				
A-C	279.4	186.3				
ALL	823.1	548.7	39.9	0.05	39.9	0.05

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

QUEUE LENGTH PROBABILITY DISTRIBUTIONS

TIME PERIOD ENDING	MEAN QUEUE LENGTH (VEHS)	5 TH % ILE (VEHS)	90 TH % ILE (VEHS)	95 TH % ILE (VEHS)	99 TH % ILE (VEHS)	PROBABILITY OF REACHING Q-MARKER
STREAM B-AC						
08.00	0	0	0	0	0	
08.15	0	0	0	0	0	
08.30	0	0	0	0	4	
08.45	0	0	0	1	2	
09.00	0	0	0	0	0	
09.15	0	0	0	0	0	
STREAM C-B						
08.00	0	0	0	0	0	
08.15	0	0	0	0	0	
08.30	0	0	0	0	0	
08.45	0	0	0	0	0	
09.00	0	0	0	0	0	
09.15	0	0	0	0	0	

NOTES:
1. MAXIMUM VALUE OF QUEUE DISTRIBUTION POINT = 199 (EQUIVALENT TO >= 199)
2. PROBABILITY OF REACHING QUEUE MARKER TAKES ACCOUNT OF MULTI-STREAM QUEUEING AUTOMATICALLY
3. ANY PROBABILITY LESS THAN 0.05 IS INDETERMINABLE
4. ## INDICATES QUEUE TOO SMALL OR TOO BIG TO RELIABLY PREDICT DISTRIBUTION
5. $$ INDICATES VARIANCE VERY SMALL IN RELATION TO MEAN QUEUE :-
FOR SMALL MEAN QUEUES (<20) THIS MEANS THAT ALL POINTS ON THE DISTRIBUTION WILL BE APPROX. EQUAL TO THE MEAN
FOR LARGE MEAN QUEUES (>100) IT MEANS THAT THE VARIANCE HAS EXCEEDED ITS MAXIMUM, AND BEEN TRUNCATED -
IN THIS CASE DISTRIBUTION CANNOT BE PREDICTED RELIABLY

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.3
08.15	0.3
08.30	0.5 u
08.45	0.5 +u
09.00	0.4
09.15	0.3

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

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

========== end of file ==========

Printed at 11:12:21 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

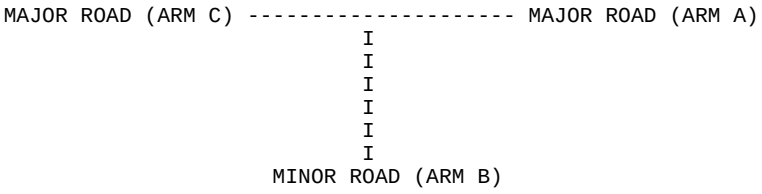
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Proposed Site Access 2016 Assessment Flows-PM.vpi"
(drive-on-the-left) at 11:17:09 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Proposed Site Access off Chipping Lanes-2016 Assessment Flows PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Chippings Lane North
ARM B IS Proposed Site Access
ARM C IS Chippings Lane South

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.10 M.
- VISIBILITY	(VC-B)100.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 38.0 M.
- VISIBILITY TO RIGHT	(VB-A) 28.0 M.
- LANE 1 WIDTH	(WB-C) 2.75 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
625.51	0.23	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
491.06	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.77	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Proposed Site Access off Chipping Lanes-2016 Ass PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	2.33	3.49	2.33
ARM B	15.00	45.00	75.00	1.04	1.56	1.04
ARM C	15.00	45.00	75.00	4.07	6.11	4.07

Demand set: Proposed Site Access off Chipping Lanes-2016 Ass PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.113	0.887
		0.0	21.0	165.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.145	0.000	0.855
		12.0	0.0	71.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.610	0.390	0.000
		199.0	127.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00										
	B-AC	1.04	9.32	0.112		0.00	0.12	1.8		0.12
	C-A	2.50								
	C-B	1.59	10.96	0.145		0.00	0.17	2.5		0.11
	A-B	0.26								
	A-C	2.07								
17.00-17.15										
	B-AC	1.24	9.17	0.136		0.12	0.16	2.3		0.13
	C-A	2.98								
	C-B	1.90	10.84	0.176		0.17	0.21	3.1		0.11
	A-B	0.31								
	A-C	2.47								
17.15-17.30										
	B-AC	1.52	8.97	0.170		0.16	0.20	3.0		0.13
	C-A	3.65								
	C-B	2.33	10.68	0.218		0.21	0.28	4.1		0.12
	A-B	0.39								
	A-C	3.03								
17.30-17.45										
	B-AC	1.52	8.97	0.170		0.20	0.20	3.0		0.13
	C-A	3.65								
	C-B	2.33	10.68	0.218		0.28	0.28	4.2		0.12
	A-B	0.39								
	A-C	3.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	1.24	9.17	0.136		0.20	0.16	2.4		0.13
C-A	2.98								
C-B	1.90	10.84	0.176		0.28	0.21	3.3		0.11
A-B	0.31								
A-C	2.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	1.04	9.32	0.112		0.16	0.13	1.9		0.12
C-A	2.50								
C-B	1.59	10.96	0.145		0.21	0.17	2.6		0.11
A-B	0.26								
A-C	2.07								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	114.2	76.2	14.5	0.13	14.5	0.13
C-A	273.9	182.6				
C-B	174.8	116.5	19.7	0.11	19.7	0.11
A-B	28.9	19.3				
A-C	227.1	151.4				
ALL	819.0	546.0	34.2	0.04	34.2	0.04

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

QUEUE LENGTH PROBABILITY DISTRIBUTIONS

TIME PERIOD ENDING	MEAN QUEUE LENGTH (VEHS)	5 TH % ILE (VEHS)	90 TH % ILE (VEHS)	95 TH % ILE (VEHS)	99 TH % ILE (VEHS)	PROBABILITY OF REACHING Q-MARKER
STREAM B-AC						
17.00	0	0	0	0	0	
17.15	0	0	0	0	0	
17.30	0	0	0	0	2	
17.45	0	0	0	0	0	
18.00	0	0	0	0	0	
18.15	0	0	0	0	0	
STREAM C-B						
17.00	0	0	0	0	0	
17.15	0	0	0	0	0	
17.30	0	0	0	0	1	
17.45	0	0	0	0	0	
18.00	0	0	0	0	0	
18.15	0	0	0	0	0	

NOTES:
1. MAXIMUM VALUE OF QUEUE DISTRIBUTION POINT = 199 (EQUIVALENT TO >= 199)
2. PROBABILITY OF REACHING QUEUE MARKER TAKES ACCOUNT OF MULTI-STREAM QUEUEING AUTOMATICALLY
3. ANY PROBABILITY LESS THAN 0.05 IS INDETERMINABLE
4. ## INDICATES QUEUE TOO SMALL OR TOO BIG TO RELIABLY PREDICT DISTRIBUTION
5. $$ INDICATES VARIANCE VERY SMALL IN RELATION TO MEAN QUEUE :-
FOR SMALL MEAN QUEUES (<20) THIS MEANS THAT ALL POINTS ON THE DISTRIBUTION WILL BE APPROX. EQUAL TO THE MEAN
FOR LARGE MEAN QUEUES (>100) IT MEANS THAT THE VARIANCE HAS EXCEEDED ITS MAXIMUM, AND BEEN TRUNCATED -
IN THIS CASE DISTRIBUTION CANNOT BE PREDICTED RELIABLY

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2 u
17.45	0.2
18.00	0.2
18.15	0.1

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.2	
17.30	0.3	u
17.45	0.3	
18.00	0.2	
18.15	0.2	

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

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

========== end of file ==========

Printed at 11:17:26 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

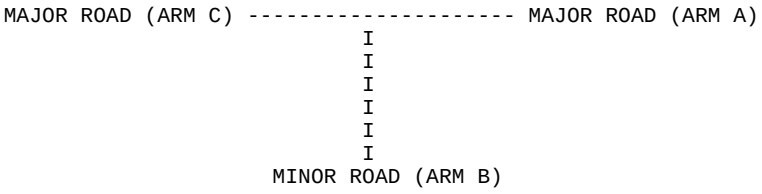
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Proposed Site Access 2025 Assessment Flows-AM.vpi"
(drive-on-the-left) at 11:18:58 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Proposed Site Access off Chipping Lane-2025 Assessment Flows AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Chippings Lane North
ARM B IS Proposed Site Access
ARM C IS Chippings Lane South

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	6.80 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	3.10 M.
- VISIBILITY	(VC-B)	100.00 M.
- BLOCKS TRAFFIC (SPACES)		NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	38.0 M.
- VISIBILITY TO RIGHT	(VB-A)	28.0 M.
- LANE 1 WIDTH	(WB-C)	2.75 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
625.51	0.23	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
491.06	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
693.77	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Proposed Site Access off Chipping Lanes- Ass AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.91	4.37	2.91
ARM B	15.00	45.00	75.00	2.00	3.00	2.00
ARM C	15.00	45.00	75.00	3.01	4.52	3.01

Demand set: Proposed Site Access off Chipping Lanes- Ass AM

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.034	0.966
		0.0	8.0	225.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.144	0.000	0.856
		23.0	0.0	137.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.793	0.207	0.000
		191.0	50.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00										
	B-AC	2.01	9.24	0.217		0.00	0.27	3.9		0.14
	C-A	2.40								
	C-B	0.63	10.80	0.058		0.00	0.06	0.9		0.10
	A-B	0.10								
	A-C	2.82								

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15										
	B-AC	2.40	9.09	0.264		0.27	0.35	5.2		0.15
	C-A	2.86								
	C-B	0.75	10.66	0.070		0.06	0.08	1.1		0.10
	A-B	0.12								
	A-C	3.37								

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30										
	B-AC	2.94	8.87	0.331		0.35	0.49	7.1		0.17
	C-A	3.50								
	C-B	0.92	10.45	0.088		0.08	0.10	1.4		0.10
	A-B	0.15								
	A-C	4.13								

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45										
	B-AC	2.94	8.87	0.331		0.49	0.49	7.3		0.17
	C-A	3.50								
	C-B	0.92	10.45	0.088		0.10	0.10	1.4		0.10
	A-B	0.15								
	A-C	4.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	2.40	9.09	0.264		0.49	0.36	5.6		0.15
C-A	2.86								
C-B	0.75	10.66	0.070		0.10	0.08	1.2		0.10
A-B	0.12								
A-C	3.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	2.01	9.24	0.217		0.36	0.28	4.3		0.14
C-A	2.40								
C-B	0.63	10.80	0.058		0.08	0.06	0.9		0.10
A-B	0.10								
A-C	2.82								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.3
08.15	0.4
08.30	0.5
08.45	0.5
09.00	0.4
09.15	0.3

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	220.2	146.8	33.5	0.15	33.5	0.15
C-A	262.9	175.3				
C-B	68.8	45.9	7.0	0.10	7.0	0.10
A-B	11.0	7.3				
A-C	309.7	206.5				
ALL	872.7	581.8	40.4	0.05	40.4	0.05

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

QUEUE LENGTH PROBABILITY DISTRIBUTIONS

TIME PERIOD ENDING	MEAN QUEUE LENGTH (VEHS)	5 TH % ILE (VEHS)	90 TH % ILE (VEHS)	95 TH % ILE (VEHS)	99 TH % ILE (VEHS)	PROBABILITY OF REACHING Q-MARKER
STREAM B-AC						
08.00	0	0	0	0	0	
08.15	0	0	0	0	0	
08.30	0	0	0	0	4	
08.45	0	0	0	1	3	
09.00	0	0	0	0	0	
09.15	0	0	0	0	0	
STREAM C-B						
08.00	0	0	0	0	0	
08.15	0	0	0	0	0	
08.30	0	0	0	0	0	
08.45	0	0	0	0	0	
09.00	0	0	0	0	0	
09.15	0	0	0	0	0	

NOTES:
1. MAXIMUM VALUE OF QUEUE DISTRIBUTION POINT = 199 (EQUIVALENT TO >= 199)
2. PROBABILITY OF REACHING QUEUE MARKER TAKES ACCOUNT OF MULTI-STREAM QUEUEING AUTOMATICALLY
3. ANY PROBABILITY LESS THAN 0.05 IS INDETERMINABLE
4. ## INDICATES QUEUE TOO SMALL OR TOO BIG TO RELIABLY PREDICT DISTRIBUTION
5. $$ INDICATES VARIANCE VERY SMALL IN RELATION TO MEAN QUEUE :-
FOR SMALL MEAN QUEUES (<20) THIS MEANS THAT ALL POINTS ON THE DISTRIBUTION WILL BE APPROX. EQUAL TO THE MEAN
FOR LARGE MEAN QUEUES (>100) IT MEANS THAT THE VARIANCE HAS EXCEEDED ITS MAXIMUM, AND BEEN TRUNCATED -
IN THIS CASE DISTRIBUTION CANNOT BE PREDICTED RELIABLY

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.3
08.15	0.4
08.30	0.5 u
08.45	0.5 + u
09.00	0.4
09.15	0.3

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

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

========== end of file ==========

Printed at 11:19:55 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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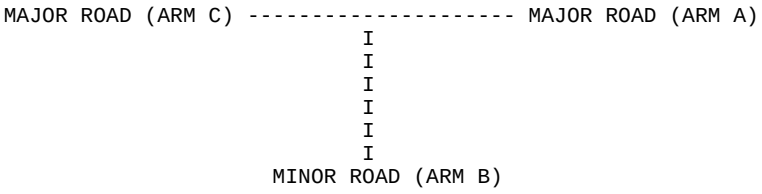
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Proposed Site Access 2025 Assessment Flows-PM.vpi"
(drive-on-the-left) at 11:22:16 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Proposed Site Access off Chipping Lanes-2025 Assessment Flows PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Chippings Lane North
ARM B IS Proposed Site Access
ARM C IS Chippings Lane South

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.10 M.
- VISIBILITY	(VC-B)100.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 38.0 M.
- VISIBILITY TO RIGHT	(VB-A) 28.0 M.
- LANE 1 WIDTH	(WB-C) 2.75 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For STREAM A-C	Slope For Opposing STREAM A-B
625.51	0.23	0.09

Intercept For STREAM B-A	Slope For STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
491.06	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
693.77	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Proposed Site Access off Chipping Lanes-2025 Ass PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.49	3.73	2.49
ARM B	15.00	45.00	75.00	1.04	1.56	1.04
ARM C	15.00	45.00	75.00	4.32	6.49	4.32

Demand set: Proposed Site Access off Chipping Lanes-2025 Ass PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.106	0.894
		0.0	21.0	178.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.145	0.000	0.855
		12.0	0.0	71.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.633	0.367	0.000
		219.0	127.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00										
	B-AC	1.04	9.27	0.112		0.00	0.13	1.8		0.12
	C-A	2.75								
	C-B	1.59	10.91	0.146		0.00	0.17	2.5		0.11
	A-B	0.26								
	A-C	2.23								

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15										
	B-AC	1.24	9.12	0.136		0.13	0.16	2.3		0.13
	C-A	3.28								
	C-B	1.90	10.79	0.176		0.17	0.21	3.1		0.11
	A-B	0.31								
	A-C	2.67								

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30										
	B-AC	1.52	8.90	0.171		0.16	0.20	3.0		0.14
	C-A	4.02								
	C-B	2.33	10.62	0.220		0.21	0.28	4.1		0.12
	A-B	0.39								
	A-C	3.27								

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45										
	B-AC	1.52	8.90	0.171		0.20	0.21	3.1		0.14
	C-A	4.02								
	C-B	2.33	10.62	0.220		0.28	0.28	4.2		0.12
	A-B	0.39								
	A-C	3.27								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	1.24	9.12	0.136		0.21	0.16	2.4		0.13
C-A	3.28								
C-B	1.90	10.79	0.176		0.28	0.22	3.3		0.11
A-B	0.31								
A-C	2.67								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	1.04	9.27	0.112		0.16	0.13	2.0		0.12
C-A	2.75								
C-B	1.59	10.91	0.146		0.22	0.17	2.6		0.11
A-B	0.26								
A-C	2.23								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	114.2	76.2	14.6	0.13	14.6	0.13
C-A	301.4	201.0				
C-B	174.8	116.5	19.8	0.11	19.8	0.11
A-B	28.9	19.3				
A-C	245.0	163.3				
ALL	864.4	576.3	34.4	0.04	34.4	0.04

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

QUEUE LENGTH PROBABILITY DISTRIBUTIONS

TIME PERIOD ENDING	MEAN QUEUE LENGTH (VEHS)	5 TH % ILE (VEHS)	90 TH % ILE (VEHS)	95 TH % ILE (VEHS)	99 TH % ILE (VEHS)	PROBABILITY OF REACHING Q-MARKER
STREAM B-AC						
17.00	0	0	0	0	0	
17.15	0	0	0	0	0	
17.30	0	0	0	0	2	
17.45	0	0	0	0	0	
18.00	0	0	0	0	0	
18.15	0	0	0	0	0	
STREAM C-B						
17.00	0	0	0	0	0	
17.15	0	0	0	0	0	
17.30	0	0	0	0	2	
17.45	0	0	0	0	0	
18.00	0	0	0	0	0	
18.15	0	0	0	0	0	

NOTES:
1. MAXIMUM VALUE OF QUEUE DISTRIBUTION POINT = 199 (EQUIVALENT TO >= 199)
2. PROBABILITY OF REACHING QUEUE MARKER TAKES ACCOUNT OF MULTI-STREAM QUEUEING AUTOMATICALLY
3. ANY PROBABILITY LESS THAN 0.05 IS INDETERMINABLE
4. ## INDICATES QUEUE TOO SMALL OR TOO BIG TO RELIABLY PREDICT DISTRIBUTION
5. $$ INDICATES VARIANCE VERY SMALL IN RELATION TO MEAN QUEUE :-
FOR SMALL MEAN QUEUES (<20) THIS MEANS THAT ALL POINTS ON THE DISTRIBUTION WILL BE APPROX. EQUAL TO THE MEAN
FOR LARGE MEAN QUEUES (>100) IT MEANS THAT THE VARIANCE HAS EXCEEDED ITS MAXIMUM, AND BEEN TRUNCATED -
IN THIS CASE DISTRIBUTION CANNOT BE PREDICTED RELIABLY

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2 u
17.45	0.2
18.00	0.2
18.15	0.1

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.2	
17.30	0.3	u
17.45	0.3	
18.00	0.2	
18.15	0.2	

KEY: * MEAN
- 5TH PERCENTILE
: 90TH PERCENTILE
+ 95TH PERCENTILE
u USER PERCENTILE

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

========== end of file ==========

Printed at 11:22:30 on 07/04/2015]

Appendix 13

PICADY Outputs – Inglewhite Road/Chipping Lane

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

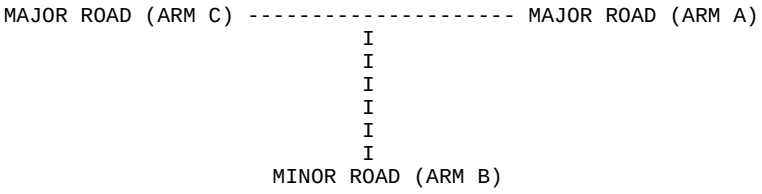
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Chipping Lane and Inglewhite Rd 2016 Baseline Flows-AM .vpi"
(drive-on-the-left) at 14:59:19 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2016 Baseline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.14	6.21	4.14
ARM B	15.00	45.00	75.00	3.16	4.74	3.16
ARM C	15.00	45.00	75.00	2.54	3.81	2.54

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.653	0.347
		0.0	216.0	115.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.751	0.000	0.249
		190.0	0.0	63.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.754	0.246	0.000
		153.0	50.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.79	10.37	0.076		0.00	0.08	1.2		0.10
B-A	2.38	9.09	0.262		0.00	0.35	5.0		0.15
C-A	1.92								
C-B	0.63	8.97	0.070		0.00	0.07	1.1		0.12
A-B	2.71								
A-C	1.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.94	9.94	0.095		0.08	0.10	1.5		0.11
B-A	2.85	8.84	0.322		0.35	0.47	6.8		0.17
C-A	2.29								
C-B	0.75	8.80	0.085		0.07	0.09	1.4		0.12
A-B	3.24								
A-C	1.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.16	9.24	0.125		0.10	0.14	2.1		0.12
B-A	3.49	8.48	0.411		0.47	0.68	9.8		0.20
C-A	2.81								
C-B	0.92	8.56	0.107		0.09	0.12	1.7		0.13
A-B	3.96								
A-C	2.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.16	9.23	0.125		0.14	0.14	2.1		0.12
B-A	3.49	8.48	0.411		0.68	0.69	10.3		0.20
C-A	2.81								
C-B	0.92	8.56	0.107		0.12	0.12	1.8		0.13
A-B	3.96								
A-C	2.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.94	9.93	0.095		0.14	0.11	1.6		0.11
B-A	2.85	8.84	0.322		0.69	0.48	7.5		0.17
C-A	2.29								
C-B	0.75	8.80	0.085		0.12	0.09	1.4		0.12
A-B	3.24								
A-C	1.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.79	10.35	0.076		0.11	0.08	1.3		0.10
B-A	2.38	9.09	0.262		0.48	0.36	5.6		0.15
C-A	1.92								
C-B	0.63	8.97	0.070		0.09	0.08	1.2		0.12
A-B	2.71								
A-C	1.44								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.1	
08.15	0.1	
08.30	0.1	
08.45	0.1	
09.00	0.1	
09.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	
08.30	0.7	*
08.45	0.7	*
09.00	0.5	
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	86.7	57.8	9.8	0.11	9.8	0.11
B-A	261.5	174.3	45.0	0.17	45.0	0.17
C-A	210.6	140.4				
C-B	68.8	45.9	8.6	0.12	8.6	0.12
A-B	297.3	198.2				
A-C	158.3	105.5				
ALL	1083.2	722.2	63.4	0.06	63.5	0.06

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

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

========== end of file ==========

Printed at 14:59:47 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

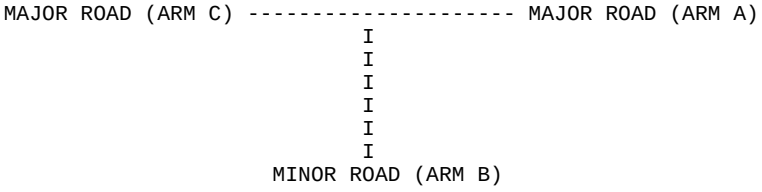
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Chipping Lane and Inglewhite Rd 2016 Baseline Flows-PM .vpi"
(drive-on-the-left) at 15:00:38 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2016 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Rd E
ARM B IS Inglewhite Rd W
ARM C IS Chipping Ln

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.66	6.99	4.66
ARM B	15.00	45.00	75.00	3.01	4.52	3.01
ARM C	15.00	45.00	75.00	2.05	3.07	2.05

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.571	0.429
		0.0	213.0	160.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.842	0.000	0.158
		203.0	0.0	38.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.720	0.280	0.000
		118.0	46.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.48	9.93	0.048		0.00	0.05	0.7		0.11
B-A	2.55	9.17	0.278		0.00	0.38	5.4		0.15
C-A	1.48								
C-B	0.58	8.86	0.065		0.00	0.07	1.0		0.12
A-B	2.67								
A-C	2.01								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.57	9.44	0.060		0.05	0.06	0.9		0.11
B-A	3.04	8.91	0.341		0.38	0.51	7.4		0.17
C-A	1.77								
C-B	0.69	8.66	0.080		0.07	0.09	1.3		0.13
A-B	3.19								
A-C	2.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.70	8.65	0.081		0.06	0.09	1.3		0.13
B-A	3.73	8.55	0.436		0.51	0.76	10.8		0.21
C-A	2.17								
C-B	0.84	8.39	0.101		0.09	0.11	1.6		0.13
A-B	3.91								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.70	8.64	0.081		0.09	0.09	1.3		0.13
B-A	3.73	8.54	0.436		0.76	0.76	11.4		0.21
C-A	2.17								
C-B	0.84	8.39	0.101		0.11	0.11	1.7		0.13
A-B	3.91								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.57	9.43	0.060		0.09	0.06	1.0		0.11
B-A	3.04	8.91	0.341		0.76	0.53	8.2		0.17
C-A	1.77								
C-B	0.69	8.66	0.080		0.11	0.09	1.3		0.13
A-B	3.19								
A-C	2.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.48	9.91	0.048		0.06	0.05	0.8		0.11
B-A	2.55	9.17	0.278		0.53	0.39	6.0		0.15
C-A	1.48								
C-B	0.58	8.86	0.065		0.09	0.07	1.1		0.12
A-B	2.67								
A-C	2.01								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.1	
17.30	0.1	
17.45	0.1	
18.00	0.1	
18.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.5	*
18.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

TRL TRL Viewer 3.2 AG N:\.. \2016 Baseline Flows\Chipping Lane and Inglewhite Rd 2016 Baseline Flows-PM .vpo

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	52.3	34.9	6.0	0.12	6.0	0.12
B-A	279.4	186.3	49.3	0.18	49.3	0.18
C-A	162.4	108.3				
C-B	63.3	42.2	8.0	0.13	8.0	0.13
A-B	293.2	195.5				
A-C	220.2	146.8				
ALL	1070.9	713.9	63.3	0.06	63.3	0.06

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

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

========== end of file ==========

Printed at 15:00:55 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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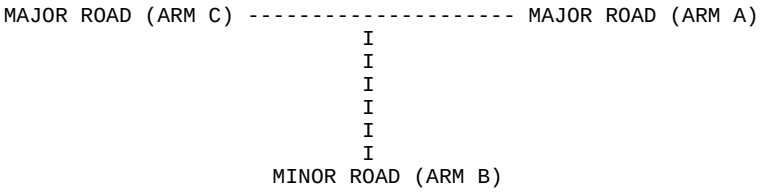
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Chipping Lane and Inglewhite Rd 2025 Baseline Flows-AM .vpi"
(drive-on-the-left) at 15:02:47 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2025 Baseline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.59	6.88	4.59
ARM B	15.00	45.00	75.00	3.49	5.23	3.49
ARM C	15.00	45.00	75.00	2.80	4.20	2.80

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.659	0.341
		0.0	242.0	125.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.760	0.000	0.240
		212.0	0.0	67.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.759	0.241	0.000
		170.0	54.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.84	10.12	0.083		0.00	0.09	1.3		0.11
B-A	2.66	8.98	0.296		0.00	0.41	5.9		0.16
C-A	2.13								
C-B	0.68	8.88	0.076		0.00	0.08	1.2		0.12
A-B	3.04								
A-C	1.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.00	9.60	0.105		0.09	0.12	1.7		0.12
B-A	3.18	8.70	0.365		0.41	0.57	8.2		0.18
C-A	2.55								
C-B	0.81	8.68	0.093		0.08	0.10	1.5		0.13
A-B	3.63								
A-C	1.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.23	8.71	0.141		0.12	0.16	2.4		0.13
B-A	3.89	8.30	0.469		0.57	0.86	12.3		0.22
C-A	3.12								
C-B	0.99	8.41	0.118		0.10	0.13	1.9		0.13
A-B	4.44								
A-C	2.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.23	8.69	0.141		0.16	0.16	2.5		0.13
B-A	3.89	8.30	0.469		0.86	0.87	13.0		0.23
C-A	3.12								
C-B	0.99	8.41	0.118		0.13	0.13	2.0		0.13
A-B	4.44								
A-C	2.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.00	9.57	0.105		0.16	0.12	1.8		0.12
B-A	3.18	8.69	0.365		0.87	0.59	9.2		0.18
C-A	2.55								
C-B	0.81	8.68	0.093		0.13	0.10	1.6		0.13
A-B	3.63								
A-C	1.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.84	10.10	0.083		0.12	0.09	1.4		0.11
B-A	2.66	8.98	0.296		0.59	0.43	6.6		0.16
C-A	2.13								
C-B	0.68	8.88	0.076		0.10	0.08	1.3		0.12
A-B	3.04								
A-C	1.57								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.1	
08.15	0.1	
08.30	0.2	
08.45	0.2	
09.00	0.1	
09.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.6	*
08.30	0.9	*
08.45	0.9	*
09.00	0.6	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	92.2	61.5	11.1	0.12	11.1	0.12
B-A	291.8	194.5	55.2	0.19	55.2	0.19
C-A	234.0	156.0				
C-B	74.3	49.6	9.5	0.13	9.5	0.13
A-B	333.1	222.1				
A-C	172.1	114.7				
ALL	1197.5	798.3	75.7	0.06	75.7	0.06

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

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

========== end of file ==========

Printed at 15:03:23 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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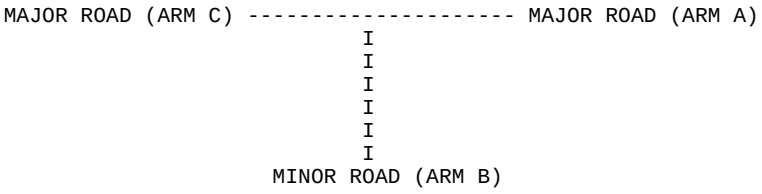
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Chipping Lane and Inglewhite Rd 2025 Baseline Flows-PM .vpi"
(drive-on-the-left) at 15:08:25 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2025 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.20	7.80	5.20
ARM B	15.00	45.00	75.00	3.35	5.02	3.35
ARM C	15.00	45.00	75.00	2.21	3.32	2.21

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.572	0.428
		0.0	238.0	178.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.847	0.000	0.153
		227.0	0.0	41.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.729	0.271	0.000
		129.0	48.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.51	9.65	0.053		0.00	0.06	0.8		0.11
B-A	2.85	9.05	0.315		0.00	0.45	6.5		0.16
C-A	1.62								
C-B	0.60	8.74	0.069		0.00	0.07	1.1		0.12
A-B	2.99								
A-C	2.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.61	9.05	0.068		0.06	0.07	1.1		0.12
B-A	3.40	8.76	0.388		0.45	0.62	9.0		0.19
C-A	1.93								
C-B	0.72	8.52	0.084		0.07	0.09	1.3		0.13
A-B	3.57								
A-C	2.67								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.75	8.04	0.094		0.07	0.10	1.5		0.14
B-A	4.17	8.35	0.499		0.62	0.97	13.7		0.24
C-A	2.37								
C-B	0.88	8.22	0.107		0.09	0.12	1.7		0.14
A-B	4.37								
A-C	3.27								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.75	8.02	0.094		0.10	0.10	1.5		0.14
B-A	4.17	8.35	0.499		0.97	0.98	14.6		0.24
C-A	2.37								
C-B	0.88	8.22	0.107		0.12	0.12	1.8		0.14
A-B	4.37								
A-C	3.27								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.61	9.03	0.068		0.10	0.07	1.1		0.12
B-A	3.40	8.76	0.388		0.98	0.65	10.2		0.19
C-A	1.93								
C-B	0.72	8.52	0.084		0.12	0.09	1.4		0.13
A-B	3.57								
A-C	2.67								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.51	9.62	0.053		0.07	0.06	0.9		0.11
B-A	2.85	9.05	0.315		0.65	0.47	7.2		0.16
C-A	1.62								
C-B	0.60	8.74	0.069		0.09	0.07	1.1		0.12
A-B	2.99								
A-C	2.23								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.1	
17.30	0.1	
17.45	0.1	
18.00	0.1	
18.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.6	*
17.30	1.0	*
17.45	1.0	*
18.00	0.6	*
18.15	0.5	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	56.4	37.6	6.9	0.12	6.9	0.12
B-A	312.4	208.3	61.2	0.20	61.2	0.20
C-A	177.6	118.4				
C-B	66.1	44.0	8.5	0.13	8.5	0.13
A-B	327.6	218.4				
A-C	245.0	163.3				
ALL	1185.1	790.1	76.6	0.06	76.6	0.06

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

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

========== end of file ==========

Printed at 15:08:56 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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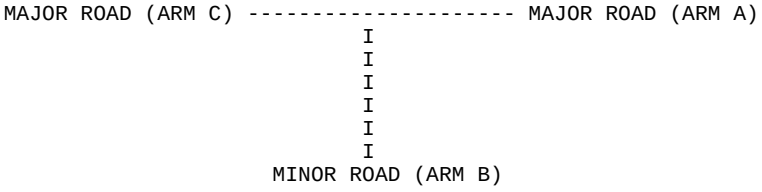
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Chipping Lane and Inglewhite Rd 2016 Assessment Flows-AM .vpi"
(drive-on-the-left) at 15:12:28 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2016 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS Inglwhite Road W
ARM C IS Chipping Lane

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.54	6.81	4.54
ARM B	15.00	45.00	75.00	3.38	5.06	3.38
ARM C	15.00	45.00	75.00	4.24	6.36	4.24

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.595	0.405
		0.0	216.0	147.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.704	0.000	0.296
		190.0	0.0	80.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.711	0.289	0.000
		241.0	98.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	1.00	10.31	0.097		0.00	0.11	1.6		0.11
B-A	2.38	8.50	0.281		0.00	0.38	5.5		0.16
C-A	3.02								
C-B	1.23	8.89	0.138		0.00	0.16	2.3		0.13
A-B	2.71								
A-C	1.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.20	9.79	0.122		0.11	0.14	2.0		0.12
B-A	2.85	8.13	0.350		0.38	0.53	7.6		0.19
C-A	3.61								
C-B	1.47	8.69	0.169		0.16	0.20	2.9		0.14
A-B	3.24								
A-C	2.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.47	8.89	0.165		0.14	0.20	2.9		0.13
B-A	3.49	7.62	0.457		0.53	0.82	11.7		0.24
C-A	4.42								
C-B	1.80	8.43	0.213		0.20	0.27	3.9		0.15
A-B	3.96								
A-C	2.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.47	8.87	0.165		0.20	0.20	2.9		0.14
B-A	3.49	7.62	0.458		0.82	0.83	12.4		0.24
C-A	4.42								
C-B	1.80	8.43	0.213		0.27	0.27	4.0		0.15
A-B	3.96								
A-C	2.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.20	9.77	0.123		0.20	0.14	2.2		0.12
B-A	2.85	8.13	0.350		0.83	0.55	8.6		0.19
C-A	3.61								
C-B	1.47	8.69	0.169		0.27	0.21	3.2		0.14
A-B	3.24								
A-C	2.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	1.00	10.29	0.098		0.14	0.11	1.7		0.11
B-A	2.38	8.49	0.281		0.55	0.40	6.2		0.16
C-A	3.02								
C-B	1.23	8.89	0.138		0.21	0.16	2.5		0.13
A-B	2.71								
A-C	1.84								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.1	
08.15	0.1	
08.30	0.2	
08.45	0.2	
09.00	0.1	
09.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.5	*
08.30	0.8	*
08.45	0.8	*
09.00	0.5	*
09.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	110.1	73.4	13.2	0.12	13.2	0.12
B-A	261.5	174.3	52.0	0.20	52.0	0.20
C-A	331.7	221.1				
C-B	134.9	89.9	18.8	0.14	18.8	0.14
A-B	297.3	198.2				
A-C	202.3	134.9				
ALL	1337.9	891.9	84.1	0.06	84.1	0.06

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

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

========== end of file ==========

Printed at 15:13:00 on 07/04/2015]

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

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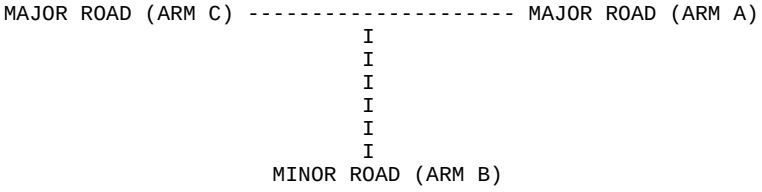
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Chipping Lane and Inglewhite Rd 2016 Assessment Flows-PM .vpi"
(drive-on-the-left) at 11:04:34 on Wednesday, 8 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2016 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglwhite Road E
ARM B IS Inglwhite Road W
ARM C IS Chipping Lane

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.69	8.53	5.69
ARM B	15.00	45.00	75.00	3.58	5.36	3.58
ARM C	15.00	45.00	75.00	2.95	4.43	2.95

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.468	0.532
		0.0	213.0	242.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.710	0.000	0.290
		203.0	0.0	83.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.695	0.305	0.000
		164.0	72.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.04	9.91	0.105		0.00	0.12	1.7		0.11
B-A	2.55	8.47	0.301		0.00	0.42	6.0		0.17
C-A	2.06								
C-B	0.90	8.64	0.105		0.00	0.12	1.7		0.13
A-B	2.67								
A-C	3.04								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.24	9.30	0.134		0.12	0.15	2.2		0.12
B-A	3.04	8.10	0.376		0.42	0.59	8.5		0.20
C-A	2.46								
C-B	1.08	8.40	0.129		0.12	0.15	2.1		0.14
A-B	3.19								
A-C	3.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.52	8.25	0.185		0.15	0.22	3.3		0.15
B-A	3.73	7.57	0.492		0.59	0.94	13.3		0.26
C-A	3.01								
C-B	1.32	8.06	0.164		0.15	0.19	2.8		0.15
A-B	3.91								
A-C	4.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.52	8.23	0.185		0.22	0.23	3.4		0.15
B-A	3.73	7.57	0.492		0.94	0.95	14.2		0.26
C-A	3.01								
C-B	1.32	8.06	0.164		0.19	0.19	2.9		0.15
A-B	3.91								
A-C	4.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	1.24	9.27	0.134		0.23	0.16	2.4		0.12
B-A	3.04	8.10	0.376		0.95	0.61	9.7		0.20
C-A	2.46								
C-B	1.08	8.40	0.129		0.19	0.15	2.3		0.14
A-B	3.19								
A-C	3.63								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	1.04	9.89	0.105		0.16	0.12	1.8		0.11
B-A	2.55	8.47	0.301		0.61	0.44	6.8		0.17
C-A	2.06								
C-B	0.90	8.64	0.105		0.15	0.12	1.8		0.13
A-B	2.67								
A-C	3.04								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	0.2	
17.45	0.2	
18.00	0.2	
18.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.6	*
17.30	0.9	*
17.45	1.0	*
18.00	0.6	*
18.15	0.4	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	114.2	76.2	14.8	0.13	14.8	0.13
B-A	279.4	186.3	58.5	0.21	58.5	0.21
C-A	225.7	150.5				
C-B	99.1	66.1	13.7	0.14	13.7	0.14
A-B	293.2	195.5				
A-C	333.1	222.1				
ALL	1344.8	896.5	87.0	0.06	87.0	0.06

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

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

========== end of file ==========

Printed at 11:08:53 on 08/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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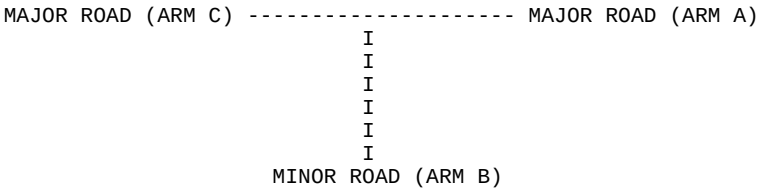
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Chipping Lane and Inglewhite Rd 2025 Assessment Flows-AM .vpi"
(drive-on-the-left) at 15:20:30 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2025 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS Inglewhite Road W
ARM C IS Chipping Lane

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Base

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.99	7.48	4.99
ARM B	15.00	45.00	75.00	3.70	5.55	3.70
ARM C	15.00	45.00	75.00	4.53	6.79	4.53

Demand set: Inglewhite Road/Chipping Lane Base

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.607	0.393
		0.0	242.0	157.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.716	0.000	0.284
		212.0	0.0	84.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.715	0.285	0.000
		259.0	103.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	1.05	10.03	0.105		0.00	0.12	1.7		0.11
B-A	2.66	8.38	0.318		0.00	0.46	6.5		0.17
C-A	3.25								
C-B	1.29	8.79	0.147		0.00	0.17	2.5		0.13
A-B	3.04								
A-C	1.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.26	9.39	0.134		0.12	0.15	2.2		0.12
B-A	3.18	7.98	0.398		0.46	0.65	9.3		0.21
C-A	3.88								
C-B	1.54	8.58	0.180		0.17	0.22	3.2		0.14
A-B	3.63								
A-C	2.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.54	8.24	0.187		0.15	0.23	3.3		0.15
B-A	3.89	7.42	0.524		0.65	1.06	15.0		0.28
C-A	4.75								
C-B	1.89	8.29	0.228		0.22	0.29	4.3		0.16
A-B	4.44								
A-C	2.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.54	8.20	0.188		0.23	0.23	3.4		0.15
B-A	3.89	7.42	0.524		1.06	1.08	16.1		0.28
C-A	4.75								
C-B	1.89	8.29	0.228		0.29	0.29	4.4		0.16
A-B	4.44								
A-C	2.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.26	9.35	0.135		0.23	0.16	2.4		0.12
B-A	3.18	7.98	0.398		1.08	0.68	10.7		0.21
C-A	3.88								
C-B	1.54	8.58	0.180		0.29	0.22	3.4		0.14
A-B	3.63								
A-C	2.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	1.05	10.00	0.105		0.16	0.12	1.8		0.11
B-A	2.66	8.37	0.318		0.68	0.47	7.4		0.18
C-A	3.25								
C-B	1.29	8.79	0.147		0.22	0.17	2.7		0.13
A-B	3.04								
A-C	1.97								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.1	
08.15	0.2	
08.30	0.2	
08.45	0.2	
09.00	0.2	
09.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	
08.15	0.6	*
08.30	1.1	*
08.45	1.1	*
09.00	0.7	*
09.15	0.5	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	115.6	77.1	14.9	0.13	14.9	0.13
B-A	291.8	194.5	64.9	0.22	65.0	0.22
C-A	356.5	237.7				
C-B	141.8	94.5	20.4	0.14	20.4	0.14
A-B	333.1	222.1				
A-C	216.1	144.1				
ALL	1454.9	969.9	100.3	0.07	100.3	0.07

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

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

========== end of file ==========

Printed at 15:21:57 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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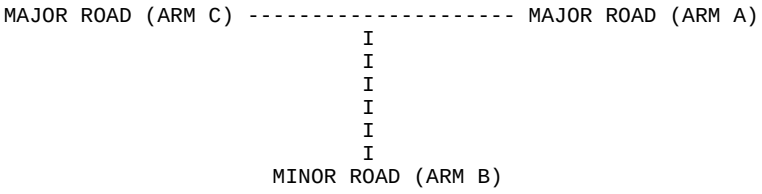
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Chipping Lane and Inglewhite Rd 2025 Assessment Flows-PM .vpi"
(drive-on-the-left) at 15:26:04 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Inglewhite Road/Chipping Lane 2025 Assessment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS Inglewhite Road W
ARM C IS Chipping Lane

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 32.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 82.0 M.
- VISIBILITY TO RIGHT	(VB-A) 132.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	5.00 M.
WIDTH AT 10 M FROM JUNCTION	2.90 M.
WIDTH AT 15 M FROM JUNCTION	3.00 M.
WIDTH AT 20 M FROM JUNCTION	3.00 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
592.49	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Inglewhite Road/Chipping Lane Ass

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.22	9.34	6.22
ARM B	15.00	45.00	75.00	3.91	5.87	3.91
ARM C	15.00	45.00	75.00	3.10	4.65	3.10

Demand set: Inglewhite Road/Chipping Lane Ass

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.478	0.522
		0.0	238.0	260.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.725	0.000	0.275
		227.0	0.0	86.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.706	0.294	0.000
		175.0	73.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.08	9.58	0.113		0.00	0.13	1.8		0.12
B-A	2.85	8.36	0.341		0.00	0.51	7.2		0.18
C-A	2.20								
C-B	0.92	8.52	0.108		0.00	0.12	1.7		0.13
A-B	2.99								
A-C	3.26								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.29	8.83	0.146		0.13	0.17	2.5		0.13
B-A	3.40	7.96	0.427		0.51	0.73	10.5		0.22
C-A	2.62								
C-B	1.09	8.26	0.132		0.12	0.15	2.2		0.14
A-B	3.57								
A-C	3.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.58	7.50	0.210		0.17	0.26	3.8		0.17
B-A	4.17	7.38	0.564		0.73	1.24	17.3		0.30
C-A	3.21								
C-B	1.34	7.89	0.170		0.15	0.20	3.0		0.15
A-B	4.37								
A-C	4.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.58	7.45	0.212		0.26	0.27	4.0		0.17
B-A	4.17	7.38	0.565		1.24	1.27	18.9		0.31
C-A	3.21								
C-B	1.34	7.89	0.170		0.20	0.20	3.0		0.15
A-B	4.37								
A-C	4.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	1.29	8.79	0.147		0.27	0.17	2.7		0.13
B-A	3.40	7.96	0.427		1.27	0.76	12.1		0.22
C-A	2.62								
C-B	1.09	8.26	0.132		0.20	0.15	2.4		0.14
A-B	3.57								
A-C	3.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	1.08	9.55	0.113		0.17	0.13	2.0		0.12
B-A	2.85	8.36	0.341		0.76	0.53	8.2		0.18
C-A	2.20								
C-B	0.92	8.52	0.108		0.15	0.12	1.9		0.13
A-B	2.99								
A-C	3.26								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	0.3	
17.45	0.3	
18.00	0.2	
18.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	*
17.15	0.7	*
17.30	1.2	*
17.45	1.3	*
18.00	0.8	*
18.15	0.5	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	118.4	78.9	16.7	0.14	16.7	0.14
B-A	312.4	208.3	74.2	0.24	74.2	0.24
C-A	240.9	160.6				
C-B	100.5	67.0	14.2	0.14	14.2	0.14
A-B	327.6	218.4				
A-C	357.9	238.6				
ALL	1457.6	971.8	105.1	0.07	105.1	0.07

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

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

========== end of file ==========

Printed at 15:26:22 on 07/04/2015]

Appendix 14

ARCADY Outputs – Inglewhite Road/Sainsbury's Access

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Import of 4. Inglewhite Rd_Sainsburys Access.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\New folder
Report generation date: 08/04/2015 11:13:39

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	Future Years - 2016 Assessment							
Inglewhite Rd (SB)	1.80	0.23	0.65	B	1.50	0.22	0.61	B
Sainsburys Access	0.19	0.15	0.16	A	0.84	0.21	0.46	B
Inglewhite Rd (NB)	1.17	0.16	0.54	A	3.36	0.35	0.78	C
	Future Years - 2016 Baseline							
Inglewhite Rd (SB)	1.06	0.17	0.52	B	1.12	0.19	0.53	B
Sainsburys Access	0.17	0.13	0.15	A	0.76	0.19	0.44	B
Inglewhite Rd (NB)	0.98	0.15	0.50	A	1.92	0.23	0.66	B
	Future Years - 2025 Assessment							
Inglewhite Rd (SB)	2.40	0.28	0.71	C	2.03	0.28	0.68	C
Sainsburys Access	0.24	0.17	0.19	A	1.13	0.26	0.54	C
Inglewhite Rd (NB)	1.47	0.19	0.60	B	5.63	0.54	0.86	D
	Future Years - 2025 Baseline							
Inglewhite Rd (SB)	1.36	0.19	0.58	B	1.47	0.23	0.60	B
Sainsburys Access	0.21	0.15	0.17	A	1.02	0.23	0.51	B
Inglewhite Rd (NB)	1.23	0.17	0.55	B	2.83	0.31	0.75	C

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

"D1 - 2016 Baseline, AM " model duration: 07:45 - 09:15
"D2 - 2016 Baseline, PM" model duration: 16:45 - 18:15
"D3 - 2025 Baseline, AM" model duration: 07:45 - 09:15
"D4 - 2025 Baseline, PM" model duration: 16:45 - 18:15
"D5 - 2016 Assessment, AM" model duration: 07:45 - 09:15
"D6 - 2016 Assessment, PM" model duration: 16:45 - 18:15
"D7 - 2025 Assessment, AM" model duration: 07:45 - 09:15
"D8 - 2025 Assessment, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 08/04/2015 11:13:37

File summary

Title	Inglewhite Road / Sainsburys Access
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Future Years - 2016 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2016 Baseline, AM	2016 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.16	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	346.00	100.000
Sainsburys Access	ONE HOUR	✓	69.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	364.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	19.000	327.000
	Sainsburys Access	18.000	0.000	51.000
	Inglewhite Rd (NB)	303.000	61.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.05	0.95
	Sainsburys Access	0.26	0.00	0.74
	Inglewhite Rd (NB)	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.52	0.17	1.06	B	317.50	476.24	68.44	0.14	0.76	68.45	0.14
Sainsburys Access	0.15	0.13	0.17	A	63.32	94.97	11.74	0.12	0.13	11.74	0.12
Inglewhite Rd (NB)	0.50	0.15	0.98	A	334.01	501.02	64.54	0.13	0.72	64.55	0.13

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	260.49	65.12	258.38	239.88	45.58	0.00	748.06	706.32	0.348	0.00	0.53	0.122	A
Sainsburys Access	51.95	12.99	51.56	59.77	244.19	0.00	579.87	363.43	0.090	0.00	0.10	0.114	A
Inglewhite Rd (NB)	274.04	68.51	272.01	282.30	13.45	0.00	808.57	765.74	0.339	0.00	0.51	0.111	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	311.05	77.76	310.32	287.99	54.73	0.00	743.45	706.32	0.418	0.53	0.71	0.138	A
Sainsburys Access	62.03	15.51	61.92	71.77	293.28	0.00	554.77	363.43	0.112	0.10	0.12	0.122	A
Inglewhite Rd (NB)	327.23	81.81	326.57	339.05	16.15	0.00	807.14	765.74	0.405	0.51	0.67	0.125	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	380.95	95.24	379.60	352.38	66.96	0.00	737.28	706.32	0.517	0.71	1.05	0.167	B
Sainsburys Access	75.97	18.99	75.79	87.81	358.76	0.00	521.29	363.43	0.146	0.12	0.17	0.135	A
Inglewhite Rd (NB)	400.77	100.19	399.57	414.78	19.77	0.00	805.24	765.74	0.498	0.67	0.97	0.147	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	380.95	95.24	380.91	353.40	67.16	0.00	737.18	706.32	0.517	1.05	1.06	0.168	B
Sainsburys Access	75.97	18.99	75.97	88.07	359.99	0.00	520.66	363.43	0.146	0.17	0.17	0.135	A
Inglewhite Rd (NB)	400.77	100.19	400.74	416.14	19.82	0.00	805.21	765.74	0.498	0.97	0.98	0.148	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	311.05	77.76	312.35	289.58	55.03	0.00	743.30	706.32	0.418	1.06	0.73	0.140	A
Sainsburys Access	62.03	15.51	62.20	72.18	295.20	0.00	553.79	363.43	0.112	0.17	0.13	0.122	A
Inglewhite Rd (NB)	327.23	81.81	328.39	341.18	16.23	0.00	807.11	765.74	0.405	0.98	0.69	0.126	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	260.49	65.12	261.25	242.27	46.04	0.00	747.83	706.32	0.348	0.73	0.54	0.123	A
Sainsburys Access	51.95	12.99	52.06	60.39	246.90	0.00	578.48	363.43	0.090	0.13	0.10	0.114	A
Inglewhite Rd (NB)	274.04	68.51	274.73	285.38	13.58	0.00	808.50	765.74	0.339	0.69	0.52	0.113	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	7.59	0.51	0.122	A	A
Sainsburys Access	1.42	0.09	0.114	A	A
Inglewhite Rd (NB)	7.31	0.49	0.111	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.30	0.69	0.138	A	A
Sainsburys Access	1.83	0.12	0.122	A	A
Inglewhite Rd (NB)	9.81	0.65	0.125	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	15.02	1.00	0.167	B	B
Sainsburys Access	2.47	0.16	0.135	A	A
Inglewhite Rd (NB)	14.04	0.94	0.147	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	15.79	1.05	0.168	B	B
Sainsburys Access	2.54	0.17	0.135	A	A
Inglewhite Rd (NB)	14.67	0.98	0.148	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	11.37	0.76	0.140	A	A
Sainsburys Access	1.96	0.13	0.122	A	A
Inglewhite Rd (NB)	10.72	0.71	0.126	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	8.36	0.56	0.123	A	A
Sainsburys Access	1.52	0.10	0.114	A	A
Inglewhite Rd (NB)	7.99	0.53	0.113	A	A

Future Years - 2016 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Profile Type	D2 - 2016 Baseline, PM	'Turning counts vary over time' option has been selected but all arms use ONE HOUR profile types. Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Future Years	ARCADY		✓				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	Relations
2016 Baseline, PM	2016 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.21	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	326.00	100.000
Sainsburys Access	ONE HOUR	✓	217.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	465.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access - (16:45-17:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	281.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	295.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access - (16:45-17:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access - (17:00-17:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	266.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	285.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access - (17:00-17:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access - (17:15-17:30)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	266.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	285.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access - (17:15-17:30)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access - (17:30-17:45)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	266.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	285.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access - (17:30-17:45)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access - (17:45-18:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	266.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	285.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access - (17:45-18:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access - (18:00-18:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	266.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	285.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access - (18:00-18:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access - (16:45-17:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access - (16:45-17:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access - (17:00-17:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access - (17:00-17:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access - (17:15-17:30)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access - (17:15-17:30)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access - (17:30-17:45)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access - (17:30-17:45)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access - (17:45-18:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access - (17:45-18:00)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access - (18:00-18:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access - (18:00-18:15)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.53	0.19	1.12	B	299.14	448.71	70.60	0.16	0.78	70.62	0.16
Sainsburys Access	0.44	0.19	0.76	B	199.12	298.68	48.91	0.16	0.54	48.92	0.16
Inglewhite Rd (NB)	0.66	0.23	1.92	B	426.69	640.04	113.76	0.18	1.26	113.78	0.18

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	245.43	61.36	243.33	275.29	126.83	0.00	707.07	634.68	0.347	0.00	0.52	0.129	A
Sainsburys Access	163.37	40.84	161.88	160.42	209.74	0.00	597.48	425.01	0.273	0.00	0.37	0.137	A
Inglewhite Rd (NB)	350.08	87.52	346.92	316.42	55.20	0.00	786.59	739.36	0.445	0.00	0.79	0.136	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	293.07	73.27	292.28	327.36	155.65	0.00	692.53	631.80	0.423	0.52	0.72	0.150	A
Sainsburys Access	195.08	48.77	194.55	197.93	250.00	0.00	576.90	428.43	0.338	0.37	0.50	0.157	A
Inglewhite Rd (NB)	418.03	104.51	416.67	378.21	66.34	0.00	780.72	738.74	0.535	0.79	1.13	0.164	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	358.93	89.73	357.39	399.93	190.16	0.00	675.12	631.80	0.532	0.72	1.11	0.188	B
Sainsburys Access	238.92	59.73	237.91	241.87	305.68	0.00	548.43	428.43	0.436	0.50	0.76	0.193	B
Inglewhite Rd (NB)	511.97	127.99	508.95	462.46	81.13	0.00	772.94	738.74	0.662	1.13	1.88	0.225	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	358.93	89.73	358.87	402.05	191.23	0.00	674.58	631.80	0.532	1.11	1.12	0.190	B
Sainsburys Access	238.92	59.73	238.88	243.16	306.95	0.00	547.78	428.43	0.436	0.76	0.76	0.194	B
Inglewhite Rd (NB)	511.97	127.99	511.82	464.37	81.46	0.00	772.77	738.74	0.663	1.88	1.92	0.230	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	293.07	73.27	294.56	330.55	157.29	0.00	691.70	631.80	0.424	1.12	0.75	0.152	A
Sainsburys Access	195.08	48.77	196.06	199.91	251.94	0.00	575.90	428.43	0.339	0.76	0.52	0.158	A
Inglewhite Rd (NB)	418.03	104.51	420.99	381.14	66.86	0.00	780.45	738.74	0.536	1.92	1.18	0.168	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	245.43	61.36	246.26	276.09	131.34	0.00	704.79	631.80	0.348	0.75	0.54	0.131	A
Sainsburys Access	163.37	40.84	163.92	166.97	210.62	0.00	597.03	428.43	0.274	0.52	0.38	0.139	A
Inglewhite Rd (NB)	350.08	87.52	351.53	318.65	55.90	0.00	786.22	738.74	0.445	1.18	0.82	0.139	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	7.53	0.50	0.129	A	A
Sainsburys Access	5.34	0.36	0.137	A	A
Inglewhite Rd (NB)	11.25	0.75	0.136	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.46	0.70	0.150	A	A
Sainsburys Access	7.31	0.49	0.157	A	A
Inglewhite Rd (NB)	16.21	1.08	0.164	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	15.81	1.05	0.188	B	B
Sainsburys Access	10.85	0.72	0.193	B	B
Inglewhite Rd (NB)	26.37	1.76	0.225	B	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	16.74	1.12	0.190	B	B
Sainsburys Access	11.42	0.76	0.194	B	B
Inglewhite Rd (NB)	28.58	1.91	0.230	B	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	11.68	0.78	0.152	A	A
Sainsburys Access	8.10	0.54	0.158	A	A
Inglewhite Rd (NB)	18.64	1.24	0.168	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	8.38	0.56	0.131	A	A
Sainsburys Access	5.90	0.39	0.139	A	A
Inglewhite Rd (NB)	12.70	0.85	0.139	A	A

Future Years - 2025 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2025 Baseline, AM	2025 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.18	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	386.00	100.000
Sainsburys Access	ONE HOUR	✓	79.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	405.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	22.000	364.000
	Sainsburys Access	21.000	0.000	58.000
	Inglewhite Rd (NB)	336.000	69.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.06	0.94
	Sainsburys Access	0.27	0.00	0.73
	Inglewhite Rd (NB)	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.58	0.19	1.36	B	354.20	531.30	85.12	0.16	0.95	85.13	0.16
Sainsburys Access	0.17	0.15	0.21	A	72.49	108.74	14.26	0.13	0.16	14.26	0.13
Inglewhite Rd (NB)	0.55	0.17	1.23	B	371.64	557.45	78.80	0.14	0.88	78.81	0.14

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	290.60	72.65	288.08	266.66	51.54	0.00	745.06	705.34	0.390	0.00	0.63	0.131	A
Sainsburys Access	59.48	14.87	59.01	67.96	271.66	0.00	565.82	364.65	0.105	0.00	0.12	0.118	A
Inglewhite Rd (NB)	304.91	76.23	302.51	314.98	15.69	0.00	807.39	764.62	0.378	0.00	0.60	0.118	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	347.01	86.75	346.06	320.19	61.88	0.00	739.84	705.34	0.469	0.63	0.87	0.152	A
Sainsburys Access	71.02	17.75	70.88	81.61	326.33	0.00	537.87	364.65	0.132	0.12	0.15	0.128	A
Inglewhite Rd (NB)	364.09	91.02	363.24	378.37	18.84	0.00	805.73	764.62	0.452	0.60	0.81	0.135	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	424.99	106.25	423.10	391.66	75.69	0.00	732.87	705.34	0.580	0.87	1.34	0.192	B
Sainsburys Access	86.98	21.75	86.75	99.81	398.98	0.00	500.73	364.65	0.174	0.15	0.21	0.145	A
Inglewhite Rd (NB)	445.91	111.48	444.29	462.68	23.06	0.00	803.51	764.62	0.555	0.81	1.22	0.166	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	424.99	106.25	424.92	393.02	75.96	0.00	732.74	705.34	0.580	1.34	1.36	0.195	B
Sainsburys Access	86.98	21.75	86.97	100.18	400.70	0.00	499.85	364.65	0.174	0.21	0.21	0.145	A
Inglewhite Rd (NB)	445.91	111.48	445.86	464.55	23.12	0.00	803.48	764.62	0.555	1.22	1.23	0.168	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	347.01	86.75	348.85	322.30	62.30	0.00	739.63	705.34	0.469	1.36	0.90	0.154	A
Sainsburys Access	71.02	17.75	71.24	82.18	328.96	0.00	536.53	364.65	0.132	0.21	0.15	0.129	A
Inglewhite Rd (NB)	364.09	91.02	365.66	381.27	18.94	0.00	805.68	764.62	0.452	1.23	0.84	0.137	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	290.60	72.65	291.61	269.55	52.10	0.00	744.78	705.34	0.390	0.90	0.65	0.133	A
Sainsburys Access	59.48	14.87	59.62	68.72	274.99	0.00	564.12	364.65	0.105	0.15	0.12	0.119	A
Inglewhite Rd (NB)	304.91	76.23	305.80	318.76	15.85	0.00	807.30	764.62	0.378	0.84	0.61	0.120	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	9.03	0.60	0.131	A	A
Sainsburys Access	1.69	0.11	0.118	A	A
Inglewhite Rd (NB)	8.61	0.57	0.118	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.55	0.84	0.152	A	A
Sainsburys Access	2.21	0.15	0.128	A	A
Inglewhite Rd (NB)	11.78	0.79	0.135	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	19.08	1.27	0.192	B	B
Sainsburys Access	3.03	0.20	0.145	A	A
Inglewhite Rd (NB)	17.45	1.16	0.166	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	20.29	1.35	0.195	B	B
Sainsburys Access	3.13	0.21	0.145	A	A
Inglewhite Rd (NB)	18.40	1.23	0.168	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	14.10	0.94	0.154	A	A
Sainsburys Access	2.37	0.16	0.129	A	A
Inglewhite Rd (NB)	13.06	0.87	0.137	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.06	0.67	0.133	A	A
Sainsburys Access	1.82	0.12	0.119	A	A
Inglewhite Rd (NB)	9.50	0.63	0.120	A	A

Future Years - 2025 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2025 Baseline, PM	2025 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.26	C

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	362.00	100.000
Sainsburys Access	ONE HOUR	✓	245.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	520.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	51.000	311.000
	Sainsburys Access	83.000	0.000	162.000
	Inglewhite Rd (NB)	328.000	192.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.14	0.86
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.60	0.23	1.47	B	332.18	498.27	88.82	0.18	0.99	88.84	0.18
Sainsburys Access	0.51	0.23	1.02	B	224.82	337.22	62.70	0.19	0.70	62.71	0.19
Inglewhite Rd (NB)	0.75	0.31	2.83	C	477.16	715.74	154.87	0.22	1.72	154.91	0.22

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	272.53	68.13	270.01	306.34	143.10	0.00	698.86	633.28	0.390	0.00	0.63	0.139	A
Sainsburys Access	184.45	46.11	182.64	181.14	231.97	0.00	586.11	426.55	0.315	0.00	0.45	0.148	A
Inglewhite Rd (NB)	391.48	97.87	387.56	352.74	61.87	0.00	783.08	739.58	0.500	0.00	0.98	0.150	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	325.43	81.36	324.39	368.01	171.88	0.00	684.34	633.29	0.476	0.63	0.89	0.166	A
Sainsburys Access	220.25	55.06	219.53	217.59	278.69	0.00	562.23	426.55	0.392	0.45	0.63	0.175	B
Inglewhite Rd (NB)	467.47	116.87	465.52	423.85	74.37	0.00	776.50	739.58	0.602	0.98	1.47	0.192	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	398.57	99.64	396.35	448.82	209.53	0.00	665.35	633.29	0.599	0.89	1.44	0.221	B
Sainsburys Access	269.75	67.44	268.26	265.37	340.51	0.00	530.62	426.55	0.508	0.63	1.00	0.227	B
Inglewhite Rd (NB)	572.53	143.13	567.47	517.89	90.88	0.00	767.81	739.58	0.746	1.47	2.73	0.292	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	398.57	99.64	398.46	452.26	211.26	0.00	664.47	633.29	0.600	1.44	1.47	0.225	B
Sainsburys Access	269.75	67.44	269.68	267.39	342.32	0.00	529.70	426.55	0.509	1.00	1.02	0.231	B
Inglewhite Rd (NB)	572.53	143.13	572.16	520.64	91.36	0.00	767.56	739.58	0.746	2.73	2.83	0.305	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	325.43	81.36	327.60	373.16	174.47	0.00	683.03	633.29	0.476	1.47	0.93	0.170	B
Sainsburys Access	220.25	55.06	221.70	220.63	281.45	0.00	560.82	426.55	0.393	1.02	0.66	0.178	B
Inglewhite Rd (NB)	467.47	116.87	472.53	428.04	75.11	0.00	776.11	739.58	0.602	2.83	1.56	0.201	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	272.53	68.13	273.65	311.05	145.35	0.00	697.73	633.28	0.391	0.93	0.65	0.142	A
Sainsburys Access	184.45	46.11	185.21	183.90	235.09	0.00	584.52	426.55	0.316	0.66	0.47	0.151	A
Inglewhite Rd (NB)	391.48	97.87	393.65	357.56	62.75	0.00	782.62	739.58	0.500	1.56	1.02	0.155	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	9.00	0.60	0.139	A	A
Sainsburys Access	6.48	0.43	0.148	A	A
Inglewhite Rd (NB)	13.87	0.92	0.150	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.82	0.85	0.166	A	A
Sainsburys Access	9.14	0.61	0.175	B	B
Inglewhite Rd (NB)	20.89	1.39	0.192	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	20.37	1.36	0.221	B	B
Sainsburys Access	14.27	0.95	0.227	B	B
Inglewhite Rd (NB)	37.23	2.48	0.292	C	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	21.90	1.46	0.225	B	B
Sainsburys Access	15.22	1.01	0.231	B	B
Inglewhite Rd (NB)	41.84	2.79	0.305	C	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	14.62	0.97	0.170	B	B
Sainsburys Access	10.33	0.69	0.178	B	B
Inglewhite Rd (NB)	25.02	1.67	0.201	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.11	0.67	0.142	A	A
Sainsburys Access	7.26	0.48	0.151	A	A
Inglewhite Rd (NB)	16.02	1.07	0.155	A	A

Future Years - 2016 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2016 Assessment, AM	2016 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.19	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	434.00	100.000
Sainsburys Access	ONE HOUR	✓	69.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	396.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	19.000	415.000
	Sainsburys Access	18.000	0.000	51.000
	Inglewhite Rd (NB)	335.000	61.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.04	0.96
	Sainsburys Access	0.26	0.00	0.74
	Inglewhite Rd (NB)	0.85	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.65	0.23	1.80	B	398.25	597.37	108.23	0.18	1.20	108.26	0.18
Sainsburys Access	0.16	0.15	0.19	A	63.32	94.97	12.89	0.14	0.14	12.89	0.14
Inglewhite Rd (NB)	0.54	0.16	1.17	A	363.38	545.06	75.22	0.14	0.84	75.23	0.14

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	326.74	81.68	323.69	263.70	45.57	0.00	748.07	711.48	0.437	0.00	0.76	0.141	A
Sainsburys Access	51.95	12.99	51.53	59.74	309.52	0.00	546.47	356.88	0.095	0.00	0.10	0.121	A
Inglewhite Rd (NB)	298.13	74.53	295.82	347.60	13.44	0.00	808.57	766.64	0.369	0.00	0.58	0.117	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	390.16	97.54	388.89	316.63	54.71	0.00	743.46	711.48	0.525	0.76	1.08	0.169	B
Sainsburys Access	62.03	15.51	61.90	71.74	371.86	0.00	514.59	356.88	0.121	0.10	0.14	0.133	A
Inglewhite Rd (NB)	356.00	89.00	355.19	417.62	16.15	0.00	807.15	766.64	0.441	0.58	0.78	0.133	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	477.84	119.46	475.08	387.33	66.93	0.00	737.29	711.48	0.648	1.08	1.77	0.226	B
Sainsburys Access	75.97	18.99	75.76	87.73	454.29	0.00	472.45	356.88	0.161	0.14	0.19	0.151	A
Inglewhite Rd (NB)	436.00	109.00	434.49	510.28	19.76	0.00	805.24	766.64	0.541	0.78	1.15	0.161	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	477.84	119.46	477.70	388.62	67.15	0.00	737.18	711.48	0.648	1.77	1.80	0.231	B
Sainsburys Access	75.97	18.99	75.96	88.07	456.79	0.00	471.17	356.88	0.161	0.19	0.19	0.152	A
Inglewhite Rd (NB)	436.00	109.00	435.95	512.94	19.82	0.00	805.22	766.64	0.541	1.15	1.17	0.162	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	390.16	97.54	392.85	318.63	55.06	0.00	743.28	711.48	0.525	1.80	1.13	0.173	B
Sainsburys Access	62.03	15.51	62.24	72.26	375.65	0.00	512.65	356.88	0.121	0.19	0.14	0.133	A
Inglewhite Rd (NB)	356.00	89.00	357.46	421.66	16.24	0.00	807.10	766.64	0.441	1.17	0.80	0.134	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	326.74	81.68	328.10	266.50	46.05	0.00	747.83	711.48	0.437	1.13	0.79	0.143	A
Sainsburys Access	51.95	12.99	52.08	60.42	313.74	0.00	544.31	356.88	0.095	0.14	0.11	0.122	A
Inglewhite Rd (NB)	298.13	74.53	298.97	352.23	13.59	0.00	808.50	766.64	0.369	0.80	0.59	0.118	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.87	0.72	0.141	A	A
Sainsburys Access	1.51	0.10	0.121	A	A
Inglewhite Rd (NB)	8.30	0.55	0.117	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	15.53	1.04	0.169	B	B
Sainsburys Access	1.99	0.13	0.133	A	A
Inglewhite Rd (NB)	11.30	0.75	0.133	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	24.84	1.66	0.226	B	B
Sainsburys Access	2.76	0.18	0.151	A	A
Inglewhite Rd (NB)	16.58	1.11	0.161	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	26.86	1.79	0.231	B	B
Sainsburys Access	2.86	0.19	0.152	A	A
Inglewhite Rd (NB)	17.44	1.16	0.162	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	17.84	1.19	0.173	B	B
Sainsburys Access	2.14	0.14	0.133	A	A
Inglewhite Rd (NB)	12.47	0.83	0.134	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.29	0.82	0.143	A	A
Sainsburys Access	1.63	0.11	0.122	A	A
Inglewhite Rd (NB)	9.13	0.61	0.118	A	A

Future Years - 2016 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2016 Assessment, PM	2016 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.28	C

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	372.00	100.000
Sainsburys Access	ONE HOUR	✓	217.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	547.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	45.000	327.000
	Sainsburys Access	74.000	0.000	143.000
	Inglewhite Rd (NB)	377.000	170.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.12	0.88
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.69	0.31	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.61	0.22	1.50	B	341.35	512.03	90.95	0.18	1.01	90.97	0.18
Sainsburys Access	0.46	0.21	0.84	B	199.12	298.68	52.37	0.18	0.58	52.38	0.18
Inglewhite Rd (NB)	0.78	0.35	3.36	C	501.94	752.91	177.47	0.24	1.97	177.52	0.24

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	280.06	70.02	277.48	336.05	126.65	0.00	707.16	654.72	0.396	0.00	0.65	0.139	A
Sainsburys Access	163.37	40.84	161.82	160.21	243.91	0.00	580.01	410.47	0.282	0.00	0.39	0.143	A
Inglewhite Rd (NB)	411.81	102.95	407.51	350.55	55.18	0.00	786.60	741.97	0.524	0.00	1.07	0.157	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	334.42	83.61	333.36	403.67	152.12	0.00	694.31	654.72	0.482	0.65	0.91	0.166	A
Sainsburys Access	195.08	48.77	194.49	192.44	293.03	0.00	554.89	410.47	0.352	0.39	0.53	0.166	A
Inglewhite Rd (NB)	491.74	122.94	489.46	421.20	66.32	0.00	780.73	741.97	0.630	1.07	1.64	0.204	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	409.58	102.39	407.32	491.81	185.21	0.00	677.62	654.72	0.604	0.91	1.48	0.220	B
Sainsburys Access	238.92	59.73	237.76	234.48	358.05	0.00	521.66	410.47	0.458	0.53	0.82	0.210	B
Inglewhite Rd (NB)	602.26	150.56	595.93	514.73	81.08	0.00	772.97	741.97	0.779	1.64	3.23	0.327	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	409.58	102.39	409.47	496.16	187.00	0.00	676.71	654.72	0.605	1.48	1.50	0.224	B
Sainsburys Access	238.92	59.73	238.87	236.53	359.93	0.00	520.69	410.47	0.459	0.82	0.84	0.213	B
Inglewhite Rd (NB)	602.26	150.56	601.70	517.35	81.46	0.00	772.77	741.97	0.779	3.23	3.36	0.348	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	334.42	83.61	336.63	410.24	154.82	0.00	692.95	654.72	0.483	1.50	0.95	0.169	B
Sainsburys Access	195.08	48.77	196.21	195.54	295.91	0.00	553.43	410.47	0.352	0.84	0.55	0.168	B
Inglewhite Rd (NB)	491.74	122.94	498.14	425.21	66.91	0.00	780.43	741.97	0.630	3.36	1.76	0.217	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	280.06	70.02	281.20	341.51	128.78	0.00	706.09	654.72	0.397	0.95	0.67	0.142	A
Sainsburys Access	163.37	40.84	163.99	162.80	247.18	0.00	578.34	410.47	0.282	0.55	0.40	0.145	A
Inglewhite Rd (NB)	411.81	102.95	414.37	355.25	55.92	0.00	786.21	741.97	0.524	1.76	1.12	0.162	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	9.23	0.62	0.139	A	A
Sainsburys Access	5.55	0.37	0.143	A	A
Inglewhite Rd (NB)	15.16	1.01	0.157	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	13.13	0.88	0.166	A	A
Sainsburys Access	7.73	0.52	0.166	A	A
Inglewhite Rd (NB)	23.28	1.55	0.204	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	20.83	1.39	0.220	B	B
Sainsburys Access	11.79	0.79	0.210	B	B
Inglewhite Rd (NB)	43.27	2.88	0.327	C	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	22.40	1.49	0.224	B	B
Sainsburys Access	12.48	0.83	0.213	B	B
Inglewhite Rd (NB)	49.62	3.31	0.348	C	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	14.99	1.00	0.169	B	B
Sainsburys	8.65	0.58	0.168	B	B
Inglewhite Rd (NB)	28.44	1.90	0.217	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.38	0.69	0.142	A	A
Sainsburys Access	6.18	0.41	0.145	A	A
Inglewhite Rd (NB)	17.70	1.18	0.162	A	A

Future Years - 2025 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2025 Assessment, AM	2025 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.23	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	474.00	100.000
Sainsburys Access	ONE HOUR	✓	79.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	437.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	22.000	452.000
	Sainsburys Access	21.000	0.000	58.000
	Inglewhite Rd (NB)	368.000	69.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.05	0.95
	Sainsburys Access	0.27	0.00	0.73
	Inglewhite Rd (NB)	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.71	0.28	2.40	C	434.95	652.43	136.36	0.21	1.52	136.39	0.21
Sainsburys Access	0.19	0.17	0.24	A	72.49	108.74	15.76	0.14	0.18	15.76	0.14
Inglewhite Rd (NB)	0.60	0.19	1.47	B	401.00	601.50	91.80	0.15	1.02	91.82	0.15

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	356.85	89.21	353.25	290.44	51.52	0.00	745.07	710.08	0.479	0.00	0.90	0.152	A
Sainsburys Access	59.48	14.87	58.98	67.91	336.85	0.00	532.49	358.52	0.112	0.00	0.12	0.127	A
Inglewhite Rd (NB)	329.00	82.25	326.28	380.15	15.68	0.00	807.39	765.48	0.407	0.00	0.68	0.124	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	426.12	106.53	424.44	348.80	61.87	0.00	739.85	710.08	0.576	0.90	1.32	0.189	B
Sainsburys Access	71.02	17.75	70.86	81.57	404.74	0.00	497.78	358.52	0.143	0.12	0.16	0.141	A
Inglewhite Rd (NB)	392.85	98.21	391.83	456.76	18.84	0.00	805.73	765.48	0.488	0.68	0.93	0.145	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	521.88	130.47	517.84	426.49	75.64	0.00	732.90	710.08	0.712	1.32	2.33	0.274	C
Sainsburys Access	86.98	21.75	86.70	99.68	493.80	0.00	452.25	358.52	0.192	0.16	0.24	0.164	A
Inglewhite Rd (NB)	481.15	120.29	479.08	557.45	23.05	0.00	803.52	765.48	0.599	0.93	1.45	0.184	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	521.88	130.47	521.62	428.23	75.96	0.00	732.74	710.08	0.712	2.33	2.40	0.283	C
Sainsburys Access	86.98	21.75	86.97	100.17	497.41	0.00	450.40	358.52	0.193	0.24	0.24	0.165	A
Inglewhite Rd (NB)	481.15	120.29	481.06	561.26	23.12	0.00	803.48	765.48	0.599	1.45	1.47	0.186	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	426.12	106.53	430.12	351.47	62.35	0.00	739.61	710.08	0.576	2.40	1.40	0.196	B
Sainsburys Access	71.02	17.75	71.29	82.31	410.16	0.00	495.01	358.52	0.143	0.24	0.17	0.142	A
Inglewhite Rd (NB)	392.85	98.21	394.86	462.50	18.95	0.00	805.67	765.48	0.488	1.47	0.97	0.147	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	356.85	89.21	358.70	293.82	52.12	0.00	744.77	710.08	0.479	1.40	0.94	0.156	A
Sainsburys Access	59.48	14.87	59.64	68.77	342.05	0.00	529.84	358.52	0.112	0.17	0.13	0.128	A
Inglewhite Rd (NB)	329.00	82.25	330.08	385.83	15.85	0.00	807.30	765.48	0.408	0.97	0.70	0.126	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.78	0.85	0.152	A	A
Sainsburys Access	1.80	0.12	0.127	A	A
Inglewhite Rd (NB)	9.72	0.65	0.124	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	18.86	1.26	0.189	B	B
Sainsburys Access	2.41	0.16	0.141	A	A
Inglewhite Rd (NB)	13.53	0.90	0.145	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	32.14	2.14	0.274	C	B
Sainsburys Access	3.42	0.23	0.164	A	A
Inglewhite Rd (NB)	20.63	1.38	0.184	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	35.59	2.37	0.283	C	B
Sainsburys Access	3.55	0.24	0.165	A	A
Inglewhite Rd (NB)	21.94	1.46	0.186	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	22.30	1.49	0.196	B	B
Sainsburys Access	2.61	0.17	0.142	A	A
Inglewhite Rd (NB)	15.17	1.01	0.147	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	14.69	0.98	0.156	A	A
Sainsburys Access	1.96	0.13	0.128	A	A
Inglewhite Rd (NB)	10.81	0.72	0.126	A	A

Future Years - 2025 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2025 Assessment, PM	2025 Assessment	PM		ONE HOUR	16:45	18:15	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Sainsburys Access	Mini-roundabout	A,B,C	0.40	C

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Sainsburys Access	B	Sainsburys Access	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Sainsburys Access	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.00	3.00	3.00	0.00	8.00	6.00	0.00	
Sainsburys Access	3.00	3.00	4.50	0.50	9.00	4.00	0.00	
Inglewhite Rd (NB)	3.00	3.00	3.00	0.00	13.50	13.50	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.505	771.061
Sainsburys Access		(calculated)	(calculated)	0.511	704.715
Inglewhite Rd (NB)		(calculated)	(calculated)	0.526	815.646

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	408.00	100.000
Sainsburys Access	ONE HOUR	✓	245.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	602.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	51.000	357.000
	Sainsburys Access	83.000	0.000	162.000
	Inglewhite Rd (NB)	410.000	192.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.13	0.88
	Sainsburys Access	0.34	0.00	0.66
	Inglewhite Rd (NB)	0.68	0.32	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Sainsburys Access	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Sainsburys Access (for whole period)

		To		
		Inglewhite Rd (SB)	Sainsburys Access	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Sainsburys Access	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.68	0.28	2.03	C	374.39	561.58	115.87	0.21	1.29	115.90	0.21
Sainsburys Access	0.54	0.26	1.13	C	224.82	337.22	67.63	0.20	0.75	67.64	0.20
Inglewhite Rd (NB)	0.86	0.54	5.63	D	552.41	828.61	259.57	0.31	2.88	259.65	0.31

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	307.16	76.79	304.08	366.88	142.84	0.00	698.99	651.67	0.439	0.00	0.77	0.151	A
Sainsburys Access	184.45	46.11	182.56	180.85	266.07	0.00	568.68	413.18	0.324	0.00	0.47	0.155	A
Inglewhite Rd (NB)	453.22	113.30	447.87	386.78	61.85	0.00	783.09	741.97	0.579	0.00	1.34	0.176	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	366.78	91.70	365.36	440.61	171.52	0.00	684.52	651.67	0.536	0.77	1.13	0.187	B
Sainsburys Access	220.25	55.06	219.45	217.19	319.69	0.00	541.27	413.18	0.407	0.47	0.67	0.186	B
Inglewhite Rd (NB)	541.19	135.30	537.78	464.80	74.34	0.00	776.51	741.97	0.697	1.34	2.19	0.248	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	449.22	112.30	445.85	534.09	207.59	0.00	666.32	651.67	0.674	1.13	1.97	0.268	C
Sainsburys Access	269.75	67.44	268.01	263.32	390.12	0.00	505.26	413.18	0.534	0.67	1.11	0.251	C
Inglewhite Rd (NB)	662.81	165.70	650.89	567.34	90.80	0.00	767.85	741.97	0.863	2.19	5.17	0.470	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	449.22	112.30	448.98	541.51	210.81	0.00	664.70	651.67	0.676	1.97	2.03	0.277	C
Sainsburys Access	269.75	67.44	269.66	266.93	392.86	0.00	503.86	413.18	0.535	1.11	1.13	0.256	C
Inglewhite Rd (NB)	662.81	165.70	660.96	571.16	91.35	0.00	767.56	741.97	0.864	5.17	5.63	0.541	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	366.78	91.70	370.11	452.51	176.69	0.00	681.91	651.67	0.538	2.03	1.19	0.194	B
Sainsburys Access	220.25	55.06	221.95	222.96	323.84	0.00	539.14	413.18	0.409	1.13	0.70	0.190	B
Inglewhite Rd (NB)	541.19	135.30	554.01	470.60	75.19	0.00	776.07	741.97	0.697	5.63	2.43	0.284	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	307.16	76.79	308.74	374.21	145.84	0.00	697.48	651.67	0.440	1.19	0.80	0.155	A
Sainsburys Access	184.45	46.11	185.31	184.43	270.15	0.00	566.60	413.18	0.326	0.70	0.49	0.158	A
Inglewhite Rd (NB)	453.22	113.30	457.27	392.68	62.78	0.00	782.60	741.97	0.579	2.43	1.41	0.187	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.94	0.73	0.151	A	A
Sainsburys Access	6.75	0.45	0.155	A	A
Inglewhite Rd (NB)	18.65	1.24	0.176	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	16.11	1.07	0.187	B	B
Sainsburys Access	9.70	0.65	0.186	B	B
Inglewhite Rd (NB)	30.45	2.03	0.248	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	27.27	1.82	0.268	C	B
Sainsburys Access	15.63	1.04	0.251	C	B
Inglewhite Rd (NB)	65.28	4.35	0.470	D	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	30.04	2.00	0.277	C	B
Sainsburys Access	16.82	1.12	0.256	C	B
Inglewhite Rd (NB)	81.61	5.44	0.541	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	18.99	1.27	0.194	B	B
Sainsburys Access	11.10	0.74	0.190	B	B
Inglewhite Rd (NB)	41.06	2.74	0.284	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.52	0.83	0.155	A	A
Sainsburys Access	7.62	0.51	0.158	A	A
Inglewhite Rd (NB)	22.52	1.50	0.187	B	B

Appendix 15

ARCADY Outputs – Inglewhite Road/Berry Lane

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Import of 3. Inglewhite Rd_Berry Lane AM.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\Callibrated
Report generation date: 08/04/2015 11:48:46

Summary of junction performance

	AM			
	Queue (PCU)	Delay (min)	RFC	LOS
	Inglewhite Road/ Berry Road - 2014 Surveyed			
Inglewhite Rd (SB)	0.52	0.07	0.34	A
Berry Lane	0.45	0.06	0.31	A
Inglewhite Rd (NB)	1.25	0.23	0.56	B
	Inglewhite Road/ Berry Road - 2016 Assessment			
Inglewhite Rd (SB)	0.85	0.09	0.46	A
Berry Lane	0.53	0.07	0.35	A
Inglewhite Rd (NB)	2.16	0.34	0.69	C
	Inglewhite Road/ Berry Road - 2016 Baseline			
Inglewhite Rd (SB)	0.62	0.08	0.38	A
Berry Lane	0.49	0.06	0.33	A
Inglewhite Rd (NB)	1.76	0.29	0.64	C
	Inglewhite Road/ Berry Road - 2025 Assessment			
Inglewhite Rd (SB)	1.03	0.10	0.51	A
Berry Lane	0.65	0.07	0.39	A
Inglewhite Rd (NB)	3.52	0.51	0.79	D
	Inglewhite Road/ Berry Road - 2025 Baseline			
Inglewhite Rd (SB)	0.75	0.08	0.43	A
Berry Lane	0.60	0.07	0.38	A
Inglewhite Rd (NB)	2.69	0.41	0.74	C

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

"D1 - 2016 Baseline, AM " model duration: 07:45 - 09:15
"D3 - 2025 Baseline, AM" model duration: 07:45 - 09:15
"D5 - 2016 Assessment, AM" model duration: 07:45 - 09:15
"D7 - 2025 Assessment, AM" model duration: 07:45 - 09:15
"D8 - 2014 Surveyed, AM" model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 08/04/2015 11:48:44

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Inglewhite Road/ Berry Road - 2016 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	Relations
2016 Baseline, AM	2016 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.13	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		500.00	
Berry Lane	Direct	Queue Surveys	1000.00	
Inglewhite Rd (NB)	Direct		-115.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	1316.061
Berry Lane		(calculated)	(calculated)	0.503	1576.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	700.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	437.00	100.000
Berry Lane	ONE HOUR	✓	426.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	334.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	160.000	277.000
	Berry Lane	212.000	0.000	214.000
	Inglewhite Rd (NB)	233.000	101.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.37	0.63
	Berry Lane	0.50	0.00	0.50
	Inglewhite Rd (NB)	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.38	0.08	0.62	A	401.00	601.50	42.15	0.07	0.47	42.15	0.07
Berry Lane	0.33	0.06	0.49	A	390.91	586.36	33.65	0.06	0.37	33.65	0.06
Inglewhite Rd (NB)	0.64	0.29	1.76	C	306.48	459.73	101.55	0.22	1.13	101.57	0.22

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	329.00	82.25	327.62	332.56	75.21	0.00	1276.26	1255.62	0.258	0.00	0.35	0.063	A
Berry Lane	320.72	80.18	319.61	195.16	207.66	0.00	1471.95	1176.27	0.218	0.00	0.28	0.052	A
Inglewhite Rd (NB)	251.45	62.86	248.72	368.22	159.05	0.00	612.58	377.72	0.410	0.00	0.68	0.164	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	392.85	98.21	392.45	399.03	90.42	0.00	1268.21	1255.62	0.310	0.35	0.45	0.068	A
Berry Lane	382.97	95.74	382.65	234.11	248.76	0.00	1451.29	1176.27	0.264	0.28	0.36	0.056	A
Inglewhite Rd (NB)	300.26	75.06	299.02	440.98	190.43	0.00	595.29	377.72	0.504	0.68	0.99	0.202	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	481.15	120.29	480.47	487.67	110.33	0.00	1257.68	1255.62	0.383	0.45	0.61	0.077	A
Berry Lane	469.03	117.26	468.51	286.24	304.55	0.00	1423.25	1176.27	0.330	0.36	0.49	0.063	A
Inglewhite Rd (NB)	367.74	91.94	364.85	539.91	233.15	0.00	571.75	377.72	0.643	0.99	1.72	0.286	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	481.15	120.29	481.14	489.83	111.15	0.00	1257.24	1255.62	0.383	0.61	0.62	0.077	A
Berry Lane	469.03	117.26	469.03	287.31	304.98	0.00	1423.04	1176.27	0.330	0.49	0.49	0.063	A
Inglewhite Rd (NB)	367.74	91.94	367.57	540.59	233.41	0.00	571.61	377.72	0.643	1.72	1.76	0.293	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	392.85	98.21	393.52	402.29	91.66	0.00	1267.56	1255.62	0.310	0.62	0.45	0.069	A
Berry Lane	382.97	95.74	383.48	235.74	249.44	0.00	1450.95	1176.27	0.264	0.49	0.36	0.056	A
Inglewhite Rd (NB)	300.26	75.06	303.11	442.08	190.84	0.00	595.06	377.72	0.505	1.76	1.05	0.207	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	329.00	82.25	329.41	336.12	76.44	0.00	1275.61	1255.62	0.258	0.45	0.35	0.063	A
Berry Lane	320.72	80.18	321.04	197.05	208.80	0.00	1471.38	1176.27	0.218	0.36	0.28	0.052	A
Inglewhite Rd (NB)	251.45	62.86	252.79	370.07	159.76	0.00	612.18	377.72	0.411	1.05	0.71	0.168	B

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	5.06	0.34	0.063	A	A
Berry Lane	4.08	0.27	0.052	A	A
Inglewhite Rd (NB)	9.70	0.65	0.164	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	6.57	0.44	0.068	A	A
Berry Lane	5.27	0.35	0.056	A	A
Inglewhite Rd (NB)	14.20	0.95	0.202	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	9.02	0.60	0.077	A	A
Berry Lane	7.20	0.48	0.063	A	A
Inglewhite Rd (NB)	23.82	1.59	0.286	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	9.24	0.62	0.077	A	A
Berry Lane	7.34	0.49	0.063	A	A
Inglewhite Rd (NB)	26.11	1.74	0.293	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	6.92	0.46	0.069	A	A
Berry Lane	5.50	0.37	0.056	A	A
Inglewhite Rd (NB)	16.61	1.11	0.207	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	5.33	0.36	0.063	A	A
Berry Lane	4.26	0.28	0.052	A	A
Inglewhite Rd (NB)	11.10	0.74	0.168	B	B

Inglewhite Road/ Berry Road - 2025 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	Relations
2025 Baseline, AM	2025 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.17	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		500.00	
Berry Lane	Direct	Queue Surveys	1000.00	
Inglewhite Rd (NB)	Direct		-115.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	1316.061
Berry Lane		(calculated)	(calculated)	0.503	1576.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	700.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	489.00	100.000
Berry Lane	ONE HOUR	✓	480.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	373.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	178.000	311.000
	Berry Lane	238.000	0.000	242.000
	Inglewhite Rd (NB)	259.000	114.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.36	0.64
	Berry Lane	0.50	0.00	0.50
	Inglewhite Rd (NB)	0.69	0.31	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.43	0.08	0.75	A	448.71	673.07	50.50	0.08	0.56	50.51	0.08
Berry Lane	0.38	0.07	0.60	A	440.46	660.68	40.57	0.06	0.45	40.58	0.06
Inglewhite Rd (NB)	0.74	0.41	2.69	C	342.27	513.41	141.84	0.28	1.58	141.88	0.28

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	368.14	92.04	366.52	371.14	84.78	0.00	1271.20	1254.74	0.290	0.00	0.41	0.066	A
Berry Lane	361.37	90.34	360.06	218.20	233.11	0.00	1459.16	1175.22	0.248	0.00	0.33	0.055	A
Inglewhite Rd (NB)	280.81	70.20	277.39	414.64	178.53	0.00	601.85	379.19	0.467	0.00	0.85	0.183	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	439.60	109.90	439.10	445.33	101.93	0.00	1262.13	1254.74	0.348	0.41	0.53	0.073	A
Berry Lane	431.51	107.88	431.11	261.76	279.26	0.00	1435.96	1175.22	0.301	0.33	0.43	0.060	A
Inglewhite Rd (NB)	335.32	83.83	333.50	496.62	213.76	0.00	582.44	379.19	0.576	0.85	1.31	0.239	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	538.40	134.60	537.53	543.33	123.96	0.00	1250.47	1254.74	0.431	0.53	0.75	0.084	A
Berry Lane	528.49	132.12	527.80	319.62	341.86	0.00	1404.50	1175.22	0.376	0.43	0.60	0.068	A
Inglewhite Rd (NB)	410.68	102.67	405.59	607.96	261.70	0.00	556.03	379.19	0.739	1.31	2.58	0.386	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	538.40	134.60	538.38	546.90	125.38	0.00	1249.72	1254.74	0.431	0.75	0.75	0.084	A
Berry Lane	528.49	132.12	528.48	321.36	342.41	0.00	1404.22	1175.22	0.376	0.60	0.60	0.069	A
Inglewhite Rd (NB)	410.68	102.67	410.24	608.85	262.04	0.00	555.84	379.19	0.739	2.58	2.69	0.409	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	439.60	109.90	440.46	450.70	104.06	0.00	1261.00	1254.74	0.349	0.75	0.54	0.073	A
Berry Lane	431.51	107.88	432.19	264.39	280.13	0.00	1435.53	1175.22	0.301	0.60	0.43	0.060	A
Inglewhite Rd (NB)	335.32	83.83	340.47	498.02	214.29	0.00	582.14	379.19	0.576	2.69	1.41	0.253	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	368.14	92.04	368.66	375.79	86.45	0.00	1270.32	1254.74	0.290	0.54	0.41	0.067	A
Berry Lane	361.37	90.34	361.77	220.65	234.46	0.00	1458.48	1175.22	0.248	0.43	0.33	0.055	A
Inglewhite Rd (NB)	280.81	70.20	282.86	416.86	179.38	0.00	601.38	379.19	0.467	1.41	0.90	0.190	B

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	5.93	0.40	0.066	A	A
Berry Lane	4.81	0.32	0.055	A	A
Inglewhite Rd (NB)	12.03	0.80	0.183	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	7.81	0.52	0.073	A	A
Berry Lane	6.31	0.42	0.060	A	A
Inglewhite Rd (NB)	18.54	1.24	0.239	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.96	0.73	0.084	A	A
Berry Lane	8.80	0.59	0.068	A	A
Inglewhite Rd (NB)	34.65	2.31	0.386	C	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	11.27	0.75	0.084	A	A
Berry Lane	9.01	0.60	0.069	A	A
Inglewhite Rd (NB)	39.75	2.65	0.409	C	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	8.27	0.55	0.073	A	A
Berry Lane	6.60	0.44	0.060	A	A
Inglewhite Rd (NB)	22.74	1.52	0.253	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	6.27	0.42	0.067	A	A
Berry Lane	5.04	0.34	0.055	A	A
Inglewhite Rd (NB)	14.13	0.94	0.190	B	B

Inglewhite Road/ Berry Road - 2016 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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
2016 Assessment, AM	2016 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.15	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		500.00	
Berry Lane	Direct	Queue Surveys	1000.00	
Inglewhite Rd (NB)	Direct		-115.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	1316.061
Berry Lane		(calculated)	(calculated)	0.503	1576.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	700.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	525.00	100.000
Berry Lane	ONE HOUR	✓	436.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	355.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	189.000	336.000
	Berry Lane	222.000	0.000	214.000
	Inglewhite Rd (NB)	254.000	101.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.36	0.64
	Berry Lane	0.51	0.00	0.49
	Inglewhite Rd (NB)	0.72	0.28	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.46	0.09	0.85	A	481.75	722.62	56.20	0.08	0.62	56.21	0.08
Berry Lane	0.35	0.07	0.53	A	400.08	600.12	35.75	0.06	0.40	35.75	0.06
Inglewhite Rd (NB)	0.69	0.34	2.16	C	325.75	488.63	119.78	0.25	1.33	119.81	0.25

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	395.25	98.81	393.46	355.57	75.16	0.00	1276.29	1260.10	0.310	0.00	0.45	0.068	A
Berry Lane	328.24	82.06	327.08	216.81	251.82	0.00	1449.76	1170.96	0.226	0.00	0.29	0.053	A
Inglewhite Rd (NB)	267.26	66.82	264.19	412.36	166.54	0.00	608.45	371.74	0.439	0.00	0.77	0.173	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	471.96	117.99	471.39	426.67	90.37	0.00	1268.24	1260.10	0.372	0.45	0.59	0.075	A
Berry Lane	391.96	97.99	391.61	260.07	301.69	0.00	1424.69	1170.96	0.275	0.29	0.38	0.058	A
Inglewhite Rd (NB)	319.14	79.78	317.64	493.90	199.40	0.00	590.35	371.74	0.541	0.77	1.14	0.219	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	578.04	144.51	577.02	521.06	110.12	0.00	1257.79	1260.10	0.460	0.59	0.84	0.088	A
Berry Lane	480.04	120.01	479.46	317.85	369.29	0.00	1390.71	1170.96	0.345	0.38	0.52	0.066	A
Inglewhite Rd (NB)	390.86	97.72	387.05	604.63	244.13	0.00	565.71	371.74	0.691	1.14	2.09	0.329	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	578.04	144.51	578.02	523.89	111.13	0.00	1257.26	1260.10	0.460	0.84	0.85	0.088	A
Berry Lane	480.04	120.01	480.04	319.21	369.93	0.00	1390.39	1170.96	0.345	0.52	0.53	0.066	A
Inglewhite Rd (NB)	390.86	97.72	390.60	605.55	244.42	0.00	565.55	371.74	0.691	2.09	2.16	0.342	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	471.96	117.99	472.96	430.92	91.87	0.00	1267.45	1260.10	0.372	0.85	0.60	0.076	A
Berry Lane	391.96	97.99	392.53	262.14	302.69	0.00	1424.18	1170.96	0.275	0.53	0.38	0.058	A
Inglewhite Rd (NB)	319.14	79.78	322.93	495.36	199.87	0.00	590.09	371.74	0.541	2.16	1.21	0.228	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	395.25	98.81	395.83	359.72	76.51	0.00	1275.58	1260.10	0.310	0.60	0.45	0.068	A
Berry Lane	328.24	82.06	328.59	219.01	253.33	0.00	1449.00	1170.96	0.227	0.38	0.29	0.054	A
Inglewhite Rd (NB)	267.26	66.82	268.92	414.61	167.31	0.00	608.03	371.74	0.440	1.21	0.80	0.178	B

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	6.51	0.43	0.068	A	A
Berry Lane	4.28	0.29	0.053	A	A
Inglewhite Rd (NB)	10.85	0.72	0.173	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	8.64	0.58	0.075	A	A
Berry Lane	5.58	0.37	0.058	A	A
Inglewhite Rd (NB)	16.27	1.08	0.219	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.29	0.82	0.088	A	A
Berry Lane	7.71	0.51	0.066	A	A
Inglewhite Rd (NB)	28.65	1.91	0.329	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	12.67	0.84	0.088	A	A
Berry Lane	7.87	0.52	0.066	A	A
Inglewhite Rd (NB)	32.02	2.13	0.342	C	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	9.18	0.61	0.076	A	A
Berry Lane	5.83	0.39	0.058	A	A
Inglewhite Rd (NB)	19.44	1.30	0.228	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	6.91	0.46	0.068	A	A
Berry Lane	4.48	0.30	0.054	A	A
Inglewhite Rd (NB)	12.56	0.84	0.178	B	B

Inglewhite Road/ Berry Road - 2025 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	
2025 Assessment, AM	2025 Assessment	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.20	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		500.00	
Berry Lane	Direct	Queue Surveys	1000.00	
Inglewhite Rd (NB)	Direct		-115.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	1316.061
Berry Lane		(calculated)	(calculated)	0.503	1576.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	700.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	577.00	100.000
Berry Lane	ONE HOUR	✓	490.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	395.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	207.000	370.000
	Berry Lane	248.000	0.000	242.000
	Inglewhite Rd (NB)	281.000	114.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.36	0.64
	Berry Lane	0.51	0.00	0.49
	Inglewhite Rd (NB)	0.71	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.51	0.10	1.03	A	529.47	794.20	66.72	0.08	0.74	66.73	0.08
Berry Lane	0.39	0.07	0.65	A	449.63	674.45	43.12	0.06	0.48	43.12	0.06
Inglewhite Rd (NB)	0.79	0.51	3.52	D	362.46	543.69	173.27	0.32	1.93	173.33	0.32

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	434.40	108.60	432.33	394.82	84.71	0.00	1271.24	1258.97	0.342	0.00	0.52	0.071	A
Berry Lane	368.90	92.22	367.52	239.81	277.23	0.00	1436.98	1170.54	0.257	0.00	0.34	0.056	A
Inglewhite Rd (NB)	297.38	74.34	293.52	458.74	186.01	0.00	597.72	373.83	0.498	0.00	0.96	0.195	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	518.71	129.68	518.01	473.73	101.83	0.00	1262.18	1258.97	0.411	0.52	0.69	0.081	A
Berry Lane	440.50	110.12	440.07	287.67	332.17	0.00	1409.37	1170.54	0.313	0.34	0.45	0.062	A
Inglewhite Rd (NB)	355.10	88.77	352.83	549.51	222.73	0.00	577.50	373.83	0.615	0.96	1.53	0.264	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	635.29	158.82	633.98	576.99	123.46	0.00	1250.73	1258.97	0.508	0.69	1.02	0.097	A
Berry Lane	539.50	134.88	538.74	350.90	406.54	0.00	1371.99	1170.54	0.393	0.45	0.64	0.072	A
Inglewhite Rd (NB)	434.90	108.73	427.78	672.61	272.67	0.00	549.99	373.83	0.791	1.53	3.31	0.465	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	635.29	158.82	635.26	581.85	125.28	0.00	1249.77	1258.97	0.508	1.02	1.03	0.098	A
Berry Lane	539.50	134.88	539.49	353.18	407.36	0.00	1371.57	1170.54	0.393	0.64	0.65	0.072	A
Inglewhite Rd (NB)	434.90	108.73	434.08	673.80	273.05	0.00	549.78	373.83	0.791	3.31	3.52	0.510	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	518.71	129.68	520.00	481.19	104.61	0.00	1260.70	1258.97	0.411	1.03	0.71	0.081	A
Berry Lane	440.50	110.12	441.25	291.16	333.45	0.00	1408.73	1170.54	0.313	0.65	0.46	0.062	A
Inglewhite Rd (NB)	355.10	88.77	362.48	551.37	223.33	0.00	577.17	373.83	0.615	3.52	1.67	0.288	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	434.40	108.60	435.12	400.34	86.58	0.00	1270.25	1258.97	0.342	0.71	0.52	0.072	A
Berry Lane	368.90	92.22	369.34	242.68	279.02	0.00	1436.08	1170.54	0.257	0.46	0.35	0.056	A
Inglewhite Rd (NB)	297.38	74.34	299.99	461.43	186.93	0.00	597.22	373.83	0.498	1.67	1.02	0.204	B

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	7.52	0.50	0.071	A	A
Berry Lane	5.05	0.34	0.056	A	A
Inglewhite Rd (NB)	13.51	0.90	0.195	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.14	0.68	0.081	A	A
Berry Lane	6.67	0.44	0.062	A	A
Inglewhite Rd (NB)	21.48	1.43	0.264	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	14.82	0.99	0.097	A	A
Berry Lane	9.44	0.63	0.072	A	A
Inglewhite Rd (NB)	43.17	2.88	0.465	D	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	15.36	1.02	0.098	A	A
Berry Lane	9.67	0.64	0.072	A	A
Inglewhite Rd (NB)	51.49	3.43	0.510	D	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	10.86	0.72	0.081	A	A
Berry Lane	7.00	0.47	0.062	A	A
Inglewhite Rd (NB)	27.50	1.83	0.288	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	8.02	0.53	0.072	A	A
Berry Lane	5.29	0.35	0.056	A	A
Inglewhite Rd (NB)	16.13	1.08	0.204	B	B

Inglewhite Road/ Berry Road - 2014 Surveyed, AM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	Relatio
2014 Surveyed, AM	2014 Surveyed	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.11	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		500.00	
Berry Lane	Direct	Queue Surveys	1000.00	
Inglewhite Rd (NB)	Direct		-115.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	1316.061
Berry Lane		(calculated)	(calculated)	0.503	1576.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	700.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	392.00	100.000
Berry Lane	ONE HOUR	✓	403.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	296.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	136.000	256.000
	Berry Lane	195.000	0.000	208.000
	Inglewhite Rd (NB)	199.000	97.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.35	0.65
	Berry Lane	0.48	0.00	0.52
	Inglewhite Rd (NB)	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.34	0.07	0.52	A	359.71	539.56	35.91	0.07	0.40	35.91	0.07
Berry Lane	0.31	0.06	0.45	A	369.80	554.70	30.88	0.06	0.34	30.88	0.06
Inglewhite Rd (NB)	0.56	0.23	1.25	B	271.61	407.42	76.64	0.19	0.85	76.66	0.19

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	295.12	73.78	293.92	294.64	72.30	0.00	1277.80	1248.57	0.231	0.00	0.30	0.061	A
Berry Lane	303.40	75.85	302.37	174.28	191.95	0.00	1479.85	1166.48	0.205	0.00	0.26	0.051	A
Inglewhite Rd (NB)	222.84	55.71	220.63	348.01	146.31	0.00	619.60	389.26	0.360	0.00	0.55	0.150	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	352.40	88.10	352.07	353.47	86.91	0.00	1270.07	1248.57	0.277	0.30	0.38	0.065	A
Berry Lane	362.29	90.57	362.00	209.06	229.92	0.00	1460.76	1166.48	0.248	0.26	0.33	0.055	A
Inglewhite Rd (NB)	266.10	66.52	265.22	416.76	175.16	0.00	603.70	389.26	0.441	0.55	0.77	0.177	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	431.60	107.90	431.06	432.34	106.20	0.00	1259.87	1248.56	0.343	0.38	0.52	0.072	A
Berry Lane	443.71	110.93	443.24	255.75	281.51	0.00	1434.83	1166.48	0.309	0.33	0.45	0.060	A
Inglewhite Rd (NB)	325.90	81.48	324.07	510.28	214.47	0.00	582.04	389.26	0.560	0.77	1.23	0.231	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	431.60	107.90	431.59	433.75	106.77	0.00	1259.56	1248.56	0.343	0.52	0.52	0.072	A
Berry Lane	443.71	110.93	443.71	256.51	281.86	0.00	1434.66	1166.48	0.309	0.45	0.45	0.061	A
Inglewhite Rd (NB)	325.90	81.48	325.82	510.87	214.70	0.00	581.92	389.26	0.560	1.23	1.25	0.234	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	352.40	88.10	352.93	355.62	87.79	0.00	1269.61	1248.57	0.278	0.52	0.39	0.066	A
Berry Lane	362.29	90.57	362.75	210.23	230.49	0.00	1460.48	1166.48	0.248	0.45	0.33	0.055	A
Inglewhite Rd (NB)	266.10	66.52	267.88	417.71	175.52	0.00	603.50	389.26	0.441	1.25	0.80	0.180	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	295.12	73.78	295.46	297.39	73.33	0.00	1277.26	1248.57	0.231	0.39	0.30	0.061	A
Berry Lane	303.40	75.85	303.69	175.84	192.95	0.00	1479.35	1166.48	0.205	0.33	0.26	0.051	A
Inglewhite Rd (NB)	222.84	55.71	223.78	349.69	146.95	0.00	619.24	389.26	0.360	0.80	0.57	0.152	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	4.38	0.29	0.061	A	A
Berry Lane	3.78	0.25	0.051	A	A
Inglewhite Rd (NB)	7.90	0.53	0.150	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	5.63	0.38	0.065	A	A
Berry Lane	4.86	0.32	0.055	A	A
Inglewhite Rd (NB)	11.15	0.74	0.177	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	7.61	0.51	0.072	A	A
Berry Lane	6.56	0.44	0.060	A	A
Inglewhite Rd (NB)	17.42	1.16	0.231	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	7.78	0.52	0.072	A	A
Berry Lane	6.69	0.45	0.061	A	A
Inglewhite Rd (NB)	18.65	1.24	0.234	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	5.90	0.39	0.066	A	A
Berry Lane	5.05	0.34	0.055	A	A
Inglewhite Rd (NB)	12.65	0.84	0.180	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	4.60	0.31	0.061	A	A
Berry Lane	3.94	0.26	0.051	A	A
Inglewhite Rd (NB)	8.87	0.59	0.152	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: Import of 3. Inglewhite Rd_Berry Lane PM.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\Callibrated
Report generation date: 07/04/2015 16:28:08

Summary of junction performance

	PM			
	Queue (PCU)	Delay (min)	RFC	LOS
	Inglewhite Road/ Berry Road - 2014 Surveyed			
Inglewhite Rd (SB)	2.49	0.35	0.72	C
Berry Lane	1.64	0.21	0.63	B
Inglewhite Rd (NB)	1.90	0.23	0.66	B
	Inglewhite Road/ Berry Road - 2016 Assessment			
Inglewhite Rd (SB)	9.07	1.04	0.93	F
Berry Lane	2.97	0.34	0.76	C
Inglewhite Rd (NB)	4.30	0.45	0.82	D
	Inglewhite Road/ Berry Road - 2016 Baseline			
Inglewhite Rd (SB)	4.13	0.53	0.82	D
Berry Lane	2.27	0.27	0.70	C
Inglewhite Rd (NB)	2.53	0.29	0.72	C
	Inglewhite Road/ Berry Road - 2025 Assessment			
Inglewhite Rd (SB)	27.60	2.59	1.06	F
Berry Lane	5.15	0.54	0.85	D
Inglewhite Rd (NB)	10.39	1.00	0.94	F
	Inglewhite Road/ Berry Road - 2025 Baseline			
Inglewhite Rd (SB)	13.01	1.44	0.97	F
Berry Lane	3.72	0.40	0.80	C
Inglewhite Rd (NB)	4.68	0.49	0.84	D

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

"D2 - 2016 Baseline, PM " model duration: 16:45 - 18:15
"D4 - 2025 Baseline, PM" model duration: 16:45 - 18:15
"D6 - 2016 Assessment, PM" model duration: 16:45 - 18:15
"D8 - 2025 Assessment, PM" model duration: 16:45 - 18:15
"D9 - 2014 Surveyed, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 07/04/2015 16:28:06

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Inglewhite Road/ Berry Road - 2016 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	Relations
2016 Baseline, PM	2016 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.36	C

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		-90.00	
Berry Lane	Direct	Queue Surveys	270.00	
Inglewhite Rd (NB)	Direct	Queue Surveys	85.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	726.061
Berry Lane		(calculated)	(calculated)	0.503	846.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	900.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	446.00	100.000
Berry Lane	ONE HOUR	✓	467.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	488.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	243.000	203.000
	Berry Lane	260.000	0.000	207.000
	Inglewhite Rd (NB)	271.000	217.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.54	0.46
	Berry Lane	0.56	0.00	0.44
	Inglewhite Rd (NB)	0.56	0.44	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.82	0.53	4.13	D	409.26	613.89	198.48	0.32	2.21	198.54	0.32
Berry Lane	0.70	0.27	2.27	C	428.53	642.79	127.15	0.20	1.41	127.18	0.20
Inglewhite Rd (NB)	0.72	0.29	2.53	C	447.80	671.70	136.77	0.20	1.52	136.80	0.20

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	335.77	83.94	331.48	396.04	161.86	0.00	640.41	565.98	0.524	0.00	1.07	0.192	B
Berry Lane	351.58	87.90	348.28	342.47	150.88	0.00	770.50	716.85	0.456	0.00	0.82	0.141	A
Inglewhite Rd (NB)	367.39	91.85	364.00	305.25	193.90	0.00	793.38	680.34	0.463	0.00	0.85	0.139	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	400.94	100.24	398.34	475.51	194.30	0.00	623.24	565.98	0.643	1.07	1.72	0.264	C
Berry Lane	419.82	104.96	418.24	411.34	181.31	0.00	755.20	716.85	0.556	0.82	1.22	0.177	B
Inglewhite Rd (NB)	438.70	109.68	436.96	366.70	232.85	0.00	771.92	680.34	0.568	0.85	1.28	0.178	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	491.06	122.76	482.59	579.88	236.85	0.00	600.73	565.98	0.817	1.72	3.84	0.476	D
Berry Lane	514.18	128.54	510.27	499.79	219.66	0.00	735.92	716.85	0.699	1.22	2.20	0.261	C
Inglewhite Rd (NB)	537.30	134.32	532.64	445.83	284.09	0.00	743.69	680.34	0.722	1.28	2.45	0.278	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	491.06	122.76	489.89	584.31	238.78	0.00	599.71	565.98	0.819	3.84	4.13	0.533	D
Berry Lane	514.18	128.54	513.90	505.69	222.98	0.00	734.25	716.85	0.700	2.20	2.27	0.271	C
Inglewhite Rd (NB)	537.30	134.32	536.97	450.77	286.11	0.00	742.58	680.34	0.724	2.45	2.53	0.291	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	400.94	100.24	409.85	482.12	197.16	0.00	621.73	565.98	0.645	4.13	1.90	0.294	C
Berry Lane	419.82	104.96	423.71	420.47	186.55	0.00	752.56	716.85	0.558	2.27	1.29	0.185	B
Inglewhite Rd (NB)	438.70	109.68	443.38	374.36	235.90	0.00	770.24	680.34	0.570	2.53	1.36	0.186	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	335.77	83.94	338.84	401.80	164.22	0.00	639.16	565.98	0.525	1.90	1.14	0.202	B
Berry Lane	351.58	87.90	353.33	348.83	154.23	0.00	768.81	716.85	0.457	1.29	0.86	0.145	A
Inglewhite Rd (NB)	367.39	91.85	369.31	310.84	196.72	0.00	791.83	680.34	0.464	1.36	0.88	0.143	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	15.00	1.00	0.192	B	B
Berry Lane	11.74	0.78	0.141	A	A
Inglewhite Rd (NB)	12.07	0.80	0.139	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	24.11	1.61	0.264	C	B
Berry Lane	17.47	1.16	0.177	B	B
Inglewhite Rd (NB)	18.32	1.22	0.178	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	49.50	3.30	0.476	D	C
Berry Lane	30.36	2.02	0.261	C	B
Inglewhite Rd (NB)	33.49	2.23	0.278	C	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	60.18	4.01	0.533	D	C
Berry Lane	33.59	2.24	0.271	C	B
Inglewhite Rd (NB)	37.45	2.50	0.291	C	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	31.63	2.11	0.294	C	B
Berry Lane	20.60	1.37	0.185	B	B
Inglewhite Rd (NB)	21.68	1.45	0.186	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	18.06	1.20	0.202	B	B
Berry Lane	13.40	0.89	0.145	A	A
Inglewhite Rd (NB)	13.77	0.92	0.143	A	A

Inglewhite Road/ Berry Road - 2025 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	Relations
2025 Baseline, PM	2025 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.77	E

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		-90.00	
Berry Lane	Direct	Queue Surveys	270.00	
Inglewhite Rd (NB)	Direct	Queue Surveys	85.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	726.061
Berry Lane		(calculated)	(calculated)	0.503	846.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	900.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	515.00	100.000
Berry Lane	ONE HOUR	✓	525.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	551.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	288.000	227.000
	Berry Lane	290.000	0.000	235.000
	Inglewhite Rd (NB)	305.000	246.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.56	0.44
	Berry Lane	0.55	0.00	0.45
	Inglewhite Rd (NB)	0.55	0.45	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.97	1.44	13.01	F	472.57	708.86	451.12	0.64	5.01	451.25	0.64
Berry Lane	0.80	0.40	3.72	C	481.75	722.62	186.74	0.26	2.07	186.79	0.26
Inglewhite Rd (NB)	0.84	0.49	4.68	D	505.61	758.41	216.45	0.29	2.41	216.50	0.29

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	387.72	96.93	381.55	443.17	183.23	0.00	629.11	565.23	0.616	0.00	1.54	0.237	B
Berry Lane	395.25	98.81	391.03	396.60	168.18	0.00	761.80	721.10	0.519	0.00	1.05	0.160	A
Inglewhite Rd (NB)	414.82	103.71	410.39	343.21	216.00	0.00	781.21	680.76	0.531	0.00	1.11	0.160	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	462.97	115.74	457.66	531.97	219.88	0.00	609.71	565.23	0.759	1.54	2.87	0.381	C
Berry Lane	471.96	117.99	469.52	475.81	201.72	0.00	744.94	721.10	0.634	1.05	1.67	0.216	B
Inglewhite Rd (NB)	495.34	123.83	492.50	411.89	259.35	0.00	757.32	680.76	0.654	1.11	1.82	0.224	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	567.03	141.76	539.31	645.52	266.36	0.00	585.12	565.23	0.969	2.87	9.80	0.963	F
Berry Lane	578.04	144.51	570.76	567.96	237.71	0.00	726.85	721.10	0.795	1.67	3.49	0.368	C
Inglewhite Rd (NB)	606.66	151.67	596.61	493.20	315.28	0.00	726.51	680.76	0.835	1.82	4.33	0.431	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	567.03	141.76	554.21	653.81	270.22	0.00	583.07	565.23	0.972	9.80	13.01	1.438	F
Berry Lane	578.04	144.51	577.11	580.14	244.28	0.00	723.55	721.10	0.799	3.49	3.72	0.404	C
Inglewhite Rd (NB)	606.66	151.67	605.25	502.61	318.79	0.00	724.58	680.76	0.837	4.33	4.68	0.490	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	462.97	115.74	500.47	544.94	225.95	0.00	606.50	565.23	0.763	13.01	3.63	0.688	E
Berry Lane	471.96	117.99	479.38	505.82	220.59	0.00	735.45	721.10	0.642	3.72	1.86	0.241	B
Inglewhite Rd (NB)	495.34	123.83	506.09	435.17	264.80	0.00	754.32	680.76	0.657	4.68	1.99	0.251	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	387.72	96.93	395.51	451.44	186.68	0.00	627.28	565.23	0.618	3.63	1.69	0.267	C
Berry Lane	395.25	98.81	398.25	407.86	174.33	0.00	758.71	721.10	0.521	1.86	1.11	0.168	B
Inglewhite Rd (NB)	414.82	103.71	418.14	352.59	219.99	0.00	779.01	680.76	0.533	1.99	1.16	0.168	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	21.07	1.40	0.237	B	B
Berry Lane	14.87	0.99	0.160	A	A
Inglewhite Rd (NB)	15.59	1.04	0.160	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	38.53	2.57	0.381	C	C
Berry Lane	23.51	1.57	0.216	B	B
Inglewhite Rd (NB)	25.49	1.70	0.224	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	107.23	7.15	0.963	F	E
Berry Lane	46.10	3.07	0.368	C	C
Inglewhite Rd (NB)	55.55	3.70	0.431	D	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	172.97	11.53	1.438	F	F
Berry Lane	54.38	3.63	0.404	C	C
Inglewhite Rd (NB)	68.11	4.54	0.490	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	83.56	5.57	0.688	E	D
Berry Lane	30.31	2.02	0.241	B	B
Inglewhite Rd (NB)	33.28	2.22	0.251	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	27.74	1.85	0.267	C	B
Berry Lane	17.56	1.17	0.168	B	B
Inglewhite Rd (NB)	18.43	1.23	0.168	B	B

Inglewhite Road/ Berry Road - 2016 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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
2016 Assessment, PM	2016 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.61	E

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		-90.00	
Berry Lane	Direct	Queue Surveys	270.00	
Inglewhite Rd (NB)	Direct	Queue Surveys	85.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	726.061
Berry Lane		(calculated)	(calculated)	0.503	846.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	900.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	507.00	100.000
Berry Lane	ONE HOUR	✓	494.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	543.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	273.000	234.000
	Berry Lane	287.000	0.000	207.000
	Inglewhite Rd (NB)	326.000	217.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.54	0.46
	Berry Lane	0.58	0.00	0.42
	Inglewhite Rd (NB)	0.60	0.40	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.93	1.04	9.07	F	465.23	697.85	349.17	0.50	3.88	349.28	0.50
Berry Lane	0.76	0.34	2.97	C	453.30	679.95	156.76	0.23	1.74	156.80	0.23
Inglewhite Rd (NB)	0.82	0.45	4.30	D	498.27	747.40	203.29	0.27	2.26	203.34	0.27

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	381.70	95.42	376.01	456.74	161.66	0.00	640.52	583.81	0.596	0.00	1.42	0.222	B
Berry Lane	371.91	92.98	368.14	364.12	173.54	0.00	759.10	710.89	0.490	0.00	0.94	0.152	A
Inglewhite Rd (NB)	408.80	102.20	404.52	327.81	213.88	0.00	782.37	672.67	0.523	0.00	1.07	0.157	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	455.78	113.95	451.39	548.30	194.01	0.00	623.40	583.81	0.731	1.42	2.52	0.340	C
Berry Lane	444.10	111.02	442.07	437.07	208.33	0.00	741.61	710.89	0.599	0.94	1.45	0.199	B
Inglewhite Rd (NB)	488.15	122.04	485.48	393.57	256.83	0.00	758.71	672.67	0.643	1.07	1.74	0.217	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	558.22	139.55	538.42	666.25	235.29	0.00	601.56	583.81	0.928	2.52	7.47	0.775	E
Berry Lane	543.90	135.98	538.37	525.21	248.50	0.00	721.42	710.89	0.754	1.45	2.83	0.318	C
Inglewhite Rd (NB)	597.85	149.46	588.76	474.09	312.78	0.00	727.89	672.67	0.821	1.74	4.01	0.407	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	558.22	139.55	551.82	673.91	238.47	0.00	599.88	583.81	0.931	7.47	9.07	1.044	F
Berry Lane	543.90	135.98	543.34	535.60	254.69	0.00	718.32	710.89	0.757	2.83	2.97	0.340	C
Inglewhite Rd (NB)	597.85	149.46	596.71	482.36	315.66	0.00	726.30	672.67	0.823	4.01	4.30	0.454	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	455.78	113.95	480.02	560.09	198.92	0.00	620.80	583.81	0.734	9.07	3.01	0.482	D
Berry Lane	444.10	111.02	449.68	457.39	221.55	0.00	734.97	710.89	0.604	2.97	1.58	0.214	B
Inglewhite Rd (NB)	488.15	122.04	497.75	409.97	261.25	0.00	756.27	672.67	0.645	4.30	1.89	0.240	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	381.70	95.42	387.59	464.72	164.60	0.00	638.96	583.81	0.597	3.01	1.54	0.244	B
Berry Lane	371.91	92.98	374.27	373.30	178.89	0.00	756.42	710.89	0.492	1.58	0.99	0.158	A
Inglewhite Rd (NB)	408.80	102.20	411.88	335.72	217.44	0.00	780.41	672.67	0.524	1.89	1.12	0.164	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	19.56	1.30	0.222	B	B
Berry Lane	13.33	0.89	0.152	A	A
Inglewhite Rd (NB)	15.10	1.01	0.157	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	34.30	2.29	0.340	C	C
Berry Lane	20.55	1.37	0.199	B	B
Inglewhite Rd (NB)	24.44	1.63	0.217	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	86.47	5.76	0.775	E	D
Berry Lane	38.24	2.55	0.318	C	B
Inglewhite Rd (NB)	51.98	3.47	0.407	C	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	125.48	8.37	1.044	F	E
Berry Lane	43.77	2.92	0.340	C	C
Inglewhite Rd (NB)	62.70	4.18	0.454	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	58.49	3.90	0.482	D	C
Berry Lane	25.36	1.69	0.214	B	B
Inglewhite Rd (NB)	31.30	2.09	0.240	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	24.88	1.66	0.244	B	B
Berry Lane	15.51	1.03	0.158	A	A
Inglewhite Rd (NB)	17.76	1.18	0.164	A	A

Inglewhite Road/ Berry Road - 2025 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	
2025 Assessment, PM	2025 Assessment	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	1.37	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		-90.00	
Berry Lane	Direct	Queue Surveys	270.00	
Inglewhite Rd (NB)	Direct	Queue Surveys	85.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	726.061
Berry Lane		(calculated)	(calculated)	0.503	846.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	900.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	561.00	100.000
Berry Lane	ONE HOUR	✓	552.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	606.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	303.000	258.000
	Berry Lane	317.000	0.000	235.000
	Inglewhite Rd (NB)	360.000	246.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.54	0.46
	Berry Lane	0.57	0.00	0.43
	Inglewhite Rd (NB)	0.59	0.41	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	1.06	2.59	27.60	F	514.78	772.18	897.44	1.16	9.97	897.67	1.16
Berry Lane	0.85	0.54	5.15	D	506.52	759.79	240.64	0.32	2.67	240.71	0.32
Inglewhite Rd (NB)	0.94	1.00	10.39	F	556.08	834.11	378.12	0.45	4.20	378.21	0.45

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	422.35	105.59	414.62	503.55	182.91	0.00	629.27	581.08	0.671	0.00	1.93	0.271	C
Berry Lane	415.57	103.89	410.74	406.85	190.68	0.00	750.49	712.01	0.554	0.00	1.21	0.174	B
Inglewhite Rd (NB)	456.23	114.06	450.59	365.54	235.88	0.00	770.25	674.94	0.592	0.00	1.41	0.185	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	504.33	126.08	495.85	604.04	219.28	0.00	610.03	581.08	0.827	1.93	4.05	0.491	D
Berry Lane	496.24	124.06	493.03	487.10	228.04	0.00	731.71	712.01	0.678	1.21	2.01	0.248	B
Inglewhite Rd (NB)	544.78	136.20	540.19	437.93	283.14	0.00	744.22	674.94	0.732	1.41	2.56	0.287	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	617.67	154.42	564.88	725.33	261.36	0.00	587.76	581.08	1.051	4.05	17.25	1.433	F
Berry Lane	607.76	151.94	597.02	566.45	259.78	0.00	715.75	712.01	0.849	2.01	4.70	0.467	D
Inglewhite Rd (NB)	667.22	166.80	643.84	513.95	342.85	0.00	711.32	674.94	0.938	2.56	8.40	0.717	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	617.67	154.42	576.27	739.62	267.62	0.00	584.45	581.08	1.057	17.25	27.60	2.587	F
Berry Lane	607.76	151.94	605.94	578.87	265.02	0.00	713.12	712.01	0.852	4.70	5.15	0.540	D
Inglewhite Rd (NB)	667.22	166.80	659.27	522.99	347.98	0.00	708.50	674.94	0.942	8.40	10.39	0.997	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	504.33	126.08	582.68	632.37	233.13	0.00	602.70	581.08	0.837	27.60	8.01	1.995	F
Berry Lane	496.24	124.06	507.10	547.84	267.97	0.00	711.64	712.01	0.697	5.15	2.43	0.307	C
Inglewhite Rd (NB)	544.78	136.20	574.28	483.86	291.22	0.00	739.77	674.94	0.736	10.39	3.02	0.415	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	422.35	105.59	445.63	515.86	187.64	0.00	626.77	581.08	0.674	8.01	2.19	0.368	C
Berry Lane	415.57	103.89	420.11	428.33	204.94	0.00	743.32	712.01	0.559	2.43	1.30	0.188	B
Inglewhite Rd (NB)	456.23	114.06	462.24	383.79	241.26	0.00	767.29	674.94	0.595	3.02	1.51	0.200	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	25.95	1.73	0.271	C	B
Berry Lane	16.93	1.13	0.174	B	B
Inglewhite Rd (NB)	19.60	1.31	0.185	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	52.26	3.48	0.491	D	C
Berry Lane	28.01	1.87	0.248	B	B
Inglewhite Rd (NB)	35.01	2.33	0.287	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	170.50	11.37	1.433	F	F
Berry Lane	59.72	3.98	0.467	D	C
Inglewhite Rd (NB)	96.02	6.40	0.717	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	337.99	22.53	2.587	F	F
Berry Lane	74.48	4.97	0.540	D	C
Inglewhite Rd (NB)	142.70	9.51	0.997	F	E

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	268.25	17.88	1.995	F	F
Berry Lane	40.74	2.72	0.307	C	B
Inglewhite Rd (NB)	60.50	4.03	0.415	C	C

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	42.48	2.83	0.368	C	C
Berry Lane	20.76	1.38	0.188	B	B
Inglewhite Rd (NB)	24.30	1.62	0.200	B	B

Inglewhite Road/ Berry Road - 2014 Surveyed, PM

Data Errors and Warnings

No errors or warnings

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
Inglewhite Road/ Berry Road	ARCADY		✓				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	Relatio
2014 Surveyed, PM	2014 Surveyed	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Inglewhite Rd / Berry Lane	Mini-roundabout	A,B,C	0.26	C

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Inglewhite Rd (SB)	A	Inglewhite Rd (SB)	
Berry Lane	B	Berry Lane	
Inglewhite Rd (NB)	C	Inglewhite Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Inglewhite Rd (SB)	0.00	99999.00		0.00
Berry Lane	0.00	99999.00		0.00
Inglewhite Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Inglewhite Rd (SB)	3.50	3.50	3.50	0.00	10.00	3.50	0.00	
Berry Lane	3.50	2.40	4.50	2.50	10.00	3.80	0.00	
Inglewhite Rd (NB)	3.20	3.20	3.20	0.00	16.00	14.50	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Inglewhite Rd (SB)	Direct		-90.00	
Berry Lane	Direct	Queue Surveys	270.00	
Inglewhite Rd (NB)	Direct	Queue Surveys	85.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Inglewhite Rd (SB)		(calculated)	(calculated)	0.529	726.061
Berry Lane		(calculated)	(calculated)	0.503	846.333
Inglewhite Rd (NB)		(calculated)	(calculated)	0.551	900.196

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Inglewhite Rd (SB)	ONE HOUR	✓	396.00	100.000
Berry Lane	ONE HOUR	✓	426.00	100.000
Inglewhite Rd (NB)	ONE HOUR	✓	459.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.000	221.000	175.000
	Berry Lane	223.000	0.000	203.000
	Inglewhite Rd (NB)	249.000	210.000	0.000

Turning Proportions (PCU) - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.00	0.56	0.44
	Berry Lane	0.52	0.00	0.48
	Inglewhite Rd (NB)	0.54	0.46	0.00

Vehicle Mix

Average PCU Per Vehicle - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	1.000	1.000	1.000
	Berry Lane	1.000	1.000	1.000
	Inglewhite Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Inglewhite Rd / Berry Lane (for whole period)

		To		
		Inglewhite Rd (SB)	Berry Lane	Inglewhite Rd (NB)
From	Inglewhite Rd (SB)	0.0	0.0	0.0
	Berry Lane	0.0	0.0	0.0
	Inglewhite Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Inglewhite Rd (SB)	0.72	0.35	2.49	C	363.38	545.06	135.41	0.25	1.50	135.45	0.25
Berry Lane	0.63	0.21	1.64	B	390.91	586.36	98.08	0.17	1.09	98.10	0.17
Inglewhite Rd (NB)	0.66	0.23	1.90	B	421.19	631.78	109.79	0.17	1.22	109.81	0.17

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	298.13	74.53	294.75	352.31	156.75	0.00	643.11	558.55	0.464	0.00	0.85	0.171	B
Berry Lane	320.72	80.18	317.97	321.24	130.25	0.00	780.86	722.26	0.411	0.00	0.69	0.129	A
Inglewhite Rd (NB)	345.56	86.39	342.62	281.77	166.45	0.00	808.50	691.91	0.427	0.00	0.74	0.128	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	356.00	89.00	354.28	422.99	188.17	0.00	626.49	558.55	0.568	0.85	1.28	0.219	B
Berry Lane	382.97	95.74	381.81	385.89	156.56	0.00	767.64	722.26	0.499	0.69	0.98	0.155	A
Inglewhite Rd (NB)	412.63	103.16	411.29	338.50	199.87	0.00	790.09	691.91	0.522	0.74	1.07	0.158	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	436.00	109.00	431.49	516.64	229.76	0.00	604.48	558.55	0.721	1.28	2.40	0.338	C
Berry Lane	469.03	117.26	466.50	470.57	190.68	0.00	750.49	722.26	0.625	0.98	1.61	0.209	B
Inglewhite Rd (NB)	505.37	126.34	502.20	412.99	244.20	0.00	765.67	691.91	0.660	1.07	1.86	0.225	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	436.00	109.00	435.64	519.53	231.14	0.00	603.75	558.55	0.722	2.40	2.49	0.355	C
Berry Lane	469.03	117.26	468.91	474.26	192.52	0.00	749.56	722.26	0.626	1.61	1.64	0.214	B
Inglewhite Rd (NB)	505.37	126.34	505.20	415.96	245.46	0.00	764.97	691.91	0.661	1.86	1.90	0.231	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	356.00	89.00	360.52	427.32	190.22	0.00	625.41	558.55	0.569	2.49	1.36	0.230	B
Berry Lane	382.97	95.74	385.45	391.42	159.32	0.00	766.25	722.26	0.500	1.64	1.02	0.159	A
Inglewhite Rd (NB)	412.63	103.16	415.77	343.00	201.77	0.00	789.04	691.91	0.523	1.90	1.12	0.162	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Inglewhite Rd (SB)	298.13	74.53	300.05	356.78	158.76	0.00	642.05	558.55	0.464	1.36	0.88	0.176	B
Berry Lane	320.72	80.18	321.96	326.21	132.60	0.00	779.68	722.26	0.411	1.02	0.71	0.131	A
Inglewhite Rd (NB)	345.56	86.39	347.00	286.02	168.54	0.00	807.35	691.91	0.428	1.12	0.76	0.131	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	11.94	0.80	0.171	B	B
Berry Lane	9.83	0.66	0.129	A	A
Inglewhite Rd (NB)	10.52	0.70	0.128	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	18.11	1.21	0.219	B	B
Berry Lane	14.08	0.94	0.155	A	A
Inglewhite Rd (NB)	15.40	1.03	0.158	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	32.63	2.18	0.338	C	C
Berry Lane	22.69	1.51	0.209	B	B
Inglewhite Rd (NB)	26.05	1.74	0.225	B	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	36.88	2.46	0.355	C	C
Berry Lane	24.42	1.63	0.214	B	B
Inglewhite Rd (NB)	28.31	1.89	0.231	B	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	21.92	1.46	0.230	B	B
Berry Lane	16.04	1.07	0.159	A	A
Inglewhite Rd (NB)	17.69	1.18	0.162	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Inglewhite Rd (SB)	13.92	0.93	0.176	B	B
Berry Lane	11.01	0.73	0.131	A	A
Inglewhite Rd (NB)	11.81	0.79	0.131	A	A

Appendix 16

ARCADY Outputs – Berry Lane/Calder Avenue

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Import of 5. Berry Lane_Calder Avenue.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\New folder
Report generation date: 08/04/2015 11:45:40

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	Future Years - 2016 Assessment							
Berry Lane (SB)	0.52	0.11	0.34	A	1.87	0.22	0.66	B
Calder Avenue	0.44	0.14	0.31	A	0.46	0.16	0.32	A
Berry Lane (NB)	1.04	0.15	0.51	A	1.21	0.16	0.55	A
	Future Years - 2016 Baseline							
Berry Lane (SB)	0.43	0.11	0.30	A	1.70	0.21	0.63	B
Calder Avenue	0.43	0.13	0.30	A	0.45	0.16	0.31	A
Berry Lane (NB)	0.98	0.15	0.50	A	1.05	0.15	0.51	A
	Future Years - 2025 Assessment							
Berry Lane (SB)	0.60	0.12	0.38	A	2.69	0.29	0.74	C
Calder Avenue	0.54	0.15	0.35	A	0.59	0.18	0.37	B
Berry Lane (NB)	1.35	0.18	0.58	B	1.60	0.19	0.62	B
	Future Years - 2025 Baseline							
Berry Lane (SB)	0.50	0.11	0.34	A	2.43	0.27	0.71	C
Calder Avenue	0.52	0.14	0.34	A	0.58	0.18	0.37	B
Berry Lane (NB)	1.27	0.17	0.56	B	1.38	0.18	0.58	B

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

"D1 - 2016 Baseline, AM " model duration: 07:45 - 09:15
"D2 - 2016 Baseline, PM" model duration: 16:45 - 18:15
"D3 - 2025 Baseline, AM" model duration: 07:45 - 09:15
"D4 - 2025 Baseline, PM" model duration: 16:45 - 18:15
"D5 - 2016 Assessment, AM" model duration: 07:45 - 09:15
"D6 - 2016 Assessment, PM" model duration: 16:45 - 18:15
"D7 - 2025 Assessment, AM" model duration: 07:45 - 09:15
"D8 - 2025 Assessment, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 08/04/2015 11:45:38

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Future Years - 2016 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2016 Baseline, AM	2016 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.13	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	218.00	100.000
Calder Avenue	ONE HOUR	✓	177.00	100.000
Berry Lane (NB)	ONE HOUR	✓	368.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	36.000	182.000
	Calder Avenue	127.000	0.000	50.000
	Berry Lane (NB)	338.000	30.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.17	0.83
	Calder Avenue	0.72	0.00	0.28
	Berry Lane (NB)	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.30	0.11	0.43	A	200.04	300.06	30.10	0.10	0.33	30.11	0.10
Calder Avenue	0.30	0.13	0.43	A	162.42	243.63	29.25	0.12	0.33	29.26	0.12
Berry Lane (NB)	0.50	0.15	0.98	A	337.68	506.52	63.27	0.12	0.70	63.28	0.12

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	164.12	41.03	163.10	347.59	22.43	0.00	802.22	783.58	0.205	0.00	0.26	0.094	A
Calder Avenue	133.25	33.31	132.29	49.36	136.17	0.00	681.06	419.71	0.196	0.00	0.24	0.109	A
Berry Lane (NB)	277.05	69.26	275.10	173.54	94.92	0.00	839.85	728.57	0.330	0.00	0.49	0.106	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	195.98	48.99	195.71	417.21	26.91	0.00	799.96	783.58	0.245	0.26	0.32	0.099	A
Calder Avenue	159.12	39.78	158.84	59.23	163.39	0.00	667.32	419.71	0.238	0.24	0.31	0.118	A
Berry Lane (NB)	330.82	82.71	330.15	208.26	113.97	0.00	829.57	728.57	0.399	0.49	0.65	0.120	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	240.02	60.01	239.60	510.49	32.93	0.00	796.93	783.58	0.301	0.32	0.43	0.108	A
Calder Avenue	194.88	48.72	194.42	72.50	200.04	0.00	648.84	419.71	0.300	0.31	0.42	0.132	A
Berry Lane (NB)	405.18	101.29	403.92	254.96	139.50	0.00	815.79	728.57	0.497	0.65	0.97	0.145	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	240.02	60.01	240.01	511.93	33.03	0.00	796.88	783.58	0.301	0.43	0.43	0.108	A
Calder Avenue	194.88	48.72	194.87	72.66	200.38	0.00	648.66	419.71	0.300	0.42	0.43	0.132	A
Berry Lane (NB)	405.18	101.29	405.14	255.43	139.82	0.00	815.62	728.57	0.497	0.97	0.98	0.146	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	195.98	48.99	196.38	419.46	27.07	0.00	799.88	783.58	0.245	0.43	0.33	0.100	A
Calder Avenue	159.12	39.78	159.56	59.50	163.95	0.00	667.04	419.71	0.239	0.43	0.32	0.118	A
Berry Lane (NB)	330.82	82.71	332.05	209.03	114.49	0.00	829.29	728.57	0.399	0.98	0.67	0.121	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	164.12	41.03	164.39	350.92	22.64	0.00	802.12	783.58	0.205	0.33	0.26	0.094	A
Calder Avenue	133.25	33.31	133.54	49.79	137.25	0.00	680.52	419.71	0.196	0.32	0.25	0.110	A
Berry Lane (NB)	277.05	69.26	277.75	174.97	95.82	0.00	839.37	728.57	0.330	0.67	0.50	0.107	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	3.71	0.25	0.094	A	A
Calder Avenue	3.50	0.23	0.109	A	A
Berry Lane (NB)	7.04	0.47	0.106	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	4.73	0.32	0.099	A	A
Calder Avenue	4.54	0.30	0.118	A	A
Berry Lane (NB)	9.55	0.64	0.120	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	6.25	0.42	0.108	A	A
Calder Avenue	6.19	0.41	0.132	A	A
Berry Lane (NB)	13.97	0.93	0.145	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	6.42	0.43	0.108	A	A
Calder Avenue	6.39	0.43	0.132	A	A
Berry Lane (NB)	14.61	0.97	0.146	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	5.02	0.33	0.100	A	A
Calder Avenue	4.87	0.32	0.118	A	A
Berry Lane (NB)	10.43	0.70	0.121	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	3.97	0.26	0.094	A	A
Calder Avenue	3.77	0.25	0.110	A	A
Berry Lane (NB)	7.67	0.51	0.107	A	A

Future Years - 2016 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2016 Baseline, PM	2016 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.18	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	453.00	100.000
Calder Avenue	ONE HOUR	✓	159.00	100.000
Berry Lane (NB)	ONE HOUR	✓	386.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	113.000	340.000
	Calder Avenue	107.000	0.000	52.000
	Berry Lane (NB)	339.000	47.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.25	0.75
	Calder Avenue	0.67	0.00	0.33
	Berry Lane (NB)	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.63	0.21	1.70	B	415.68	623.52	103.16	0.17	1.15	103.19	0.17
Calder Avenue	0.31	0.16	0.45	A	145.90	218.85	29.84	0.14	0.33	29.85	0.14
Berry Lane (NB)	0.51	0.15	1.05	A	354.20	531.30	67.34	0.13	0.75	67.35	0.13

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	341.04	85.26	338.09	333.32	35.13	0.00	795.82	769.04	0.429	0.00	0.74	0.130	A
Calder Avenue	119.70	29.93	118.76	119.47	253.75	0.00	621.74	458.55	0.193	0.00	0.24	0.119	A
Berry Lane (NB)	290.60	72.65	288.54	292.59	79.92	0.00	847.94	724.56	0.343	0.00	0.52	0.107	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	407.24	101.81	406.05	400.11	42.16	0.00	792.27	769.04	0.514	0.74	1.04	0.155	A
Calder Avenue	142.94	35.73	142.63	143.45	304.76	0.00	596.00	458.55	0.240	0.24	0.31	0.132	A
Berry Lane (NB)	347.01	86.75	346.29	351.41	95.99	0.00	839.27	724.56	0.413	0.52	0.70	0.122	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	498.76	124.69	496.24	489.50	51.58	0.00	787.52	769.04	0.633	1.04	1.67	0.204	B
Calder Avenue	175.06	43.77	174.53	175.37	372.45	0.00	561.85	458.55	0.312	0.31	0.45	0.155	A
Berry Lane (NB)	424.99	106.25	423.64	429.53	117.45	0.00	827.69	724.56	0.513	0.70	1.04	0.148	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	498.76	124.69	498.65	491.01	51.74	0.00	787.44	769.04	0.633	1.67	1.70	0.208	B
Calder Avenue	175.06	43.77	175.05	176.13	374.26	0.00	560.93	458.55	0.312	0.45	0.45	0.155	A
Berry Lane (NB)	424.99	106.25	424.95	431.51	117.80	0.00	827.50	724.56	0.514	1.04	1.05	0.149	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	407.24	101.81	409.71	402.46	42.41	0.00	792.14	769.04	0.514	1.70	1.08	0.158	A
Calder Avenue	142.94	35.73	143.46	144.61	307.50	0.00	594.62	458.55	0.240	0.45	0.32	0.133	A
Berry Lane (NB)	347.01	86.75	348.33	354.42	96.54	0.00	838.97	724.56	0.414	1.05	0.71	0.123	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	341.04	85.26	342.32	336.64	35.48	0.00	795.64	769.04	0.429	1.08	0.76	0.133	A
Calder Avenue	119.70	29.93	120.02	120.87	256.93	0.00	620.13	458.55	0.193	0.32	0.24	0.120	A
Berry Lane (NB)	290.60	72.65	291.35	296.18	80.77	0.00	847.48	724.56	0.343	0.71	0.53	0.108	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	10.56	0.70	0.130	A	A
Calder Avenue	3.42	0.23	0.119	A	A
Berry Lane (NB)	7.45	0.50	0.107	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	14.95	1.00	0.155	A	A
Calder Avenue	4.56	0.30	0.132	A	A
Berry Lane (NB)	10.13	0.68	0.122	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	23.55	1.57	0.204	B	B
Calder Avenue	6.48	0.43	0.155	A	A
Berry Lane (NB)	14.91	0.99	0.148	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	25.28	1.69	0.208	B	B
Calder Avenue	6.73	0.45	0.155	A	A
Berry Lane (NB)	15.62	1.04	0.149	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	16.99	1.13	0.158	A	A
Calder Avenue	4.95	0.33	0.133	A	A
Berry Lane (NB)	11.10	0.74	0.123	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	11.83	0.79	0.133	A	A
Calder Avenue	3.71	0.25	0.120	A	A
Berry Lane (NB)	8.13	0.54	0.108	A	A

Future Years - 2025 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2025 Baseline, AM	2025 Baseline	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.15	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	242.00	100.000
Calder Avenue	ONE HOUR	✓	199.00	100.000
Berry Lane (NB)	ONE HOUR	✓	412.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	40.000	202.000
	Calder Avenue	143.000	0.000	56.000
	Berry Lane (NB)	379.000	33.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.17	0.83
	Calder Avenue	0.72	0.00	0.28
	Berry Lane (NB)	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.34	0.11	0.50	A	222.06	333.10	34.83	0.10	0.39	34.83	0.10
Calder Avenue	0.34	0.14	0.52	A	182.61	273.91	35.05	0.13	0.39	35.06	0.13
Berry Lane (NB)	0.56	0.17	1.27	B	378.06	567.09	79.36	0.14	0.88	79.38	0.14

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	182.19	45.55	181.02	390.02	24.66	0.00	801.10	784.11	0.227	0.00	0.29	0.097	A
Calder Avenue	149.82	37.45	148.68	54.58	151.10	0.00	673.53	419.54	0.222	0.00	0.28	0.114	A
Berry Lane (NB)	310.18	77.54	307.83	192.94	106.84	0.00	833.41	728.39	0.372	0.00	0.59	0.114	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	217.55	54.39	217.24	468.20	29.60	0.00	798.61	784.11	0.272	0.29	0.37	0.103	A
Calder Avenue	178.90	44.72	178.55	65.50	181.33	0.00	658.27	419.54	0.272	0.28	0.37	0.125	A
Berry Lane (NB)	370.38	92.59	369.49	231.58	128.31	0.00	821.83	728.39	0.451	0.59	0.81	0.132	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	266.45	66.61	265.94	572.66	36.19	0.00	795.28	784.11	0.335	0.37	0.50	0.113	A
Calder Avenue	219.10	54.78	218.52	80.15	221.98	0.00	637.76	419.54	0.344	0.37	0.52	0.143	A
Berry Lane (NB)	453.62	113.41	451.83	283.47	157.02	0.00	806.34	728.39	0.563	0.81	1.26	0.168	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	266.45	66.61	266.44	574.66	36.33	0.00	795.21	784.11	0.335	0.50	0.50	0.113	A
Calder Avenue	219.10	54.78	219.09	80.37	222.40	0.00	637.55	419.54	0.344	0.52	0.52	0.143	A
Berry Lane (NB)	453.62	113.41	453.56	284.05	157.44	0.00	806.12	728.39	0.563	1.26	1.27	0.170	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	217.55	54.39	218.05	471.28	29.81	0.00	798.50	784.11	0.272	0.50	0.38	0.103	A
Calder Avenue	178.90	44.72	179.47	65.85	182.01	0.00	657.93	419.54	0.272	0.52	0.38	0.126	A
Berry Lane (NB)	370.38	92.59	372.13	232.51	128.96	0.00	821.48	728.39	0.451	1.27	0.83	0.134	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	182.19	45.55	182.51	394.10	24.92	0.00	800.97	784.11	0.227	0.38	0.30	0.097	A
Calder Avenue	149.82	37.45	150.17	55.09	152.35	0.00	672.90	419.54	0.223	0.38	0.29	0.115	A
Berry Lane (NB)	310.18	77.54	311.11	194.61	107.91	0.00	832.84	728.39	0.372	0.83	0.60	0.115	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	4.24	0.28	0.097	A	A
Calder Avenue	4.10	0.27	0.114	A	A
Berry Lane (NB)	8.43	0.56	0.114	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	5.45	0.36	0.103	A	A
Calder Avenue	5.40	0.36	0.125	A	A
Berry Lane (NB)	11.73	0.78	0.132	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	7.28	0.49	0.113	A	A
Calder Avenue	7.50	0.50	0.143	A	A
Berry Lane (NB)	17.94	1.20	0.168	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	7.50	0.50	0.113	A	A
Calder Avenue	7.78	0.52	0.143	A	A
Berry Lane (NB)	18.97	1.26	0.170	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	5.81	0.39	0.103	A	A
Calder Avenue	5.83	0.39	0.126	A	A
Berry Lane (NB)	13.01	0.87	0.134	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	4.55	0.30	0.097	A	A
Calder Avenue	4.44	0.30	0.115	A	A
Berry Lane (NB)	9.28	0.62	0.115	A	A

Future Years - 2025 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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	Relations
2025 Baseline, PM	2025 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.22	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	509.00	100.000
Calder Avenue	ONE HOUR	✓	180.00	100.000
Berry Lane (NB)	ONE HOUR	✓	434.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	128.000	381.000
	Calder Avenue	121.000	0.000	59.000
	Berry Lane (NB)	381.000	53.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.25	0.75
	Calder Avenue	0.67	0.00	0.33
	Berry Lane (NB)	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.71	0.27	2.43	C	467.07	700.60	138.44	0.20	1.54	138.47	0.20
Calder Avenue	0.37	0.18	0.58	B	165.17	247.76	37.21	0.15	0.41	37.22	0.15
Berry Lane (NB)	0.58	0.18	1.38	B	398.25	597.37	85.57	0.14	0.95	85.59	0.14

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	383.20	95.80	379.54	374.97	39.60	0.00	793.56	768.91	0.483	0.00	0.92	0.144	A
Calder Avenue	135.51	33.88	134.37	135.04	284.09	0.00	606.43	459.38	0.223	0.00	0.28	0.127	A
Berry Lane (NB)	326.74	81.68	324.23	328.14	90.33	0.00	842.32	724.44	0.388	0.00	0.63	0.115	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	457.58	114.40	455.88	450.17	47.53	0.00	789.56	768.91	0.580	0.92	1.34	0.179	B
Calder Avenue	161.82	40.45	161.42	162.17	341.24	0.00	577.60	459.38	0.280	0.28	0.38	0.144	A
Berry Lane (NB)	390.16	97.54	389.19	394.15	108.51	0.00	832.52	724.44	0.469	0.63	0.87	0.135	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	560.42	140.10	556.32	550.48	58.11	0.00	784.22	768.91	0.715	1.34	2.37	0.259	C
Calder Avenue	198.18	49.55	197.44	198.01	416.42	0.00	539.67	459.38	0.367	0.38	0.57	0.175	B
Berry Lane (NB)	477.84	119.46	475.86	481.13	132.72	0.00	819.45	724.44	0.583	0.87	1.36	0.174	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	560.42	140.10	560.16	552.63	58.35	0.00	784.11	768.91	0.715	2.37	2.43	0.267	C
Calder Avenue	198.18	49.55	198.16	199.21	419.30	0.00	538.21	459.38	0.368	0.57	0.58	0.176	B
Berry Lane (NB)	477.84	119.46	477.77	484.25	133.21	0.00	819.19	724.44	0.583	1.36	1.38	0.176	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	457.58	114.40	461.64	453.47	47.88	0.00	789.38	768.91	0.580	2.43	1.42	0.185	B
Calder Avenue	161.82	40.45	162.54	163.97	345.55	0.00	575.42	459.38	0.281	0.58	0.40	0.146	A
Berry Lane (NB)	390.16	97.54	392.09	398.83	109.26	0.00	832.11	724.44	0.469	1.38	0.90	0.137	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	383.20	95.80	385.06	379.11	40.03	0.00	793.35	768.91	0.483	1.42	0.95	0.148	A
Calder Avenue	135.51	33.88	135.93	136.86	288.23	0.00	604.34	459.38	0.224	0.40	0.29	0.128	A
Berry Lane (NB)	326.74	81.68	327.76	332.79	91.38	0.00	841.76	724.44	0.388	0.90	0.64	0.117	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	13.02	0.87	0.144	A	A
Calder Avenue	4.11	0.27	0.127	A	A
Berry Lane (NB)	9.00	0.60	0.115	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	19.19	1.28	0.179	B	B
Calder Avenue	5.60	0.37	0.144	A	A
Berry Lane (NB)	12.58	0.84	0.135	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	32.69	2.18	0.259	C	B
Calder Avenue	8.23	0.55	0.175	B	B
Berry Lane (NB)	19.43	1.30	0.174	B	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	36.10	2.41	0.267	C	B
Calder Avenue	8.62	0.57	0.176	B	B
Berry Lane (NB)	20.60	1.37	0.176	B	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	22.56	1.50	0.185	B	B
Calder Avenue	6.15	0.41	0.146	A	A
Berry Lane (NB)	14.02	0.93	0.137	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	14.88	0.99	0.148	A	A
Calder Avenue	4.50	0.30	0.128	A	A
Berry Lane (NB)	9.94	0.66	0.117	A	A

Future Years - 2016 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2016 Assessment, AM	2016 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.14	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	247.00	100.000
Calder Avenue	ONE HOUR	✓	177.00	100.000
Berry Lane (NB)	ONE HOUR	✓	379.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	36.000	211.000
	Calder Avenue	127.000	0.000	50.000
	Berry Lane (NB)	349.000	30.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.15	0.85
	Calder Avenue	0.72	0.00	0.28
	Berry Lane (NB)	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.34	0.11	0.52	A	226.65	339.98	35.76	0.11	0.40	35.76	0.11
Calder Avenue	0.31	0.14	0.44	A	162.42	243.63	30.10	0.12	0.33	30.11	0.12
Berry Lane (NB)	0.51	0.15	1.04	A	347.78	521.67	66.65	0.13	0.74	66.66	0.13

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	185.95	46.49	184.76	355.78	22.42	0.00	802.23	784.33	0.232	0.00	0.30	0.097	A
Calder Avenue	133.25	33.31	132.27	49.35	157.83	0.00	670.13	411.72	0.199	0.00	0.25	0.111	A
Berry Lane (NB)	285.33	71.33	283.30	195.19	94.91	0.00	839.86	731.67	0.340	0.00	0.51	0.107	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	222.05	55.51	221.72	427.05	26.91	0.00	799.96	784.33	0.278	0.30	0.38	0.104	A
Calder Avenue	159.12	39.78	158.83	59.23	189.41	0.00	654.20	411.72	0.243	0.25	0.32	0.121	A
Berry Lane (NB)	340.71	85.18	340.00	234.27	113.96	0.00	829.57	731.67	0.411	0.51	0.69	0.122	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	271.95	67.99	271.43	522.49	32.92	0.00	796.93	784.33	0.341	0.38	0.51	0.114	A
Calder Avenue	194.88	48.72	194.40	72.48	231.87	0.00	632.78	411.72	0.308	0.32	0.44	0.137	A
Berry Lane (NB)	417.29	104.32	415.93	286.78	139.48	0.00	815.80	731.67	0.512	0.69	1.03	0.150	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	271.95	67.99	271.94	524.04	33.03	0.00	796.88	784.33	0.341	0.51	0.52	0.114	A
Calder Avenue	194.88	48.72	194.87	72.66	232.31	0.00	632.56	411.72	0.308	0.44	0.44	0.137	A
Berry Lane (NB)	417.29	104.32	417.25	287.35	139.82	0.00	815.62	731.67	0.512	1.03	1.04	0.151	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	222.05	55.51	222.56	429.47	27.07	0.00	799.88	784.33	0.278	0.52	0.39	0.104	A
Calder Avenue	159.12	39.78	159.59	59.51	190.12	0.00	653.84	411.72	0.243	0.44	0.32	0.122	A
Berry Lane (NB)	340.71	85.18	342.03	235.20	114.51	0.00	829.28	731.67	0.411	1.04	0.71	0.124	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	185.95	46.49	186.29	359.26	22.64	0.00	802.11	784.33	0.232	0.39	0.30	0.098	A
Calder Avenue	133.25	33.31	133.55	49.80	159.14	0.00	669.47	411.72	0.199	0.32	0.25	0.112	A
Berry Lane (NB)	285.33	71.33	286.08	196.86	95.83	0.00	839.36	731.67	0.340	0.71	0.52	0.109	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	4.35	0.29	0.097	A	A
Calder Avenue	3.56	0.24	0.111	A	A
Berry Lane (NB)	7.35	0.49	0.107	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	5.59	0.37	0.104	A	A
Calder Avenue	4.66	0.31	0.121	A	A
Berry Lane (NB)	10.02	0.67	0.122	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	7.49	0.50	0.114	A	A
Calder Avenue	6.40	0.43	0.137	A	A
Berry Lane (NB)	14.79	0.99	0.150	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	7.71	0.51	0.114	A	A
Calder Avenue	6.62	0.44	0.137	A	A
Berry Lane (NB)	15.50	1.03	0.151	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	5.96	0.40	0.104	A	A
Calder Avenue	5.01	0.33	0.122	A	A
Berry Lane (NB)	10.98	0.73	0.124	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	4.66	0.31	0.098	A	A
Calder Avenue	3.85	0.26	0.112	A	A
Berry Lane (NB)	8.02	0.53	0.109	A	A

Future Years - 2016 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2016 Assessment, PM	2016 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.19	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	469.00	100.000
Calder Avenue	ONE HOUR	✓	159.00	100.000
Berry Lane (NB)	ONE HOUR	✓	413.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	113.000	356.000
	Calder Avenue	107.000	0.000	52.000
	Berry Lane (NB)	366.000	47.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.24	0.76
	Calder Avenue	0.67	0.00	0.33
	Berry Lane (NB)	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.66	0.22	1.87	B	430.36	645.54	111.70	0.17	1.24	111.72	0.17
Calder Avenue	0.32	0.16	0.46	A	145.90	218.85	30.38	0.14	0.34	30.39	0.14
Berry Lane (NB)	0.55	0.16	1.21	A	378.98	568.46	76.31	0.13	0.85	76.32	0.13

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	353.09	88.27	349.95	353.43	35.12	0.00	795.82	771.85	0.444	0.00	0.78	0.134	A
Calder Avenue	119.70	29.93	118.75	119.44	265.63	0.00	615.74	454.16	0.194	0.00	0.24	0.121	A
Berry Lane (NB)	310.93	77.73	308.64	304.47	79.91	0.00	847.95	726.15	0.367	0.00	0.57	0.111	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	421.62	105.41	420.31	424.26	42.16	0.00	792.27	771.85	0.532	0.78	1.11	0.161	A
Calder Avenue	142.94	35.73	142.63	143.42	319.04	0.00	588.80	454.16	0.243	0.24	0.32	0.134	A
Berry Lane (NB)	371.28	92.82	370.44	365.68	95.98	0.00	839.28	726.15	0.442	0.57	0.78	0.128	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	516.38	129.09	513.51	518.95	51.56	0.00	787.53	771.85	0.656	1.11	1.83	0.217	B
Calder Avenue	175.06	43.77	174.51	175.28	389.78	0.00	553.10	454.16	0.317	0.32	0.46	0.158	A
Berry Lane (NB)	454.72	113.68	453.08	446.85	117.43	0.00	827.70	726.15	0.549	0.78	1.19	0.159	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	516.38	129.09	516.24	520.72	51.74	0.00	787.44	771.85	0.656	1.83	1.87	0.221	B
Calder Avenue	175.06	43.77	175.05	176.12	391.86	0.00	552.06	454.16	0.317	0.46	0.46	0.159	A
Berry Lane (NB)	454.72	113.68	454.67	449.10	117.80	0.00	827.50	726.15	0.550	1.19	1.21	0.161	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	421.62	105.41	424.43	427.00	42.43	0.00	792.13	771.85	0.532	1.87	1.16	0.164	A
Calder Avenue	142.94	35.73	143.48	144.70	322.17	0.00	587.22	454.16	0.243	0.46	0.33	0.135	A
Berry Lane (NB)	371.28	92.82	372.88	369.10	96.55	0.00	838.97	726.15	0.443	1.21	0.81	0.129	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	353.09	88.27	354.50	357.10	35.48	0.00	795.64	771.85	0.444	1.16	0.81	0.136	A
Calder Avenue	119.70	29.93	120.03	120.90	269.09	0.00	614.00	454.16	0.195	0.33	0.24	0.122	A
Berry Lane (NB)	310.93	77.73	311.81	308.34	80.77	0.00	847.48	726.15	0.367	0.81	0.59	0.112	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	11.20	0.75	0.134	A	A
Calder Avenue	3.46	0.23	0.121	A	A
Berry Lane (NB)	8.25	0.55	0.111	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	16.02	1.07	0.161	A	A
Calder Avenue	4.63	0.31	0.134	A	A
Berry Lane (NB)	11.36	0.76	0.128	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	25.72	1.71	0.217	B	B
Calder Avenue	6.62	0.44	0.158	A	A
Berry Lane (NB)	17.09	1.14	0.159	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	27.79	1.85	0.221	B	B
Calder Avenue	6.88	0.46	0.159	A	A
Berry Lane (NB)	18.00	1.20	0.161	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	18.35	1.22	0.164	A	A
Calder Avenue	5.03	0.34	0.135	A	A
Berry Lane (NB)	12.55	0.84	0.129	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	12.62	0.84	0.136	A	A
Calder Avenue	3.76	0.25	0.122	A	A
Berry Lane (NB)	9.05	0.60	0.112	A	A

Future Years - 2025 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2025 Assessment, AM	2025 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.15	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	271.00	100.000
Calder Avenue	ONE HOUR	✓	199.00	100.000
Berry Lane (NB)	ONE HOUR	✓	423.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	40.000	231.000
	Calder Avenue	143.000	0.000	56.000
	Berry Lane (NB)	390.000	33.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.15	0.85
	Calder Avenue	0.72	0.00	0.28
	Berry Lane (NB)	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.38	0.12	0.60	A	248.67	373.01	40.98	0.11	0.46	40.98	0.11
Calder Avenue	0.35	0.15	0.54	A	182.61	273.91	36.14	0.13	0.40	36.15	0.13
Berry Lane (NB)	0.58	0.18	1.35	B	388.15	582.23	83.60	0.14	0.93	83.61	0.14

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	204.02	51.01	202.67	398.19	24.65	0.00	801.10	784.76	0.255	0.00	0.34	0.100	A
Calder Avenue	149.82	37.45	148.66	54.57	172.75	0.00	662.60	412.26	0.226	0.00	0.29	0.116	A
Berry Lane (NB)	318.46	79.61	316.01	214.59	106.83	0.00	833.42	731.22	0.382	0.00	0.61	0.115	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	243.62	60.91	243.24	478.02	29.59	0.00	798.61	784.76	0.305	0.34	0.43	0.108	A
Calder Avenue	178.90	44.72	178.54	65.49	207.34	0.00	645.15	412.26	0.277	0.29	0.38	0.128	A
Berry Lane (NB)	380.27	95.07	379.32	257.58	128.30	0.00	821.84	731.22	0.463	0.61	0.85	0.135	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	298.38	74.59	297.74	584.61	36.18	0.00	795.29	784.76	0.375	0.43	0.59	0.120	A
Calder Avenue	219.10	54.78	218.48	80.13	253.80	0.00	621.71	412.26	0.352	0.38	0.54	0.149	A
Berry Lane (NB)	465.73	116.43	463.79	315.28	156.99	0.00	806.35	731.22	0.578	0.85	1.33	0.174	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	298.38	74.59	298.36	586.77	36.33	0.00	795.21	784.76	0.375	0.59	0.60	0.121	A
Calder Avenue	219.10	54.78	219.09	80.37	254.32	0.00	621.45	412.26	0.353	0.54	0.54	0.149	A
Berry Lane (NB)	465.73	116.43	465.66	315.98	157.43	0.00	806.12	731.22	0.578	1.33	1.35	0.176	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	243.62	60.91	244.24	481.34	29.81	0.00	798.50	784.76	0.305	0.60	0.44	0.108	A
Calder Avenue	178.90	44.72	179.50	65.86	208.19	0.00	644.72	412.26	0.277	0.54	0.39	0.129	A
Berry Lane (NB)	380.27	95.07	382.16	258.70	128.99	0.00	821.46	731.22	0.463	1.35	0.88	0.137	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	204.02	51.01	204.42	402.46	24.92	0.00	800.97	784.76	0.255	0.44	0.34	0.101	A
Calder Avenue	149.82	37.45	150.19	55.09	174.25	0.00	661.85	412.26	0.226	0.39	0.30	0.117	A
Berry Lane (NB)	318.46	79.61	319.45	216.51	107.93	0.00	832.83	731.22	0.382	0.88	0.63	0.117	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	4.91	0.33	0.100	A	A
Calder Avenue	4.18	0.28	0.116	A	A
Berry Lane (NB)	8.79	0.59	0.115	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	6.37	0.42	0.108	A	A
Calder Avenue	5.55	0.37	0.128	A	A
Berry Lane (NB)	12.29	0.82	0.135	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	8.65	0.58	0.120	A	A
Calder Avenue	7.79	0.52	0.149	A	A
Berry Lane (NB)	19.00	1.27	0.174	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	8.93	0.60	0.121	A	A
Calder Avenue	8.08	0.54	0.149	A	A
Berry Lane (NB)	20.14	1.34	0.176	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	6.83	0.46	0.108	A	A
Calder Avenue	6.00	0.40	0.129	A	A
Berry Lane (NB)	13.69	0.91	0.137	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	5.29	0.35	0.101	A	A
Calder Avenue	4.54	0.30	0.117	A	A
Berry Lane (NB)	9.70	0.65	0.117	A	A

Future Years - 2025 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Future Years	ARCADY		✓				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
2025 Assessment, PM	2025 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Berry Lane / Calder Avenue	Mini-roundabout	A,B,C	0.23	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Berry Lane (SB)	A	Berry Lane (SB)	
Calder Avenue	B	Calder Avenue	
Berry Lane (NB)	C	Berry Lane (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Berry Lane (SB)	0.00	99999.00		0.00
Calder Avenue	0.00	99999.00		0.00
Berry Lane (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Berry Lane (SB)	3.00	3.00	3.00	0.00	7.00	5.50	0.00	
Calder Avenue	3.00	3.00	3.00	0.00	7.00	6.00	0.00	
Berry Lane (NB)	3.50	3.50	3.50	0.00	10.00	12.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Berry Lane (SB)		(calculated)	(calculated)	0.504	813.537
Calder Avenue		(calculated)	(calculated)	0.505	749.761
Berry Lane (NB)		(calculated)	(calculated)	0.540	891.064

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Berry Lane (SB)	ONE HOUR	✓	524.00	100.000
Calder Avenue	ONE HOUR	✓	180.00	100.000
Berry Lane (NB)	ONE HOUR	✓	461.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.000	128.000	396.000
	Calder Avenue	121.000	0.000	59.000
	Berry Lane (NB)	408.000	53.000	0.000

Turning Proportions (PCU) - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.00	0.24	0.76
	Calder Avenue	0.67	0.00	0.33
	Berry Lane (NB)	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	1.000	1.000	1.000
	Calder Avenue	1.000	1.000	1.000
	Berry Lane (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Berry Lane / Calder Avenue (for whole period)

		To		
		Berry Lane (SB)	Calder Avenue	Berry Lane (NB)
From	Berry Lane (SB)	0.0	0.0	0.0
	Calder Avenue	0.0	0.0	0.0
	Berry Lane (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Berry Lane (SB)	0.74	0.29	2.69	C	480.83	721.25	150.01	0.21	1.67	150.05	0.21
Calder Avenue	0.37	0.18	0.59	B	165.17	247.76	37.91	0.15	0.42	37.92	0.15
Berry Lane (NB)	0.62	0.19	1.60	B	423.02	634.53	97.10	0.15	1.08	97.12	0.15

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	394.49	98.62	390.62	395.04	39.58	0.00	793.57	771.45	0.497	0.00	0.97	0.148	A
Calder Avenue	135.51	33.88	134.36	135.00	295.20	0.00	600.82	455.62	0.226	0.00	0.29	0.128	A
Berry Lane (NB)	347.06	86.77	344.30	339.24	90.32	0.00	842.33	725.81	0.412	0.00	0.69	0.120	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	471.07	117.77	469.19	474.29	47.52	0.00	789.57	771.45	0.597	0.97	1.44	0.186	B
Calder Avenue	161.82	40.45	161.41	162.13	354.58	0.00	570.86	455.62	0.283	0.29	0.39	0.146	A
Berry Lane (NB)	414.43	103.61	413.30	407.49	108.50	0.00	832.52	725.81	0.498	0.69	0.97	0.143	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	576.93	144.23	572.24	579.78	58.08	0.00	784.24	771.45	0.736	1.44	2.61	0.277	C
Calder Avenue	198.18	49.55	197.41	197.86	432.46	0.00	531.57	455.62	0.373	0.39	0.58	0.179	B
Berry Lane (NB)	507.57	126.89	505.16	497.17	132.70	0.00	819.46	725.81	0.619	0.97	1.58	0.189	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	576.93	144.23	576.61	582.33	58.34	0.00	784.11	771.45	0.736	2.61	2.69	0.288	C
Calder Avenue	198.18	49.55	198.15	199.19	435.76	0.00	529.91	455.62	0.374	0.58	0.59	0.181	B
Berry Lane (NB)	507.57	126.89	507.47	500.71	133.20	0.00	819.19	725.81	0.620	1.58	1.60	0.192	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	471.07	117.77	475.73	478.16	47.92	0.00	789.37	771.45	0.597	2.69	1.52	0.194	B
Calder Avenue	161.82	40.45	162.57	164.13	359.52	0.00	568.37	455.62	0.285	0.59	0.40	0.148	A
Berry Lane (NB)	414.43	103.61	416.80	412.81	109.28	0.00	832.10	725.81	0.498	1.60	1.01	0.145	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Berry Lane (SB)	394.49	98.62	396.56	399.61	40.04	0.00	793.34	771.45	0.497	1.52	1.01	0.152	A
Calder Avenue	135.51	33.88	135.94	136.91	299.69	0.00	598.56	455.62	0.226	0.40	0.30	0.130	A
Berry Lane (NB)	347.06	86.77	348.26	344.25	91.38	0.00	841.76	725.81	0.412	1.01	0.71	0.122	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	13.74	0.92	0.148	A	A
Calder Avenue	4.16	0.28	0.128	A	A
Berry Lane (NB)	9.92	0.66	0.120	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	20.49	1.37	0.186	B	B
Calder Avenue	5.69	0.38	0.146	A	A
Berry Lane (NB)	14.07	0.94	0.143	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	35.75	2.38	0.277	C	B
Calder Avenue	8.42	0.56	0.179	B	B
Berry Lane (NB)	22.34	1.49	0.189	B	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	39.88	2.66	0.288	C	B
Calder Avenue	8.83	0.59	0.181	B	B
Berry Lane (NB)	23.89	1.59	0.192	B	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	24.36	1.62	0.194	B	B
Calder Avenue	6.26	0.42	0.148	A	A
Berry Lane (NB)	15.85	1.06	0.145	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Berry Lane (SB)	15.80	1.05	0.152	A	A
Calder Avenue	4.56	0.30	0.130	A	A
Berry Lane (NB)	11.02	0.73	0.122	A	A

Appendix 17

ARCADY Outputs – Derby Road/Whittingham Rd/Kestor Lane

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Import of 1. Derby Road_Preston Road AM.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\Callibrated
Report generation date: 07/04/2015 16:37:08

Summary of junction performance

	AM			
	Queue (PCU)	Delay (min)	RFC	LOS
	Derby Road_Preston Road - 2014 Surveyed			
Derby Road	1.25	0.15	0.56	A
Kestor Lane	1.65	0.34	0.63	C
Preston Road	2.51	0.29	0.72	C
Whittingham Road	0.90	0.21	0.48	B
	Derby Road_Preston Road - 2016 Assessment			
Derby Road	2.80	0.28	0.74	C
Kestor Lane	6.29	1.16	0.90	F
Preston Road	8.38	0.83	0.92	E
Whittingham Road	9.46	1.20	0.94	F
	Derby Road_Preston Road - 2016 Baseline			
Derby Road	1.95	0.22	0.67	B
Kestor Lane	4.68	0.86	0.85	F
Preston Road	6.52	0.67	0.89	E
Whittingham Road	8.31	1.06	0.92	F
	Derby Road_Preston Road - 2025 Assessment			
Derby Road	4.71	0.44	0.84	D
Kestor Lane	19.63	2.95	1.06	F
Preston Road	25.08	2.03	1.03	F
Whittingham Road	22.14	2.42	1.04	F
	Derby Road_Preston Road - 2025 Baseline			
Derby Road	3.03	0.30	0.76	C
Kestor Lane	13.29	2.09	1.00	F
Preston Road	19.09	1.65	1.00	F
Whittingham Road	20.24	2.23	1.03	F

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

"D1 - 2016 Baseline, AM " model duration: 07:45 - 09:15
"D3 - 2025 Baseline, AM" model duration: 07:45 - 09:15
"D5 - 2016 Assessment, AM" model duration: 07:45 - 09:15
"D7 - 2025 Assessment, AM" model duration: 07:45 - 09:15
"D9 - 2014 Surveyed, AM" model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 07/04/2015 16:37:07

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Derby Road_Preston Road - 2016 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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	Relations
2016 Baseline, AM	2016 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				0.68	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	30.00	
Kestor Lane	Direct	Queue Surveys	-120.00	
Preston Road	Direct	Queue Surveys	-150.00	
Whittingham Road	Direct	Queue Surveys	-300.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	1079.554
Kestor Lane		(calculated)	(calculated)	0.355	678.042
Preston Road		(calculated)	(calculated)	0.461	873.182
Whittingham Road		(calculated)	(calculated)	0.463	774.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	500.00	100.000
Kestor Lane	ONE HOUR	✓	320.00	100.000
Preston Road	ONE HOUR	✓	572.00	100.000
Whittingham Road	ONE HOUR	✓	457.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	47.000	343.000	110.000
	Kestor Lane	58.000	0.000	109.000	153.000
	Preston Road	279.000	116.000	0.000	177.000
	Whittingham Road	75.000	161.000	221.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.09	0.69	0.22
	Kestor Lane	0.18	0.00	0.34	0.48
	Preston Road	0.49	0.20	0.00	0.31
	Whittingham Road	0.16	0.35	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.67	0.22	1.95	B	458.81	688.21	109.36	0.16	1.22	109.37	0.16
Kestor Lane	0.85	0.86	4.68	F	293.64	440.46	198.00	0.45	2.20	198.06	0.45
Preston Road	0.89	0.67	6.52	E	524.88	787.32	275.49	0.35	3.06	275.56	0.35
Whittingham Road	0.92	1.06	8.31	F	419.35	629.03	311.83	0.50	3.46	311.92	0.50

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	376.43	94.11	373.62	306.26	369.83	0.00	906.38	808.19	0.415	0.00	0.70	0.112	A
Kestor Lane	240.91	60.23	237.30	240.92	502.53	0.00	499.70	327.99	0.482	0.00	0.90	0.226	B
Preston Road	430.63	107.66	425.59	501.16	238.66	0.00	763.15	691.50	0.564	0.00	1.26	0.175	B
Whittingham Road	344.05	86.01	339.19	327.35	336.90	0.00	618.19	525.53	0.557	0.00	1.22	0.212	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	449.49	112.37	448.12	367.54	443.73	0.00	871.78	808.20	0.516	0.70	1.04	0.141	A
Kestor Lane	287.67	71.92	285.11	289.05	602.80	0.00	464.12	327.99	0.620	0.90	1.55	0.330	C
Preston Road	514.22	128.55	510.65	601.33	286.58	0.00	741.06	691.50	0.694	1.26	2.15	0.256	C
Whittingham Road	410.83	102.71	406.97	392.92	404.31	0.00	586.97	525.53	0.700	1.22	2.18	0.326	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	550.51	137.63	547.15	441.73	530.11	0.00	831.33	808.20	0.662	1.04	1.89	0.209	B
Kestor Lane	352.33	88.08	342.08	347.05	730.21	0.00	418.90	327.99	0.841	1.55	4.11	0.702	E
Preston Road	629.78	157.45	615.37	726.35	345.93	0.00	713.70	691.50	0.882	2.15	5.76	0.543	D
Whittingham Road	503.17	125.79	484.89	474.35	486.95	0.00	548.69	525.53	0.917	2.18	6.75	0.779	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	550.51	137.63	550.24	450.69	542.46	0.00	825.55	808.20	0.667	1.89	1.95	0.217	B
Kestor Lane	352.33	88.08	350.05	353.88	738.82	0.00	415.84	327.99	0.847	4.11	4.68	0.856	F
Preston Road	629.78	157.45	626.72	737.01	351.87	0.00	710.96	691.50	0.886	5.76	6.52	0.665	E
Whittingham Road	503.17	125.79	496.91	482.35	496.23	0.00	544.40	525.53	0.924	6.75	8.31	1.063	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	449.49	112.37	452.82	384.15	469.99	0.00	859.49	808.20	0.523	1.95	1.12	0.149	A
Kestor Lane	287.67	71.92	299.21	302.89	619.92	0.00	458.04	327.99	0.628	4.68	1.79	0.401	C
Preston Road	514.22	128.55	530.51	622.22	296.91	0.00	736.30	691.50	0.698	6.52	2.45	0.312	C
Whittingham Road	410.83	102.71	433.55	406.84	420.58	0.00	579.43	525.53	0.709	8.31	2.63	0.462	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	376.43	94.11	377.99	313.80	380.24	0.00	901.51	808.19	0.418	1.12	0.73	0.115	A
Kestor Lane	240.91	60.23	244.20	246.83	511.40	0.00	496.55	327.99	0.485	1.79	0.97	0.241	B
Preston Road	430.63	107.66	435.07	511.42	244.18	0.00	760.61	691.50	0.566	2.45	1.34	0.187	B
Whittingham Road	344.05	86.01	349.34	334.54	344.70	0.00	614.58	525.53	0.560	2.63	1.31	0.230	B

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	10.08	0.67	0.112	A	A
Kestor Lane	12.58	0.84	0.226	B	B
Preston Road	17.63	1.18	0.175	B	B
Whittingham Road	16.85	1.12	0.212	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	15.06	1.00	0.141	A	A
Kestor Lane	21.41	1.43	0.330	C	B
Preston Road	29.87	1.99	0.256	C	B
Whittingham Road	29.87	1.99	0.326	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	26.39	1.76	0.209	B	B
Kestor Lane	50.54	3.37	0.702	E	D
Preston Road	70.66	4.71	0.543	D	C
Whittingham Road	78.38	5.23	0.779	E	D

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	28.92	1.93	0.217	B	B
Kestor Lane	66.60	4.44	0.856	F	D
Preston Road	93.05	6.20	0.665	E	D
Whittingham Road	114.50	7.63	1.063	F	E

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	17.63	1.18	0.149	A	A
Kestor Lane	31.34	2.09	0.401	C	C
Preston Road	42.91	2.86	0.312	C	B
Whittingham Road	51.05	3.40	0.462	D	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	11.28	0.75	0.115	A	A
Kestor Lane	15.53	1.04	0.241	B	B
Preston Road	21.37	1.42	0.187	B	B
Whittingham Road	21.17	1.41	0.230	B	B

Derby Road_Preston Road - 2025 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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	Relations
2025 Baseline, AM	2025 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				1.49	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	30.00	
Kestor Lane	Direct	Queue Surveys	-120.00	
Preston Road	Direct	Queue Surveys	-150.00	
Whittingham Road	Direct	Queue Surveys	-300.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	1079.554
Kestor Lane		(calculated)	(calculated)	0.355	678.042
Preston Road		(calculated)	(calculated)	0.461	873.182
Whittingham Road		(calculated)	(calculated)	0.463	774.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	563.00	100.000
Kestor Lane	ONE HOUR	✓	356.00	100.000
Preston Road	ONE HOUR	✓	636.00	100.000
Whittingham Road	ONE HOUR	✓	490.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	53.000	386.000	124.000
	Kestor Lane	65.000	0.000	123.000	168.000
	Preston Road	314.000	131.000	0.000	191.000
	Whittingham Road	82.000	175.000	233.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.09	0.69	0.22
	Kestor Lane	0.18	0.00	0.35	0.47
	Preston Road	0.49	0.21	0.00	0.30
	Whittingham Road	0.17	0.36	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.76	0.30	3.03	C	516.62	774.93	157.27	0.20	1.75	157.30	0.20
Kestor Lane	1.00	2.09	13.29	F	326.67	490.01	429.54	0.88	4.77	429.65	0.88
Preston Road	1.00	1.65	19.09	F	583.60	875.41	613.59	0.70	6.82	613.73	0.70
Whittingham Road	1.03	2.23	20.24	F	449.63	674.45	650.52	0.96	7.23	650.67	0.96

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	423.86	105.96	420.30	341.82	399.28	0.00	892.59	809.25	0.475	0.00	0.89	0.126	A
Kestor Lane	268.02	67.00	263.20	266.35	553.22	0.00	481.71	329.75	0.556	0.00	1.20	0.269	C
Preston Road	478.81	119.70	472.05	551.59	264.83	0.00	751.09	691.51	0.637	0.00	1.69	0.210	B
Whittingham Road	368.90	92.22	362.76	358.54	378.34	0.00	599.00	522.25	0.616	0.00	1.54	0.248	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	506.13	126.53	504.05	409.25	477.80	0.00	855.83	809.25	0.591	0.89	1.41	0.170	B
Kestor Lane	320.04	80.01	315.40	318.87	662.98	0.00	442.76	329.75	0.723	1.20	2.36	0.455	D
Preston Road	571.75	142.94	565.18	660.93	317.44	0.00	726.83	691.51	0.787	1.69	3.33	0.357	C
Whittingham Road	440.50	110.12	434.02	429.59	453.03	0.00	564.40	522.25	0.780	1.54	3.16	0.439	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	619.87	154.97	614.03	476.42	552.33	0.00	820.93	809.25	0.755	1.41	2.87	0.282	C
Kestor Lane	391.96	97.99	364.32	372.44	793.92	0.00	396.29	329.75	0.989	2.36	9.27	1.301	F
Preston Road	700.25	175.06	660.82	784.56	373.68	0.00	700.90	691.51	0.999	3.33	13.19	1.004	F
Whittingham Road	539.50	134.88	499.87	505.62	528.88	0.00	529.27	522.25	1.019	3.16	13.06	1.281	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	619.87	154.97	619.23	488.20	564.69	0.00	815.14	809.25	0.760	2.87	3.03	0.304	C
Kestor Lane	391.96	97.99	375.92	380.10	803.82	0.00	392.77	329.75	0.998	9.27	13.29	2.085	F
Preston Road	700.25	175.06	676.67	797.32	382.42	0.00	696.87	691.51	1.005	13.19	19.09	1.647	F
Whittingham Road	539.50	134.88	510.79	517.00	542.09	0.00	523.15	522.25	1.031	13.06	20.24	2.226	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	506.13	126.53	511.70	459.62	544.60	0.00	824.55	809.25	0.614	3.03	1.64	0.195	B
Kestor Lane	320.04	80.01	359.52	355.75	700.54	0.00	429.43	329.75	0.745	13.29	3.42	1.067	F
Preston Road	571.75	142.94	629.05	712.05	348.00	0.00	712.74	691.51	0.802	19.09	4.76	0.905	F
Whittingham Road	440.50	110.12	498.44	471.27	505.78	0.00	539.97	522.25	0.816	20.24	5.76	1.525	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	423.86	105.96	426.65	357.00	421.58	0.00	882.15	809.25	0.480	1.64	0.94	0.133	A
Kestor Lane	268.02	67.00	276.30	278.68	569.55	0.00	475.91	329.75	0.563	3.42	1.34	0.312	C
Preston Road	478.81	119.70	490.42	571.05	274.81	0.00	746.49	691.51	0.641	4.76	1.86	0.244	B
Whittingham Road	368.90	92.22	384.99	371.64	393.59	0.00	591.94	522.25	0.623	5.76	1.73	0.310	C

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	12.70	0.85	0.126	A	A
Kestor Lane	16.47	1.10	0.269	C	B
Preston Road	23.22	1.55	0.210	B	B
Whittingham Road	20.94	1.40	0.248	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	20.10	1.34	0.170	B	B
Kestor Lane	31.54	2.10	0.455	D	C
Preston Road	44.45	2.96	0.357	C	C
Whittingham Road	41.55	2.77	0.439	D	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	38.90	2.59	0.282	C	B
Kestor Lane	97.70	6.51	1.301	F	E
Preston Road	137.97	9.20	1.004	F	E
Whittingham Road	133.26	8.88	1.281	F	E

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	44.56	2.97	0.304	C	B
Kestor Lane	170.97	11.40	2.085	F	F
Preston Road	244.42	16.29	1.647	F	F
Whittingham Road	251.75	16.78	2.226	F	F

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	26.27	1.75	0.195	B	B
Kestor Lane	90.21	6.01	1.067	F	E
Preston Road	132.24	8.82	0.905	F	D
Whittingham Road	171.86	11.46	1.525	F	F

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	14.74	0.98	0.133	A	A
Kestor Lane	22.64	1.51	0.312	C	B
Preston Road	31.29	2.09	0.244	B	B
Whittingham Road	31.16	2.08	0.310	C	B

Derby Road_Preston Road - 2016 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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
2016 Assessment, AM	2016 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				0.81	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	30.00	
Kestor Lane	Direct	Queue Surveys	-120.00	
Preston Road	Direct	Queue Surveys	-150.00	
Whittingham Road	Direct	Queue Surveys	-300.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	1079.554
Kestor Lane		(calculated)	(calculated)	0.355	678.042
Preston Road		(calculated)	(calculated)	0.461	873.182
Whittingham Road		(calculated)	(calculated)	0.463	774.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	559.00	100.000
Kestor Lane	ONE HOUR	✓	320.00	100.000
Preston Road	ONE HOUR	✓	593.00	100.000
Whittingham Road	ONE HOUR	✓	457.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	47.000	402.000	110.000
	Kestor Lane	58.000	0.000	109.000	153.000
	Preston Road	300.000	116.000	0.000	177.000
	Whittingham Road	75.000	161.000	221.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.08	0.72	0.20
	Kestor Lane	0.18	0.00	0.34	0.48
	Preston Road	0.51	0.20	0.00	0.30
	Whittingham Road	0.16	0.35	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.74	0.28	2.80	C	512.95	769.42	145.82	0.19	1.62	145.85	0.19
Kestor Lane	0.90	1.16	6.29	F	293.64	440.46	240.71	0.55	2.67	240.78	0.55
Preston Road	0.92	0.83	8.38	E	544.15	816.22	329.31	0.40	3.66	329.39	0.40
Whittingham Road	0.94	1.20	9.46	F	419.35	629.03	340.91	0.54	3.79	341.00	0.54

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	420.84	105.21	417.43	321.70	369.68	0.00	906.45	812.13	0.464	0.00	0.85	0.122	A
Kestor Lane	240.91	60.23	237.07	240.81	546.30	0.00	484.17	324.94	0.498	0.00	0.96	0.239	B
Preston Road	446.44	111.61	440.97	544.91	238.46	0.00	763.24	700.73	0.585	0.00	1.37	0.183	B
Whittingham Road	344.05	86.01	339.07	327.11	352.32	0.00	611.05	519.28	0.563	0.00	1.25	0.217	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	502.53	125.63	500.63	385.92	443.42	0.00	871.93	812.13	0.576	0.85	1.33	0.161	A
Kestor Lane	287.67	71.92	284.67	288.84	655.21	0.00	445.51	324.94	0.646	0.96	1.71	0.366	C
Preston Road	533.09	133.27	528.92	653.66	286.22	0.00	741.23	700.73	0.719	1.37	2.41	0.277	C
Whittingham Road	410.83	102.71	406.69	392.49	422.65	0.00	578.48	519.28	0.710	1.25	2.28	0.341	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	615.47	153.87	610.13	461.42	527.53	0.00	832.54	812.13	0.739	1.33	2.66	0.264	C
Kestor Lane	352.33	88.08	338.38	345.42	792.25	0.00	396.88	324.94	0.888	1.71	5.20	0.870	F
Preston Road	652.91	163.23	634.27	787.45	343.18	0.00	714.97	700.73	0.913	2.41	7.07	0.632	E
Whittingham Road	503.17	125.79	482.67	471.17	506.28	0.00	539.74	519.28	0.932	2.28	7.40	0.844	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	615.47	153.87	614.92	471.94	540.42	0.00	826.51	812.13	0.745	2.66	2.80	0.282	C
Kestor Lane	352.33	88.08	347.98	352.76	802.57	0.00	393.22	324.94	0.896	5.20	6.29	1.156	F
Preston Road	652.91	163.23	647.64	800.10	350.45	0.00	711.61	700.73	0.918	7.07	8.38	0.827	E
Whittingham Road	503.17	125.79	494.96	480.69	517.40	0.00	534.59	519.28	0.941	7.40	9.46	1.200	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	502.53	125.63	507.92	407.89	474.12	0.00	857.55	812.13	0.586	2.80	1.45	0.174	B
Kestor Lane	287.67	71.92	304.57	305.37	676.66	0.00	437.90	324.94	0.657	6.29	2.06	0.496	D
Preston Road	533.09	133.27	555.30	680.46	300.77	0.00	734.52	700.73	0.726	8.38	2.83	0.369	C
Whittingham Road	410.83	102.71	437.25	411.32	444.75	0.00	568.24	519.28	0.723	9.46	2.85	0.528	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	420.84	105.21	423.10	330.48	381.01	0.00	901.15	812.13	0.467	1.45	0.89	0.126	A
Kestor Lane	240.91	60.23	245.01	247.30	556.80	0.00	480.44	324.94	0.501	2.06	1.04	0.259	C
Preston Road	446.44	111.61	451.92	557.00	244.81	0.00	760.32	700.73	0.587	2.83	1.46	0.198	B
Whittingham Road	344.05	86.01	350.05	335.29	361.44	0.00	606.83	519.28	0.567	2.85	1.35	0.239	B

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	12.21	0.81	0.122	A	A
Kestor Lane	13.29	0.89	0.239	B	B
Preston Road	19.05	1.27	0.183	B	B
Whittingham Road	17.25	1.15	0.217	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	18.99	1.27	0.161	A	A
Kestor Lane	23.47	1.56	0.366	C	C
Preston Road	33.17	2.21	0.277	C	B
Whittingham Road	31.08	2.07	0.341	C	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	36.34	2.42	0.264	C	B
Kestor Lane	61.07	4.07	0.870	F	D
Preston Road	83.73	5.58	0.632	E	D
Whittingham Road	84.33	5.62	0.844	F	D

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	41.23	2.75	0.282	C	B
Kestor Lane	87.27	5.82	1.156	F	E
Preston Road	117.30	7.82	0.827	E	D
Whittingham Road	128.22	8.55	1.200	F	E

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	23.16	1.54	0.174	B	B
Kestor Lane	38.87	2.59	0.496	D	C
Preston Road	52.58	3.51	0.369	C	C
Whittingham Road	58.06	3.87	0.528	D	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	13.90	0.93	0.126	A	A
Kestor Lane	16.74	1.12	0.259	C	B
Preston Road	23.46	1.56	0.198	B	B
Whittingham Road	21.98	1.47	0.239	B	B

Derby Road_Preston Road - 2025 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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
2025 Assessment, AM	2025 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				1.81	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	30.00	
Kestor Lane	Direct	Queue Surveys	-120.00	
Preston Road	Direct	Queue Surveys	-150.00	
Whittingham Road	Direct	Queue Surveys	-300.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	1079.554
Kestor Lane		(calculated)	(calculated)	0.355	678.042
Preston Road		(calculated)	(calculated)	0.461	873.182
Whittingham Road		(calculated)	(calculated)	0.463	774.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	622.00	100.000
Kestor Lane	ONE HOUR	✓	356.00	100.000
Preston Road	ONE HOUR	✓	657.00	100.000
Whittingham Road	ONE HOUR	✓	490.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	53.000	445.000	124.000
	Kestor Lane	65.000	0.000	123.000	168.000
	Preston Road	335.000	131.000	0.000	191.000
	Whittingham Road	82.000	175.000	233.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.09	0.72	0.20
	Kestor Lane	0.18	0.00	0.35	0.47
	Preston Road	0.51	0.20	0.00	0.29
	Whittingham Road	0.17	0.36	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.84	0.44	4.71	D	570.76	856.14	220.11	0.26	2.45	220.15	0.26
Kestor Lane	1.06	2.95	19.63	F	326.67	490.01	610.36	1.25	6.78	610.50	1.25
Preston Road	1.03	2.03	25.08	F	602.87	904.31	803.80	0.89	8.93	803.97	0.89
Whittingham Road	1.04	2.42	22.14	F	449.63	674.45	732.77	1.09	8.14	732.94	1.09

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	468.27	117.07	463.95	357.11	399.05	0.00	892.70	812.77	0.525	0.00	1.08	0.139	A
Kestor Lane	268.02	67.00	262.85	266.17	596.82	0.00	466.24	326.98	0.575	0.00	1.29	0.288	C
Preston Road	494.62	123.66	487.24	595.15	264.52	0.00	751.23	699.82	0.658	0.00	1.85	0.222	B
Whittingham Road	368.90	92.22	362.57	358.18	393.58	0.00	591.94	516.68	0.623	0.00	1.58	0.255	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	559.17	139.79	556.23	427.08	477.13	0.00	856.14	812.77	0.653	1.08	1.82	0.198	B
Kestor Lane	320.04	80.01	314.38	318.40	714.95	0.00	424.31	326.98	0.754	1.29	2.71	0.520	D
Preston Road	590.63	147.66	582.74	712.69	316.65	0.00	727.20	699.82	0.812	1.85	3.82	0.395	C
Whittingham Road	440.50	110.12	433.48	428.66	470.73	0.00	556.21	516.68	0.792	1.58	3.34	0.464	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	684.83	171.21	674.82	491.08	547.84	0.00	823.03	812.77	0.832	1.82	4.32	0.381	C
Kestor Lane	391.96	97.99	353.62	369.17	853.49	0.00	375.15	326.98	1.045	2.71	12.29	1.656	F
Preston Road	723.37	180.84	673.47	841.14	365.97	0.00	704.46	699.82	1.027	3.82	16.29	1.162	F
Whittingham Road	539.50	134.88	496.67	497.20	542.25	0.00	523.08	516.68	1.031	3.34	14.04	1.365	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	684.83	171.21	683.26	501.99	559.47	0.00	817.59	812.77	0.838	4.32	4.71	0.436	D
Kestor Lane	391.96	97.99	362.60	376.55	866.17	0.00	370.65	326.98	1.058	12.29	19.63	2.953	F
Preston Road	723.37	180.84	688.23	855.24	373.53	0.00	700.97	699.82	1.032	16.29	25.08	2.034	F
Whittingham Road	539.50	134.88	507.10	507.41	554.36	0.00	517.47	516.68	1.043	14.04	22.14	2.419	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	559.17	139.79	569.17	491.27	547.60	0.00	823.14	812.77	0.679	4.71	2.21	0.245	B
Kestor Lane	320.04	80.01	379.20	358.99	757.79	0.00	409.11	326.98	0.782	19.63	4.84	1.956	F
Preston Road	590.63	147.66	664.03	775.33	361.65	0.00	706.45	699.82	0.836	25.08	6.73	1.430	F
Whittingham Road	440.50	110.12	498.65	485.46	540.22	0.00	524.02	516.68	0.841	22.14	7.61	1.901	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	468.27	117.07	472.47	378.70	428.76	0.00	878.79	812.77	0.533	2.21	1.16	0.149	A
Kestor Lane	268.02	67.00	281.48	282.61	618.62	0.00	458.50	326.98	0.585	4.84	1.48	0.362	C
Preston Road	494.62	123.66	513.25	621.69	278.42	0.00	744.82	699.82	0.664	6.73	2.07	0.278	C
Whittingham Road	368.90	92.22	392.03	376.23	415.44	0.00	581.82	516.68	0.634	7.61	1.82	0.350	C

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	15.34	1.02	0.139	A	A
Kestor Lane	17.56	1.17	0.288	C	B
Preston Road	25.18	1.68	0.222	B	B
Whittingham Road	21.49	1.43	0.255	C	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	25.58	1.71	0.198	B	B
Kestor Lane	35.47	2.36	0.520	D	C
Preston Road	50.11	3.34	0.395	C	C
Whittingham Road	43.58	2.91	0.464	D	C

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	55.91	3.73	0.381	C	C
Kestor Lane	122.09	8.14	1.656	F	F
Preston Road	164.06	10.94	1.162	F	E
Whittingham Road	141.49	9.43	1.365	F	F

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	68.38	4.56	0.436	D	C
Kestor Lane	240.94	16.06	2.953	F	F
Preston Road	312.34	20.82	2.034	F	F
Whittingham Road	273.22	18.21	2.419	F	F

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	36.50	2.43	0.245	B	B
Kestor Lane	167.68	11.18	1.956	F	F
Preston Road	214.98	14.33	1.430	F	F
Whittingham Road	217.00	14.47	1.901	F	F

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	18.40	1.23	0.149	A	A
Kestor Lane	26.62	1.77	0.362	C	C
Preston Road	37.13	2.48	0.278	C	B
Whittingham Road	35.99	2.40	0.350	C	C

Derby Road_Preston Road - 2014 Surveyed, AM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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	Relatio
2014 Surveyed, AM	2014 Surveyed	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				0.24	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	30.00	
Kestor Lane	Direct	Queue Surveys	-120.00	
Preston Road	Direct	Queue Surveys	-150.00	
Whittingham Road	Direct	Queue Surveys	-300.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	1079.554
Kestor Lane		(calculated)	(calculated)	0.355	678.042
Preston Road		(calculated)	(calculated)	0.461	873.182
Whittingham Road		(calculated)	(calculated)	0.463	774.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	469.00	100.000
Kestor Lane	ONE HOUR	✓	273.00	100.000
Preston Road	ONE HOUR	✓	484.00	100.000
Whittingham Road	ONE HOUR	✓	240.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	45.000	325.000	99.000
	Kestor Lane	56.000	0.000	105.000	112.000
	Preston Road	263.000	112.000	0.000	109.000
	Whittingham Road	52.000	99.000	89.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.10	0.69	0.21
	Kestor Lane	0.21	0.00	0.38	0.41
	Preston Road	0.54	0.23	0.00	0.23
	Whittingham Road	0.22	0.41	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.56	0.15	1.25	A	430.36	645.54	77.28	0.12	0.86	77.29	0.12
Kestor Lane	0.63	0.34	1.65	C	250.51	375.76	92.50	0.25	1.03	92.52	0.25
Preston Road	0.72	0.29	2.51	C	444.13	666.19	137.06	0.21	1.52	137.09	0.21
Whittingham Road	0.48	0.21	0.90	B	220.23	330.34	55.35	0.17	0.61	55.35	0.17

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	353.09	88.27	350.84	276.60	223.80	0.00	974.76	823.88	0.362	0.00	0.56	0.096	A
Kestor Lane	205.53	51.38	203.13	191.06	383.58	0.00	541.91	348.95	0.379	0.00	0.60	0.176	B
Preston Road	364.38	91.10	360.95	387.65	199.06	0.00	781.41	694.00	0.466	0.00	0.86	0.142	A
Whittingham Road	180.68	45.17	179.08	238.68	321.33	0.00	625.41	492.03	0.289	0.00	0.40	0.134	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	421.62	105.41	420.74	332.20	268.80	0.00	953.69	823.88	0.442	0.56	0.78	0.112	A
Kestor Lane	245.42	61.36	244.27	229.39	460.15	0.00	514.74	348.95	0.477	0.60	0.89	0.221	B
Preston Road	435.11	108.78	433.37	465.28	239.13	0.00	762.93	694.00	0.570	0.86	1.29	0.181	B
Whittingham Road	215.76	53.94	215.12	286.62	385.88	0.00	595.51	492.03	0.362	0.40	0.56	0.157	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	516.38	129.09	514.57	405.13	328.24	0.00	925.86	823.88	0.558	0.78	1.23	0.145	A
Kestor Lane	300.58	75.14	297.72	280.10	562.71	0.00	478.34	348.95	0.628	0.89	1.60	0.327	C
Preston Road	532.89	133.22	528.33	568.60	291.83	0.00	738.64	694.00	0.721	1.29	2.43	0.279	C
Whittingham Road	264.24	66.06	262.95	349.74	470.42	0.00	556.35	492.03	0.475	0.56	0.88	0.204	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	516.38	129.09	516.32	408.25	330.19	0.00	924.95	823.88	0.558	1.23	1.25	0.147	A
Kestor Lane	300.58	75.14	300.39	281.76	564.75	0.00	477.62	348.95	0.629	1.60	1.65	0.338	C
Preston Road	532.89	133.22	532.57	571.30	293.85	0.00	737.71	694.00	0.722	2.43	2.51	0.291	C
Whittingham Road	264.24	66.06	264.19	352.17	474.25	0.00	554.58	492.03	0.476	0.88	0.90	0.207	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	421.62	105.41	423.40	336.87	271.74	0.00	952.31	823.88	0.443	1.25	0.80	0.114	A
Kestor Lane	245.42	61.36	248.25	231.89	463.25	0.00	513.64	348.95	0.478	1.65	0.94	0.228	B
Preston Road	435.11	108.78	439.69	469.36	242.15	0.00	761.55	694.00	0.571	2.51	1.37	0.189	B
Whittingham Road	215.76	53.94	217.02	290.24	391.59	0.00	592.86	492.03	0.364	0.90	0.58	0.160	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	353.09	88.27	354.01	280.75	226.82	0.00	973.35	823.88	0.363	0.80	0.57	0.097	A
Kestor Lane	205.53	51.38	206.79	193.54	387.29	0.00	540.60	348.95	0.380	0.94	0.62	0.180	B
Preston Road	364.38	91.10	366.29	392.10	201.98	0.00	780.06	694.00	0.467	1.37	0.89	0.146	A
Whittingham Road	180.68	45.17	181.36	242.05	326.22	0.00	623.14	492.03	0.290	0.58	0.41	0.136	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	8.14	0.54	0.096	A	A
Kestor Lane	8.50	0.57	0.176	B	B
Preston Road	12.21	0.81	0.142	A	A
Whittingham Road	5.77	0.38	0.134	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	11.39	0.76	0.112	A	A
Kestor Lane	12.68	0.85	0.221	B	B
Preston Road	18.46	1.23	0.181	B	B
Whittingham Road	8.11	0.54	0.157	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	17.72	1.18	0.145	A	A
Kestor Lane	22.10	1.47	0.327	C	B
Preston Road	33.34	2.22	0.279	C	B
Whittingham Road	12.61	0.84	0.204	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	18.66	1.24	0.147	A	A
Kestor Lane	24.45	1.63	0.338	C	C
Preston Road	37.25	2.48	0.291	C	B
Whittingham Road	13.38	0.89	0.207	B	B

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	12.51	0.83	0.114	A	A
Kestor Lane	14.99	1.00	0.228	B	B
Preston Road	21.85	1.46	0.189	B	B
Whittingham Road	9.08	0.61	0.160	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	8.86	0.59	0.097	A	A
Kestor Lane	9.79	0.65	0.180	B	B
Preston Road	13.96	0.93	0.146	A	A
Whittingham Road	6.40	0.43	0.136	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Import of 1. Derby Road_Preston Road PM.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\Callibrated
Report generation date: 07/04/2015 17:05:29

Summary of junction performance

	PM			
	Queue (PCU)	Delay (min)	RFC	LOS
	Derby Road_Preston Road - 2014 Surveyed			
Derby Road	2.71	0.33	0.74	C
Kestor Lane	0.70	0.21	0.42	B
Preston Road	1.73	0.14	0.64	A
Whittingham Road	1.52	0.26	0.61	C
	Derby Road_Preston Road - 2016 Assessment			
Derby Road	10.26	1.11	0.95	F
Kestor Lane	1.71	0.38	0.64	C
Preston Road	5.58	0.37	0.86	C
Whittingham Road	10.90	1.31	0.96	F
	Derby Road_Preston Road - 2016 Baseline			
Derby Road	6.74	0.78	0.89	E
Kestor Lane	1.61	0.36	0.63	C
Preston Road	3.93	0.27	0.80	C
Whittingham Road	7.61	0.93	0.91	F
	Derby Road_Preston Road - 2025 Assessment			
Derby Road	30.28	2.65	1.06	F
Kestor Lane	2.37	0.48	0.72	D
Preston Road	13.76	0.82	0.96	E
Whittingham Road	38.46	3.75	1.13	F
	Derby Road_Preston Road - 2025 Baseline			
Derby Road	20.72	1.98	1.02	F
Kestor Lane	2.31	0.47	0.71	D
Preston Road	8.00	0.51	0.90	D
Whittingham Road	28.40	2.81	1.07	F

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

"D2 - 2016 Baseline, PM " model duration: 16:45 - 18:15
"D4 - 2025 Baseline, PM" model duration: 16:45 - 18:15
"D6 - 2016 Assessment, PM" model duration: 16:45 - 18:15
"D8 - 2025 Assessment, PM" model duration: 16:45 - 18:15
"D10 - 2014 Surveyed, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 07/04/2015 17:05:27

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Derby Road_Preston Road - 2016 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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	Relations
2016 Baseline, PM	2016 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				0.56	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	-170.00	
Kestor Lane	Direct	Queue Surveys	-100.00	
Preston Road	Direct	Queue Surveys	250.00	
Whittingham Road	Direct	Queue Surveys	-170.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	879.554
Kestor Lane		(calculated)	(calculated)	0.355	698.042
Preston Road		(calculated)	(calculated)	0.461	1273.182
Whittingham Road		(calculated)	(calculated)	0.463	904.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	505.00	100.000
Kestor Lane	ONE HOUR	✓	253.00	100.000
Preston Road	ONE HOUR	✓	817.00	100.000
Whittingham Road	ONE HOUR	✓	479.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	60.000	337.000	108.000
	Kestor Lane	56.000	0.000	55.000	142.000
	Preston Road	449.000	133.000	0.000	235.000
	Whittingham Road	109.000	162.000	208.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.12	0.67	0.21
	Kestor Lane	0.22	0.00	0.22	0.56
	Preston Road	0.55	0.16	0.00	0.29
	Whittingham Road	0.23	0.34	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.89	0.78	6.74	E	463.40	695.10	269.61	0.39	3.00	269.68	0.39
Kestor Lane	0.63	0.36	1.61	C	232.16	348.24	88.78	0.25	0.99	88.80	0.26
Preston Road	0.80	0.27	3.93	C	749.69	1124.54	196.20	0.17	2.18	196.23	0.17
Whittingham Road	0.91	0.93	7.61	F	439.54	659.31	284.05	0.43	3.16	284.11	0.43

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	380.19	95.05	375.62	458.36	374.61	0.00	704.15	613.98	0.540	0.00	1.14	0.180	B
Kestor Lane	190.47	47.62	188.24	264.53	485.69	0.00	525.68	427.26	0.362	0.00	0.56	0.177	B
Preston Road	615.08	153.77	610.70	446.28	227.65	0.00	1168.23	1058.49	0.527	0.00	1.10	0.107	A
Whittingham Road	360.62	90.15	356.26	361.64	476.70	0.00	683.44	511.19	0.528	0.00	1.09	0.181	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	453.98	113.50	450.55	549.53	449.09	0.00	669.27	613.98	0.678	1.14	2.00	0.269	C
Kestor Lane	227.44	56.86	226.32	317.14	582.50	0.00	491.32	427.26	0.463	0.56	0.84	0.225	B
Preston Road	734.47	183.62	731.91	535.35	273.47	0.00	1147.10	1058.49	0.640	1.10	1.74	0.144	A
Whittingham Road	430.61	107.65	427.15	433.90	571.48	0.00	639.54	511.19	0.673	1.09	1.96	0.278	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	556.02	139.00	541.04	666.92	538.78	0.00	627.28	613.98	0.886	2.00	5.75	0.610	E
Kestor Lane	278.56	69.64	275.78	381.76	698.06	0.00	450.31	427.26	0.619	0.84	1.54	0.338	C
Preston Road	899.53	224.88	891.43	642.30	331.53	0.00	1120.34	1058.49	0.803	1.74	3.76	0.253	C
Whittingham Road	527.39	131.85	509.63	526.90	696.06	0.00	581.84	511.19	0.906	1.96	6.39	0.703	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	556.02	139.00	552.05	674.48	549.95	0.00	622.05	613.98	0.894	5.75	6.74	0.781	E
Kestor Lane	278.56	69.64	278.24	388.64	713.36	0.00	444.88	427.26	0.626	1.54	1.61	0.359	C
Preston Road	899.53	224.88	898.87	655.78	335.82	0.00	1118.36	1058.49	0.804	3.76	3.93	0.271	C
Whittingham Road	527.39	131.85	522.52	532.78	701.91	0.00	579.13	511.19	0.911	6.39	7.61	0.931	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	453.98	113.50	471.56	562.07	470.17	0.00	659.40	613.98	0.688	6.74	2.34	0.345	C
Kestor Lane	227.44	56.86	230.21	329.86	611.87	0.00	480.90	427.26	0.473	1.61	0.92	0.242	B
Preston Road	734.47	183.62	742.81	561.06	281.01	0.00	1143.63	1058.49	0.642	3.93	1.84	0.153	A
Whittingham Road	430.61	107.65	452.14	443.71	580.10	0.00	635.55	511.19	0.678	7.61	2.23	0.360	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	380.19	95.05	384.70	465.09	382.46	0.00	700.47	613.98	0.543	2.34	1.22	0.193	B
Kestor Lane	190.47	47.62	191.82	269.71	497.45	0.00	521.50	427.26	0.365	0.92	0.59	0.183	B
Preston Road	615.08	153.77	617.92	456.88	232.39	0.00	1166.04	1058.49	0.527	1.84	1.13	0.110	A
Whittingham Road	360.62	90.15	364.91	367.67	482.64	0.00	680.69	511.19	0.530	2.23	1.16	0.192	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	16.00	1.07	0.180	B	B
Kestor Lane	7.91	0.53	0.177	B	B
Preston Road	15.68	1.05	0.107	A	A
Whittingham Road	15.25	1.02	0.181	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	27.73	1.85	0.269	C	B
Kestor Lane	11.99	0.80	0.225	B	B
Preston Road	24.77	1.65	0.144	A	A
Whittingham Road	27.03	1.80	0.278	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	69.45	4.63	0.610	E	D
Kestor Lane	21.17	1.41	0.338	C	C
Preston Road	50.54	3.37	0.253	C	B
Whittingham Road	74.88	4.99	0.703	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	94.85	6.32	0.781	E	D
Kestor Lane	23.78	1.59	0.359	C	C
Preston Road	57.94	3.86	0.271	C	B
Whittingham Road	106.31	7.09	0.931	F	E

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	42.14	2.81	0.345	C	C
Kestor Lane	14.74	0.98	0.242	B	B
Preston Road	29.59	1.97	0.153	A	A
Whittingham Road	42.15	2.81	0.360	C	C

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	19.44	1.30	0.193	B	B
Kestor Lane	9.19	0.61	0.183	B	B
Preston Road	17.69	1.18	0.110	A	A
Whittingham Road	18.42	1.23	0.192	B	B

Derby Road_Preston Road - 2025 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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	Relations
2025 Baseline, PM	2025 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				1.40	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	-170.00	
Kestor Lane	Direct	Queue Surveys	-100.00	
Preston Road	Direct	Queue Surveys	250.00	
Whittingham Road	Direct	Queue Surveys	-170.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	879.554
Kestor Lane		(calculated)	(calculated)	0.355	698.042
Preston Road		(calculated)	(calculated)	0.461	1273.182
Whittingham Road		(calculated)	(calculated)	0.463	904.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	568.00	100.000
Kestor Lane	ONE HOUR	✓	278.00	100.000
Preston Road	ONE HOUR	✓	907.00	100.000
Whittingham Road	ONE HOUR	✓	524.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	68.000	379.000	121.000
	Kestor Lane	63.000	0.000	62.000	153.000
	Preston Road	507.000	150.000	0.000	250.000
	Whittingham Road	123.000	177.000	224.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.12	0.67	0.21
	Kestor Lane	0.23	0.00	0.22	0.55
	Preston Road	0.56	0.17	0.00	0.28
	Whittingham Road	0.23	0.34	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	1.02	1.98	20.72	F	521.21	781.81	678.02	0.87	7.53	678.16	0.87
Kestor Lane	0.71	0.47	2.31	D	255.10	382.65	122.45	0.32	1.36	122.49	0.32
Preston Road	0.90	0.51	8.00	D	832.28	1248.42	327.46	0.26	3.64	327.52	0.26
Whittingham Road	1.07	2.81	28.40	F	480.83	721.25	825.30	1.14	9.17	825.42	1.14

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	427.62	106.91	421.30	516.59	409.43	0.00	687.84	616.98	0.622	0.00	1.58	0.220	B
Kestor Lane	209.29	52.32	206.55	293.72	537.01	0.00	507.46	428.85	0.412	0.00	0.69	0.198	B
Preston Road	682.84	170.71	677.20	493.32	250.23	0.00	1157.82	1058.97	0.590	0.00	1.41	0.123	A
Whittingham Road	394.49	98.62	388.67	390.08	537.35	0.00	655.35	503.93	0.602	0.00	1.46	0.221	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	510.62	127.66	503.84	618.73	489.54	0.00	650.33	616.98	0.785	1.58	3.28	0.392	C
Kestor Lane	249.92	62.48	248.28	351.34	642.04	0.00	470.19	428.85	0.532	0.69	1.09	0.268	C
Preston Road	815.37	203.84	811.21	590.08	300.24	0.00	1134.76	1058.97	0.719	1.41	2.45	0.183	B
Whittingham Road	471.07	117.77	464.39	467.57	643.88	0.00	606.01	503.93	0.777	1.46	3.13	0.405	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	625.38	156.34	583.68	738.55	561.01	0.00	616.86	616.98	1.014	3.28	13.70	1.153	F
Kestor Lane	306.08	76.52	301.87	408.03	736.66	0.00	436.61	428.85	0.701	1.09	2.15	0.432	D
Preston Road	998.63	249.66	979.93	679.64	358.88	0.00	1107.73	1058.97	0.902	2.45	7.12	0.419	D
Whittingham Road	576.93	144.23	521.32	560.58	778.24	0.00	543.78	503.93	1.061	3.13	17.03	1.475	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	625.38	156.34	597.29	750.23	571.29	0.00	612.05	616.98	1.022	13.70	20.72	1.976	F
Kestor Lane	306.08	76.52	305.44	415.61	752.98	0.00	430.82	428.85	0.710	2.15	2.31	0.473	D
Preston Road	998.63	249.66	995.12	693.86	364.56	0.00	1105.11	1058.97	0.904	7.12	8.00	0.513	D
Whittingham Road	576.93	144.23	531.47	569.63	790.05	0.00	538.31	503.93	1.072	17.03	28.40	2.806	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	510.62	127.66	567.50	657.51	570.34	0.00	612.50	616.98	0.834	20.72	6.50	1.404	F
Kestor Lane	249.92	62.48	253.51	396.96	740.88	0.00	435.11	428.85	0.574	2.31	1.41	0.337	C
Preston Road	815.37	203.84	836.42	676.52	317.86	0.00	1126.64	1058.97	0.724	8.00	2.74	0.220	B
Whittingham Road	471.07	117.77	564.52	490.96	663.33	0.00	597.00	503.93	0.789	28.40	5.03	1.793	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	427.62	106.91	446.56	528.37	426.17	0.00	680.01	616.98	0.629	6.50	1.77	0.276	C
Kestor Lane	209.29	52.32	211.96	305.12	567.61	0.00	496.60	428.85	0.421	1.41	0.75	0.213	B
Preston Road	682.84	170.71	687.87	519.75	259.82	0.00	1153.40	1058.97	0.592	2.74	1.48	0.130	A
Whittingham Road	394.49	98.62	408.23	401.39	546.31	0.00	651.20	503.93	0.606	5.03	1.60	0.260	C

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	21.69	1.45	0.220	B	B
Kestor Lane	9.66	0.64	0.198	B	B
Preston Road	19.96	1.33	0.123	A	A
Whittingham Road	20.05	1.34	0.221	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	43.31	2.89	0.392	C	C
Kestor Lane	15.45	1.03	0.268	C	B
Preston Road	34.30	2.29	0.183	B	B
Whittingham Road	41.25	2.75	0.405	C	C

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	140.26	9.35	1.153	F	E
Kestor Lane	28.85	1.92	0.432	D	C
Preston Road	87.43	5.83	0.419	D	C
Whittingham Road	163.24	10.88	1.475	F	F

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	260.30	17.35	1.976	F	F
Kestor Lane	33.75	2.25	0.473	D	C
Preston Road	114.55	7.64	0.513	D	C
Whittingham Road	342.21	22.81	2.806	F	F

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	180.22	12.01	1.404	F	F
Kestor Lane	22.90	1.53	0.337	C	C
Preston Road	47.84	3.19	0.220	B	B
Whittingham Road	230.83	15.39	1.793	F	F

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	32.24	2.15	0.276	C	B
Kestor Lane	11.85	0.79	0.213	B	B
Preston Road	23.38	1.56	0.130	A	A
Whittingham Road	27.71	1.85	0.260	C	B

Derby Road_Preston Road - 2016 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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
2016 Assessment, PM	2016 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				0.76	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	-170.00	
Kestor Lane	Direct	Queue Surveys	-100.00	
Preston Road	Direct	Queue Surveys	250.00	
Whittingham Road	Direct	Queue Surveys	-170.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	879.554
Kestor Lane		(calculated)	(calculated)	0.355	698.042
Preston Road		(calculated)	(calculated)	0.461	1273.182
Whittingham Road		(calculated)	(calculated)	0.463	904.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	536.00	100.000
Kestor Lane	ONE HOUR	✓	253.00	100.000
Preston Road	ONE HOUR	✓	872.00	100.000
Whittingham Road	ONE HOUR	✓	479.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	60.000	368.000	108.000
	Kestor Lane	56.000	0.000	55.000	142.000
	Preston Road	504.000	133.000	0.000	235.000
	Whittingham Road	109.000	162.000	208.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.11	0.69	0.20
	Kestor Lane	0.22	0.00	0.22	0.56
	Preston Road	0.58	0.15	0.00	0.27
	Whittingham Road	0.23	0.34	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.95	1.11	10.26	F	491.84	737.76	365.52	0.50	4.06	365.60	0.50
Kestor Lane	0.64	0.38	1.71	C	232.16	348.24	92.92	0.27	1.03	92.94	0.27
Preston Road	0.86	0.37	5.58	C	800.16	1200.24	253.93	0.21	2.82	253.98	0.21
Whittingham Road	0.96	1.31	10.90	F	439.54	659.31	361.19	0.55	4.01	361.26	0.55

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	403.53	100.88	398.32	499.19	374.35	0.00	704.27	622.38	0.573	0.00	1.30	0.193	B
Kestor Lane	190.47	47.62	188.19	264.35	508.32	0.00	517.64	424.64	0.368	0.00	0.57	0.181	B
Preston Road	656.49	164.12	651.45	468.97	227.54	0.00	1168.28	1062.16	0.562	0.00	1.26	0.115	A
Whittingham Road	360.62	90.15	356.00	361.44	517.54	0.00	664.53	501.32	0.543	0.00	1.15	0.192	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	481.85	120.46	477.45	598.31	448.54	0.00	669.53	622.38	0.720	1.30	2.40	0.305	C
Kestor Lane	227.44	56.86	226.25	316.77	609.23	0.00	481.83	424.64	0.472	0.57	0.87	0.234	B
Preston Road	783.91	195.98	780.60	562.21	273.27	0.00	1147.20	1062.16	0.683	1.26	2.09	0.162	A
Whittingham Road	430.61	107.65	426.55	433.56	620.31	0.00	616.93	501.32	0.698	1.15	2.17	0.309	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	590.15	147.54	567.72	723.12	532.85	0.00	630.05	622.38	0.937	2.40	8.01	0.773	E
Kestor Lane	278.56	69.64	275.60	378.11	722.47	0.00	441.65	424.64	0.631	0.87	1.61	0.355	C
Preston Road	960.09	240.02	947.66	667.99	330.08	0.00	1121.01	1062.16	0.856	2.09	5.20	0.325	C
Whittingham Road	527.39	131.85	502.71	524.46	753.27	0.00	555.34	501.32	0.950	2.17	8.34	0.883	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	590.15	147.54	581.15	733.29	545.67	0.00	624.05	622.38	0.946	8.01	10.26	1.107	F
Kestor Lane	278.56	69.64	278.17	386.16	740.66	0.00	435.19	424.64	0.640	1.61	1.71	0.380	C
Preston Road	960.09	240.02	958.58	684.03	334.80	0.00	1118.83	1062.16	0.858	5.20	5.58	0.366	C
Whittingham Road	527.39	131.85	517.15	531.56	761.82	0.00	551.38	501.32	0.956	8.34	10.90	1.307	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	481.85	120.46	510.75	617.29	479.92	0.00	654.84	622.38	0.736	10.26	3.03	0.481	D
Kestor Lane	227.44	56.86	230.33	335.65	655.01	0.00	465.58	424.64	0.489	1.71	0.98	0.258	C
Preston Road	783.91	195.98	797.17	602.17	283.17	0.00	1142.63	1062.16	0.686	5.58	2.26	0.180	B
Whittingham Road	430.61	107.65	463.89	447.02	633.32	0.00	610.90	501.32	0.705	10.90	2.58	0.482	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	403.53	100.88	410.05	507.42	383.43	0.00	700.02	622.38	0.576	3.03	1.40	0.211	B
Kestor Lane	190.47	47.62	192.00	270.39	523.08	0.00	512.40	424.64	0.372	0.98	0.60	0.188	B
Preston Road	656.49	164.12	660.28	482.20	232.88	0.00	1165.82	1062.16	0.563	2.26	1.31	0.120	A
Whittingham Road	360.62	90.15	366.00	368.33	524.84	0.00	661.15	501.32	0.545	2.58	1.23	0.207	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	18.10	1.21	0.193	B	B
Kestor Lane	8.09	0.54	0.181	B	B
Preston Road	17.95	1.20	0.115	A	A
Whittingham Road	16.10	1.07	0.192	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	32.81	2.19	0.305	C	B
Kestor Lane	12.39	0.83	0.234	B	B
Preston Road	29.54	1.97	0.162	A	A
Whittingham Road	29.70	1.98	0.309	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	91.10	6.07	0.773	E	D
Kestor Lane	22.10	1.47	0.355	C	C
Preston Road	67.11	4.47	0.325	C	B
Whittingham Road	92.13	6.14	0.883	F	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	138.93	9.26	1.107	F	E
Kestor Lane	25.07	1.67	0.380	C	C
Preston Road	81.35	5.42	0.366	C	C
Whittingham Road	146.21	9.75	1.307	F	E

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	61.85	4.12	0.481	D	C
Kestor Lane	15.77	1.05	0.258	C	B
Preston Road	37.39	2.49	0.180	B	B
Whittingham Road	57.20	3.81	0.482	D	C

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	22.73	1.52	0.211	B	B
Kestor Lane	9.48	0.63	0.188	B	B
Preston Road	20.59	1.37	0.120	A	A
Whittingham Road	19.86	1.32	0.207	B	B

Derby Road_Preston Road - 2025 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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
2025 Assessment, PM	2025 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				1.90	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	-170.00	
Kestor Lane	Direct	Queue Surveys	-100.00	
Preston Road	Direct	Queue Surveys	250.00	
Whittingham Road	Direct	Queue Surveys	-170.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	879.554
Kestor Lane		(calculated)	(calculated)	0.355	698.042
Preston Road		(calculated)	(calculated)	0.461	1273.182
Whittingham Road		(calculated)	(calculated)	0.463	904.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	599.00	100.000
Kestor Lane	ONE HOUR	✓	278.00	100.000
Preston Road	ONE HOUR	✓	962.00	100.000
Whittingham Road	ONE HOUR	✓	524.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	68.000	410.000	121.000
	Kestor Lane	63.000	0.000	62.000	153.000
	Preston Road	562.000	150.000	0.000	250.000
	Whittingham Road	123.000	177.000	224.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.11	0.68	0.20
	Kestor Lane	0.23	0.00	0.22	0.55
	Preston Road	0.58	0.16	0.00	0.26
	Whittingham Road	0.23	0.34	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	1.06	2.65	30.28	F	549.65	824.48	1043.95	1.27	11.60	1044.18	1.27
Kestor Lane	0.72	0.48	2.37	D	255.10	382.65	127.43	0.33	1.42	127.48	0.33
Preston Road	0.96	0.82	13.76	E	882.75	1324.12	478.48	0.36	5.32	478.56	0.36
Whittingham Road	1.13	3.75	38.46	F	480.83	721.25	1208.81	1.68	13.43	1208.96	1.68

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	450.96	112.74	443.70	557.22	409.02	0.00	688.03	624.51	0.655	0.00	1.82	0.239	B
Kestor Lane	209.29	52.32	206.47	293.42	559.29	0.00	499.56	426.43	0.419	0.00	0.70	0.203	B
Preston Road	724.24	181.06	717.72	515.71	250.05	0.00	1157.90	1062.27	0.625	0.00	1.63	0.134	A
Whittingham Road	394.49	98.62	388.24	389.78	577.99	0.00	636.52	495.32	0.620	0.00	1.56	0.236	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	538.49	134.62	529.39	666.85	488.17	0.00	650.97	624.51	0.827	1.82	4.09	0.461	D
Kestor Lane	249.92	62.48	248.18	350.41	667.15	0.00	461.28	426.43	0.542	0.70	1.14	0.279	C
Preston Road	864.82	216.20	859.23	615.56	299.77	0.00	1134.98	1062.27	0.762	1.63	3.03	0.213	B
Whittingham Road	471.07	117.77	462.84	466.82	692.18	0.00	583.64	495.32	0.807	1.56	3.62	0.467	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	659.51	164.88	601.23	786.94	546.68	0.00	623.58	624.51	1.058	4.09	18.66	1.428	F
Kestor Lane	306.08	76.52	301.79	399.01	748.90	0.00	432.26	426.43	0.708	1.14	2.21	0.445	D
Preston Road	1059.18	264.80	1027.03	694.76	355.93	0.00	1109.09	1062.27	0.955	3.03	11.07	0.580	D
Whittingham Road	576.93	144.23	505.11	554.44	828.52	0.00	520.49	495.32	1.108	3.62	21.58	1.824	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	659.51	164.88	613.03	801.29	553.32	0.00	620.47	624.51	1.063	18.66	30.28	2.650	F
Kestor Lane	306.08	76.52	305.47	405.14	761.20	0.00	427.90	426.43	0.715	2.21	2.37	0.485	D
Preston Road	1059.18	264.80	1048.42	705.50	361.18	0.00	1106.67	1062.27	0.957	11.07	13.76	0.825	E
Whittingham Road	576.93	144.23	509.42	564.41	845.19	0.00	512.77	495.32	1.125	21.58	38.46	3.746	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	538.49	134.62	595.68	716.32	564.24	0.00	615.35	624.51	0.875	30.28	15.98	2.409	F
Kestor Lane	249.92	62.48	253.45	395.57	764.35	0.00	426.78	426.43	0.586	2.37	1.48	0.353	C
Preston Road	864.82	216.20	905.75	700.55	317.25	0.00	1126.92	1062.27	0.767	13.76	3.53	0.314	C
Whittingham Road	471.07	117.77	552.76	495.20	727.80	0.00	567.14	495.32	0.831	38.46	18.03	3.139	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	450.96	112.74	505.70	583.17	465.73	0.00	661.48	624.51	0.682	15.98	2.30	0.504	D
Kestor Lane	209.29	52.32	211.92	326.69	644.75	0.00	469.23	426.43	0.446	1.48	0.83	0.235	B
Preston Road	724.24	181.06	731.38	589.86	266.81	0.00	1150.17	1062.27	0.630	3.53	1.74	0.146	A
Whittingham Road	394.49	98.62	459.57	408.85	589.34	0.00	631.27	495.32	0.625	18.03	1.76	0.480	D

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	24.67	1.64	0.239	B	B
Kestor Lane	9.90	0.66	0.203	B	B
Preston Road	22.94	1.53	0.134	A	A
Whittingham Road	21.37	1.42	0.236	B	B

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	52.62	3.51	0.461	D	C
Kestor Lane	16.02	1.07	0.279	C	B
Preston Road	41.71	2.78	0.213	B	B
Whittingham Road	46.75	3.12	0.467	D	C

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	181.86	12.12	1.428	F	F
Kestor Lane	29.65	1.98	0.445	D	C
Preston Road	124.76	8.32	0.580	D	C
Whittingham Road	198.93	13.26	1.824	F	F

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	368.62	24.57	2.650	F	F
Kestor Lane	34.61	2.31	0.485	D	C
Preston Road	188.43	12.56	0.825	E	D
Whittingham Road	451.21	30.08	3.746	F	F

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	346.98	23.13	2.409	F	F
Kestor Lane	24.06	1.60	0.353	C	C
Preston Road	72.87	4.86	0.314	C	B
Whittingham Road	423.65	28.24	3.139	F	F

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	69.21	4.61	0.504	D	C
Kestor Lane	13.18	0.88	0.235	B	B
Preston Road	27.78	1.85	0.146	A	A
Whittingham Road	66.91	4.46	0.480	D	C

Derby Road_Preston Road - 2014 Surveyed, PM

Data Errors and Warnings

No errors or warnings

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
Derby Road_Preston Road	ARCADY		✓				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	Relatio
2014 Surveyed, PM	2014 Surveyed	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (min)	Junction LOS
1	Derby Road / Preston Road	Roundabout	A,B,C,1				0.23	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Derby Road	A	Derby Road	
Kestor Lane	B	Kestor Lane	
Preston Road	C	Preston Road	
Whittingham Road	1	Whittingham Road	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Derby Road	0.00	99999.00		0.00
Kestor Lane	0.00	99999.00		0.00
Preston Road	0.00	99999.00		0.00
Whittingham Road	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Derby Road	3.40	7.00	4.00	11.00	17.00	76.00	
Kestor Lane	3.60	5.50	4.00	3.00	17.00	64.00	
Preston Road	3.80	4.50	4.00	8.00	17.00	68.00	
Whittingham Road	3.60	5.50	7.00	6.00	17.00	64.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Derby Road	Direct	Queue Surveys	-170.00	
Kestor Lane	Direct	Queue Surveys	-100.00	
Preston Road	Direct	Queue Surveys	250.00	
Whittingham Road	Direct	Queue Surveys	-170.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Derby Road		(calculated)	(calculated)	0.468	879.554
Kestor Lane		(calculated)	(calculated)	0.355	698.042
Preston Road		(calculated)	(calculated)	0.461	1273.182
Whittingham Road		(calculated)	(calculated)	0.463	904.240

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Derby Road	ONE HOUR	✓	466.00	100.000
Kestor Lane	ONE HOUR	✓	186.00	100.000
Preston Road	ONE HOUR	✓	669.00	100.000
Whittingham Road	ONE HOUR	✓	327.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.000	58.000	313.000	95.000
	Kestor Lane	54.000	0.000	53.000	79.000
	Preston Road	430.000	128.000	0.000	111.000
	Whittingham Road	97.000	111.000	119.000	0.000

Turning Proportions (PCU) - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.00	0.12	0.67	0.20
	Kestor Lane	0.29	0.00	0.28	0.42
	Preston Road	0.64	0.19	0.00	0.17
	Whittingham Road	0.30	0.34	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	1.000	1.000	1.000	1.000
	Kestor Lane	1.000	1.000	1.000	1.000
	Preston Road	1.000	1.000	1.000	1.000
	Whittingham Road	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Derby Road / Preston Road (for whole period)

		To			
		Derby Road	Kestor Lane	Preston Road	Whittingham Road
From	Derby Road	0.0	0.0	0.0	0.0
	Kestor Lane	0.0	0.0	0.0	0.0
	Preston Road	0.0	0.0	0.0	0.0
	Whittingham Road	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Derby Road	0.74	0.33	2.71	C	427.61	641.41	142.44	0.22	1.58	142.48	0.22
Kestor Lane	0.42	0.21	0.70	B	170.68	256.02	44.35	0.17	0.49	44.35	0.17
Preston Road	0.64	0.14	1.73	A	613.89	920.83	103.31	0.11	1.15	103.32	0.11
Whittingham Road	0.61	0.26	1.52	C	300.06	450.09	84.83	0.19	0.94	84.84	0.19

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	350.83	87.71	347.41	434.52	267.44	0.00	754.33	641.53	0.465	0.00	0.85	0.146	A
Kestor Lane	140.03	35.01	138.71	221.88	392.97	0.00	558.58	442.85	0.251	0.00	0.33	0.142	A
Preston Road	503.66	125.91	500.77	361.67	170.01	0.00	1194.80	1066.90	0.422	0.00	0.72	0.086	A
Whittingham Road	246.18	61.55	244.00	212.83	457.95	0.00	692.12	432.52	0.356	0.00	0.54	0.133	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	418.92	104.73	417.09	521.06	320.85	0.00	729.32	641.53	0.574	0.85	1.31	0.191	B
Kestor Lane	167.21	41.80	166.72	266.17	471.77	0.00	530.62	442.85	0.315	0.33	0.45	0.165	A
Preston Road	601.42	150.35	600.19	434.25	204.24	0.00	1179.02	1066.90	0.510	0.72	1.03	0.103	A
Whittingham Road	293.97	73.49	292.90	255.42	549.01	0.00	649.95	432.52	0.452	0.54	0.81	0.168	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	513.08	128.27	507.90	636.88	391.76	0.00	696.12	641.53	0.737	1.31	2.61	0.310	C
Kestor Lane	204.79	51.20	203.83	324.93	574.73	0.00	494.08	442.85	0.414	0.45	0.69	0.206	B
Preston Road	736.58	184.15	733.87	529.27	249.29	0.00	1158.25	1066.90	0.636	1.03	1.70	0.140	A
Whittingham Road	360.03	90.01	357.34	311.88	671.29	0.00	593.31	432.52	0.607	0.81	1.48	0.251	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	513.08	128.27	512.67	639.58	394.05	0.00	695.04	641.53	0.738	2.61	2.71	0.327	C
Kestor Lane	204.79	51.20	204.75	326.89	579.83	0.00	492.27	442.85	0.416	0.69	0.70	0.209	B
Preston Road	736.58	184.15	736.49	533.66	250.92	0.00	1157.50	1066.90	0.636	1.70	1.73	0.142	A
Whittingham Road	360.03	90.01	359.90	313.67	673.74	0.00	592.18	432.52	0.608	1.48	1.52	0.258	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	418.92	104.73	424.17	525.09	324.23	0.00	727.73	641.53	0.576	2.71	1.40	0.201	B
Kestor Lane	167.21	41.80	168.14	269.07	479.33	0.00	527.93	442.85	0.317	0.70	0.47	0.167	B
Preston Road	601.42	150.35	604.09	440.77	206.70	0.00	1177.89	1066.90	0.511	1.73	1.06	0.105	A
Whittingham Road	293.97	73.49	296.65	258.12	552.68	0.00	648.25	432.52	0.453	1.52	0.85	0.172	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Derby Road	350.83	87.71	352.86	438.72	270.57	0.00	752.86	641.53	0.466	1.40	0.89	0.151	A
Kestor Lane	140.03	35.01	140.55	224.48	398.95	0.00	556.46	442.85	0.252	0.47	0.34	0.144	A
Preston Road	503.66	125.91	504.94	367.06	172.44	0.00	1193.68	1066.90	0.422	1.06	0.74	0.087	A
Whittingham Road	246.18	61.55	247.32	215.41	461.97	0.00	690.27	432.52	0.357	0.85	0.56	0.136	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	12.13	0.81	0.146	A	A
Kestor Lane	4.75	0.32	0.142	A	A
Preston Road	10.45	0.70	0.086	A	A
Whittingham Road	7.81	0.52	0.133	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	18.69	1.25	0.191	B	B
Kestor Lane	6.58	0.44	0.165	A	A
Preston Road	14.93	1.00	0.103	A	A
Whittingham Road	11.66	0.78	0.168	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	35.33	2.36	0.310	C	B
Kestor Lane	9.93	0.66	0.206	B	B
Preston Road	24.31	1.62	0.140	A	A
Whittingham Road	20.71	1.38	0.251	C	B

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	40.02	2.67	0.327	C	B
Kestor Lane	10.49	0.70	0.209	B	B
Preston Road	25.77	1.72	0.142	A	A
Whittingham Road	22.55	1.50	0.258	C	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	22.37	1.49	0.201	B	B
Kestor Lane	7.34	0.49	0.167	B	B
Preston Road	16.48	1.10	0.105	A	A
Whittingham Road	13.36	0.89	0.172	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Derby Road	13.92	0.93	0.151	A	A
Kestor Lane	5.27	0.35	0.144	A	A
Preston Road	11.36	0.76	0.087	A	A
Whittingham Road	8.74	0.58	0.136	A	A

Appendix 18

ARCADY Outputs – Preston Road/Chapel Hill

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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

Filename: Import of 2. Preston Road_Chapel Hill AM.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\Callibrated
Report generation date: 07/04/2015 16:47:37

Summary of junction performance

	AM			
	Queue (PCU)	Delay (min)	RFC	LOS
	Preston Road/ Chapel Hill - 2014 Surveyed			
Preston Rd (SB)	1.75	0.18	0.64	B
Chapel Hill	0.78	0.12	0.44	A
Preston Rd (NB)	0.65	0.06	0.39	A
	Preston Road/ Chapel Hill - 2016 Assessment			
Preston Rd (SB)	9.49	0.75	0.93	E
Chapel Hill	1.80	0.21	0.65	B
Preston Rd (NB)	0.96	0.07	0.49	A
	Preston Road/ Chapel Hill - 2016 Baseline			
Preston Rd (SB)	5.25	0.44	0.85	D
Chapel Hill	1.60	0.19	0.62	B
Preston Rd (NB)	0.91	0.07	0.48	A
	Preston Road/ Chapel Hill - 2025 Assessment			
Preston Rd (SB)	31.37	2.02	1.04	F
Chapel Hill	2.65	0.29	0.73	C
Preston Rd (NB)	1.19	0.08	0.55	A
	Preston Road/ Chapel Hill - 2025 Baseline			
Preston Rd (SB)	13.82	1.06	0.96	F
Chapel Hill	2.42	0.26	0.72	C
Preston Rd (NB)	1.13	0.08	0.53	A

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

"D1 - 2016 Baseline, AM " model duration: 07:45 - 09:15
"D3 - 2025 Baseline, AM" model duration: 07:45 - 09:15
"D5 - 2016 Assessment, AM" model duration: 07:45 - 09:15
"D7 - 2025 Assessment, AM" model duration: 07:45 - 09:15
"D8 - 2014 Surveyed, AM" model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 07/04/2015 16:47:36

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Preston Road/ Chapel Hill - 2016 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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	Relations
2016 Baseline, AM	2016 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.23	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	Direct	Queue Surveys	195.00	
Chapel Hill	Direct		300.00	
Preston Rd (NB)	Direct	Queue Surveys	800.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	1071.783
Chapel Hill		(calculated)	(calculated)	0.601	1233.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1689.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	679.00	100.000
Chapel Hill	ONE HOUR	✓	471.00	100.000
Preston Rd (NB)	ONE HOUR	✓	726.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	78.000	601.000
	Chapel Hill	31.000	0.000	440.000
	Preston Rd (NB)	421.000	305.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.11	0.89
	Chapel Hill	0.07	0.00	0.93
	Preston Rd (NB)	0.58	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.85	0.44	5.25	D	623.06	934.59	237.13	0.25	2.63	237.18	0.25
Chapel Hill	0.62	0.19	1.60	B	432.20	648.30	89.82	0.14	1.00	89.83	0.14
Preston Rd (NB)	0.48	0.07	0.91	A	666.19	999.29	60.64	0.06	0.67	60.64	0.06

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	511.19	127.80	506.51	339.02	228.81	0.00	939.53	669.04	0.544	0.00	1.17	0.137	A
Chapel Hill	354.59	88.65	352.29	287.00	448.32	0.00	963.48	876.97	0.368	0.00	0.58	0.098	A
Preston Rd (NB)	546.57	136.64	544.65	777.42	23.19	0.00	1677.36	1658.59	0.326	0.00	0.48	0.053	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	610.41	152.60	607.32	405.91	273.93	0.00	913.45	669.04	0.668	1.17	1.94	0.194	B
Chapel Hill	423.42	105.85	422.29	343.70	537.55	0.00	909.82	876.97	0.465	0.58	0.86	0.123	A
Preston Rd (NB)	652.66	163.16	652.04	932.05	27.79	0.00	1674.85	1658.59	0.390	0.48	0.63	0.059	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	747.59	186.90	735.80	496.84	335.35	0.00	877.95	669.04	0.852	1.94	4.89	0.393	C
Chapel Hill	518.58	129.65	515.78	419.88	651.27	0.00	841.43	876.97	0.616	0.86	1.56	0.183	B
Preston Rd (NB)	799.34	199.84	798.24	1133.11	33.95	0.00	1671.51	1658.59	0.478	0.63	0.91	0.069	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	747.59	186.90	746.15	497.64	335.80	0.00	877.69	669.04	0.852	4.89	5.25	0.444	D
Chapel Hill	518.58	129.65	518.40	421.52	660.44	0.00	835.92	876.97	0.620	1.56	1.60	0.189	B
Preston Rd (NB)	799.34	199.84	799.33	1144.72	34.12	0.00	1671.42	1658.59	0.478	0.91	0.91	0.069	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	610.41	152.60	623.03	407.15	274.64	0.00	913.04	669.04	0.669	5.25	2.09	0.215	B
Chapel Hill	423.42	105.85	426.23	346.21	551.46	0.00	901.46	876.97	0.470	1.60	0.90	0.127	A
Preston Rd (NB)	652.66	163.16	653.74	949.64	28.05	0.00	1674.71	1658.59	0.390	0.91	0.64	0.059	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	511.19	127.80	514.69	340.73	229.88	0.00	938.91	669.04	0.544	2.09	1.22	0.143	A
Chapel Hill	354.59	88.65	355.82	289.01	455.57	0.00	959.12	876.97	0.370	0.90	0.59	0.100	A
Preston Rd (NB)	546.57	136.64	547.20	787.97	23.42	0.00	1677.23	1658.59	0.326	0.64	0.49	0.053	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	16.56	1.10	0.137	A	A
Chapel Hill	8.34	0.56	0.098	A	A
Preston Rd (NB)	7.06	0.47	0.053	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	27.33	1.82	0.194	B	B
Chapel Hill	12.43	0.83	0.123	A	A
Preston Rd (NB)	9.35	0.62	0.059	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	62.47	4.16	0.393	C	C
Chapel Hill	22.01	1.47	0.183	B	B
Preston Rd (NB)	13.32	0.89	0.069	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	76.55	5.10	0.444	D	C
Chapel Hill	23.80	1.59	0.189	B	B
Preston Rd (NB)	13.67	0.91	0.069	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	35.00	2.33	0.215	B	B
Chapel Hill	14.08	0.94	0.127	A	A
Preston Rd (NB)	9.84	0.66	0.059	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	19.21	1.28	0.143	A	A
Chapel Hill	9.16	0.61	0.100	A	A
Preston Rd (NB)	7.41	0.49	0.053	A	A

Preston Road/ Chapel Hill - 2025 Baseline, AM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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	Relations
2025 Baseline, AM	2025 Baseline	AM		ONE HOUR	07:45	09:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.48	D

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	Direct	Queue Surveys	195.00	
Chapel Hill	Direct		300.00	
Preston Rd (NB)	Direct	Queue Surveys	800.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	1071.783
Chapel Hill		(calculated)	(calculated)	0.601	1233.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1689.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	749.00	100.000
Chapel Hill	ONE HOUR	✓	521.00	100.000
Preston Rd (NB)	ONE HOUR	✓	806.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	**Chapel Hill**	**Preston Rd (NB)**
From	**Preston Rd (SB)**	0.000	88.000	661.000
	Chapel Hill	35.000	0.000	486.000
	Preston Rd (NB)	466.000	340.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	**Chapel Hill**	**Preston Rd (NB)**
From	**Preston Rd (SB)**	0.00	0.12	0.88
	Chapel Hill	0.07	0.00	0.93
	Preston Rd (NB)	0.58	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.96	1.06	13.82	F	687.30	1030.94	465.62	0.45	5.17	465.71	0.45
Chapel Hill	0.72	0.26	2.42	C	478.08	717.12	124.51	0.17	1.38	124.53	0.17
Preston Rd (NB)	0.53	0.08	1.13	A	739.60	1109.40	73.25	0.07	0.81	73.26	0.07

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	563.89	140.97	557.80	375.68	255.02	0.00	924.38	667.56	0.610	0.00	1.52	0.161	A
Chapel Hill	392.24	98.06	389.39	320.55	492.26	0.00	937.05	878.81	0.419	0.00	0.71	0.109	A
Preston Rd (NB)	606.80	151.70	604.54	855.50	26.16	0.00	1675.74	1657.88	0.362	0.00	0.56	0.056	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	673.34	168.33	668.04	449.83	305.33	0.00	895.30	667.56	0.752	1.52	2.84	0.258	C
Chapel Hill	468.37	117.09	466.73	383.81	589.55	0.00	878.55	878.81	0.533	0.71	1.12	0.145	A
Preston Rd (NB)	724.58	181.14	723.80	1024.93	31.35	0.00	1672.92	1657.88	0.433	0.56	0.76	0.063	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	824.66	206.17	792.58	550.46	373.73	0.00	855.77	667.56	0.964	2.84	10.87	0.724	E
Chapel Hill	573.63	143.41	568.99	466.85	699.46	0.00	812.45	878.81	0.706	1.12	2.28	0.242	B
Preston Rd (NB)	887.42	221.86	885.96	1230.23	38.22	0.00	1669.19	1657.88	0.532	0.76	1.12	0.076	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	824.66	206.17	812.83	551.56	374.34	0.00	855.42	667.56	0.964	10.87	13.82	1.058	F
Chapel Hill	573.63	143.41	573.07	469.84	717.33	0.00	801.71	878.81	0.716	2.28	2.42	0.261	C
Preston Rd (NB)	887.42	221.86	887.40	1251.90	38.50	0.00	1669.04	1657.88	0.532	1.12	1.13	0.077	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	673.34	168.33	715.51	451.54	306.26	0.00	894.76	667.56	0.753	13.82	3.28	0.399	C
Chapel Hill	468.37	117.09	473.08	390.32	631.45	0.00	853.36	878.81	0.549	2.42	1.24	0.160	A
Preston Rd (NB)	724.58	181.14	726.02	1072.75	31.78	0.00	1672.69	1657.88	0.433	1.13	0.77	0.064	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	563.89	140.97	570.56	377.77	256.31	0.00	923.64	667.56	0.611	3.28	1.61	0.173	B
Chapel Hill	392.24	98.06	394.26	323.34	503.53	0.00	930.28	878.81	0.422	1.24	0.74	0.112	A
Preston Rd (NB)	606.80	151.70	607.59	871.30	26.49	0.00	1675.56	1657.88	0.362	0.77	0.57	0.056	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	21.26	1.42	0.161	A	A
Chapel Hill	10.23	0.68	0.109	A	A
Preston Rd (NB)	8.27	0.55	0.056	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	38.92	2.59	0.258	C	B
Chapel Hill	16.09	1.07	0.145	A	A
Preston Rd (NB)	11.16	0.74	0.063	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	119.58	7.97	0.724	E	D
Chapel Hill	31.40	2.09	0.242	B	B
Preston Rd (NB)	16.39	1.09	0.076	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	187.26	12.48	1.058	F	E
Chapel Hill	35.59	2.37	0.261	C	B
Preston Rd (NB)	16.90	1.13	0.077	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	72.78	4.85	0.399	C	C
Chapel Hill	19.73	1.32	0.160	A	A
Preston Rd (NB)	11.82	0.79	0.064	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	25.82	1.72	0.173	B	B
Chapel Hill	11.49	0.77	0.112	A	A
Preston Rd (NB)	8.72	0.58	0.056	A	A

Preston Road/ Chapel Hill - 2016 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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
2016 Assessment, AM	2016 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.36	C

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	Direct	Queue Surveys	195.00	
Chapel Hill	Direct		300.00	
Preston Rd (NB)	Direct	Queue Surveys	800.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	1071.783
Chapel Hill		(calculated)	(calculated)	0.601	1233.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1689.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	738.00	100.000
Chapel Hill	ONE HOUR	✓	471.00	100.000
Preston Rd (NB)	ONE HOUR	✓	747.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	78.000	660.000
	Chapel Hill	31.000	0.000	440.000
	Preston Rd (NB)	442.000	305.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.11	0.89
	Chapel Hill	0.07	0.00	0.93
	Preston Rd (NB)	0.59	0.41	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.93	0.75	9.49	E	677.20	1015.80	359.89	0.35	4.00	359.96	0.35
Chapel Hill	0.65	0.21	1.80	B	432.20	648.30	97.87	0.15	1.09	97.88	0.15
Preston Rd (NB)	0.49	0.07	0.96	A	685.46	1028.19	63.71	0.06	0.71	63.71	0.06

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	555.61	138.90	549.96	354.75	228.80	0.00	939.54	680.28	0.591	0.00	1.41	0.152	A
Chapel Hill	354.59	88.65	352.19	286.93	491.83	0.00	937.31	867.23	0.378	0.00	0.60	0.102	A
Preston Rd (NB)	562.38	140.60	560.37	820.84	23.18	0.00	1677.36	1658.94	0.335	0.00	0.50	0.054	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	663.45	165.86	659.02	424.75	273.92	0.00	913.46	680.28	0.726	1.41	2.52	0.232	B
Chapel Hill	423.42	105.85	422.17	343.57	589.37	0.00	878.66	867.23	0.482	0.60	0.92	0.131	A
Preston Rd (NB)	671.54	167.88	670.88	983.75	27.79	0.00	1674.86	1658.94	0.401	0.50	0.66	0.060	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	812.55	203.14	790.13	519.87	335.33	0.00	877.96	680.28	0.926	2.52	8.12	0.574	D
Chapel Hill	518.58	129.65	515.33	418.84	706.62	0.00	808.15	867.23	0.642	0.92	1.73	0.203	B
Preston Rd (NB)	822.46	205.62	821.28	1188.03	33.92	0.00	1671.53	1658.94	0.492	0.66	0.96	0.070	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	812.55	203.14	807.10	520.75	335.80	0.00	877.69	680.28	0.926	8.12	9.49	0.750	E
Chapel Hill	518.58	129.65	518.28	421.11	721.79	0.00	799.02	867.23	0.649	1.73	1.80	0.213	B
Preston Rd (NB)	822.46	205.62	822.44	1205.96	34.11	0.00	1671.42	1658.94	0.492	0.96	0.96	0.071	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	663.45	165.86	690.14	426.12	274.66	0.00	913.03	680.28	0.727	9.49	2.81	0.297	C
Chapel Hill	423.42	105.85	426.70	347.61	617.20	0.00	861.92	867.23	0.491	1.80	0.98	0.139	A
Preston Rd (NB)	671.54	167.88	672.70	1015.82	28.08	0.00	1674.69	1658.94	0.401	0.96	0.67	0.060	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	555.61	138.90	560.92	356.59	229.89	0.00	938.90	680.28	0.592	2.81	1.49	0.161	A
Chapel Hill	354.59	88.65	356.04	289.18	501.64	0.00	931.42	867.23	0.381	0.98	0.62	0.105	A
Preston Rd (NB)	562.38	140.60	563.05	834.24	23.43	0.00	1677.22	1658.94	0.335	0.67	0.51	0.054	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	19.82	1.32	0.152	A	A
Chapel Hill	8.69	0.58	0.102	A	A
Preston Rd (NB)	7.36	0.49	0.054	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	34.84	2.32	0.232	B	B
Chapel Hill	13.23	0.88	0.131	A	A
Preston Rd (NB)	9.80	0.65	0.060	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	95.17	6.34	0.574	D	C
Chapel Hill	24.22	1.61	0.203	B	B
Preston Rd (NB)	14.05	0.94	0.070	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	133.48	8.90	0.750	E	D
Chapel Hill	26.65	1.78	0.213	B	B
Preston Rd (NB)	14.44	0.96	0.071	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	52.96	3.53	0.297	C	B
Chapel Hill	15.45	1.03	0.139	A	A
Preston Rd (NB)	10.32	0.69	0.060	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	23.62	1.57	0.161	A	A
Chapel Hill	9.63	0.64	0.105	A	A
Preston Rd (NB)	7.74	0.52	0.054	A	A

Preston Road/ Chapel Hill - 2025 Assessment, AM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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
2025 Assessment, AM	2025 Assessment	AM		ONE HOUR	07:45	09:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.86	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	Direct	Queue Surveys	195.00	
Chapel Hill	Direct		300.00	
Preston Rd (NB)	Direct	Queue Surveys	800.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	1071.783
Chapel Hill		(calculated)	(calculated)	0.601	1233.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1689.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	808.00	100.000
Chapel Hill	ONE HOUR	✓	521.00	100.000
Preston Rd (NB)	ONE HOUR	✓	827.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	88.000	720.000
	Chapel Hill	35.000	0.000	486.000
	Preston Rd (NB)	487.000	340.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.11	0.89
	Chapel Hill	0.07	0.00	0.93
	Preston Rd (NB)	0.59	0.41	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	1.04	2.02	31.37	F	741.43	1112.15	918.50	0.83	10.21	918.63	0.83
Chapel Hill	0.73	0.29	2.65	C	478.08	717.12	137.17	0.19	1.52	137.19	0.19
Preston Rd (NB)	0.55	0.08	1.19	A	758.87	1138.30	76.91	0.07	0.85	76.91	0.07

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	608.30	152.08	600.88	391.40	255.00	0.00	924.39	677.74	0.658	0.00	1.86	0.182	B
Chapel Hill	392.24	98.06	389.25	320.45	535.43	0.00	911.09	869.90	0.431	0.00	0.75	0.114	A
Preston Rd (NB)	622.61	155.65	620.26	898.54	26.15	0.00	1675.75	1658.20	0.372	0.00	0.59	0.057	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	726.38	181.59	718.31	468.66	305.31	0.00	895.31	677.74	0.811	1.86	3.87	0.325	C
Chapel Hill	468.37	117.09	466.53	383.55	640.08	0.00	848.17	869.90	0.552	0.75	1.21	0.156	A
Preston Rd (NB)	743.46	185.86	742.63	1075.26	31.34	0.00	1672.93	1658.20	0.444	0.59	0.79	0.064	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	889.62	222.41	825.05	573.46	373.70	0.00	855.78	677.74	1.040	3.87	20.02	1.111	F
Chapel Hill	573.63	143.41	568.51	463.56	735.19	0.00	790.97	869.90	0.725	1.21	2.49	0.264	C
Preston Rd (NB)	910.54	227.64	908.97	1265.51	38.19	0.00	1669.20	1658.20	0.546	0.79	1.19	0.079	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	889.62	222.41	844.24	574.67	374.34	0.00	855.42	677.74	1.040	20.02	31.37	2.025	F
Chapel Hill	573.63	143.41	572.96	466.28	752.29	0.00	780.68	869.90	0.735	2.49	2.65	0.287	C
Preston Rd (NB)	910.54	227.64	910.52	1286.76	38.49	0.00	1669.04	1658.20	0.546	1.19	1.19	0.079	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	726.38	181.59	830.68	470.49	306.29	0.00	894.75	677.74	0.812	31.37	5.29	1.184	F
Chapel Hill	468.37	117.09	472.94	396.76	740.21	0.00	787.95	869.90	0.594	2.65	1.51	0.193	B
Preston Rd (NB)	743.46	185.86	745.01	1181.39	31.77	0.00	1672.69	1658.20	0.444	1.19	0.81	0.065	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	608.30	152.08	621.46	393.68	256.32	0.00	923.63	677.74	0.659	5.29	2.00	0.207	B
Chapel Hill	392.24	98.06	395.14	324.00	553.78	0.00	900.06	869.90	0.436	1.51	0.78	0.119	A
Preston Rd (NB)	622.61	155.65	623.45	922.37	26.54	0.00	1675.53	1658.20	0.372	0.81	0.59	0.057	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	25.63	1.71	0.182	B	B
Chapel Hill	10.71	0.71	0.114	A	A
Preston Rd (NB)	8.60	0.57	0.057	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	51.38	3.43	0.325	C	B
Chapel Hill	17.26	1.15	0.156	A	A
Preston Rd (NB)	11.67	0.78	0.064	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	194.82	12.99	1.111	F	E
Chapel Hill	33.96	2.26	0.264	C	B
Preston Rd (NB)	17.30	1.15	0.079	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	387.42	25.83	2.025	F	F
Chapel Hill	38.89	2.59	0.287	C	B
Preston Rd (NB)	17.86	1.19	0.079	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	225.75	15.05	1.184	F	E
Chapel Hill	24.10	1.61	0.193	B	B
Preston Rd (NB)	12.38	0.83	0.065	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	33.50	2.23	0.207	B	B
Chapel Hill	12.24	0.82	0.119	A	A
Preston Rd (NB)	9.09	0.61	0.057	A	A

Preston Road/ Chapel Hill - 2014 Surveyed, AM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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	Relatio
2014 Surveyed, AM	2014 Surveyed	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.12	A

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	Direct	Queue Surveys	195.00	
Chapel Hill	Direct		300.00	
Preston Rd (NB)	Direct	Queue Surveys	800.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	1071.783
Chapel Hill		(calculated)	(calculated)	0.601	1233.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1689.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	528.00	100.000
Chapel Hill	ONE HOUR	✓	374.00	100.000
Preston Rd (NB)	ONE HOUR	✓	597.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	74.000	454.000
	Chapel Hill	29.000	0.000	345.000
	Preston Rd (NB)	339.000	258.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.14	0.86
	Chapel Hill	0.08	0.00	0.92
	Preston Rd (NB)	0.57	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.64	0.18	1.75	B	484.50	726.75	102.58	0.14	1.14	102.59	0.14
Chapel Hill	0.44	0.12	0.78	A	343.19	514.78	49.86	0.10	0.55	49.86	0.10
Preston Rd (NB)	0.39	0.06	0.65	A	547.82	821.73	44.24	0.05	0.49	44.24	0.05

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	397.51	99.38	394.71	276.11	193.61	0.00	959.88	659.04	0.414	0.00	0.70	0.106	A
Chapel Hill	281.57	70.39	280.07	248.93	339.39	0.00	1028.98	892.31	0.274	0.00	0.37	0.080	A
Preston Rd (NB)	449.45	112.36	448.00	597.75	21.72	0.00	1678.15	1652.36	0.268	0.00	0.36	0.049	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	474.66	118.67	473.42	330.54	231.76	0.00	937.83	659.04	0.506	0.70	1.01	0.129	A
Chapel Hill	336.22	84.05	335.67	298.11	407.07	0.00	988.29	892.31	0.340	0.37	0.51	0.092	A
Preston Rd (NB)	536.69	134.17	536.27	716.71	26.03	0.00	1675.81	1652.36	0.320	0.36	0.47	0.053	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	581.34	145.33	578.47	404.70	283.76	0.00	907.77	659.04	0.640	1.01	1.73	0.181	B
Chapel Hill	411.78	102.95	410.71	364.84	497.40	0.00	933.97	892.31	0.441	0.51	0.78	0.114	A
Preston Rd (NB)	657.31	164.33	656.61	876.26	31.85	0.00	1672.65	1652.36	0.393	0.47	0.64	0.059	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	581.34	145.33	581.23	405.17	284.06	0.00	907.60	659.04	0.641	1.73	1.75	0.184	B
Chapel Hill	411.78	102.95	411.75	365.52	499.77	0.00	932.54	892.31	0.442	0.78	0.78	0.115	A
Preston Rd (NB)	657.31	164.33	657.30	879.60	31.93	0.00	1672.61	1652.36	0.393	0.64	0.65	0.059	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	474.66	118.67	477.50	331.30	232.23	0.00	937.55	659.04	0.506	1.75	1.04	0.131	A
Chapel Hill	336.22	84.05	337.27	299.16	410.58	0.00	986.18	892.31	0.341	0.78	0.52	0.093	A
Preston Rd (NB)	536.69	134.17	537.38	721.70	26.15	0.00	1675.74	1652.36	0.320	0.65	0.47	0.053	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	397.51	99.38	398.81	277.33	194.42	0.00	959.41	659.04	0.414	1.04	0.72	0.107	A
Chapel Hill	281.57	70.39	282.13	250.31	342.92	0.00	1026.86	892.31	0.274	0.52	0.38	0.081	A
Preston Rd (NB)	449.45	112.36	449.88	603.18	21.88	0.00	1678.07	1652.36	0.268	0.47	0.37	0.049	A

Queueing Delay Results for each time segment

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	10.06	0.67	0.106	A	A
Chapel Hill	5.45	0.36	0.080	A	A
Preston Rd (NB)	5.36	0.36	0.049	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	14.58	0.97	0.129	A	A
Chapel Hill	7.49	0.50	0.092	A	A
Preston Rd (NB)	6.93	0.46	0.053	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	24.38	1.63	0.181	B	B
Chapel Hill	11.30	0.75	0.114	A	A
Preston Rd (NB)	9.47	0.63	0.059	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	26.13	1.74	0.184	B	B
Chapel Hill	11.74	0.78	0.115	A	A
Preston Rd (NB)	9.67	0.64	0.059	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	16.35	1.09	0.131	A	A
Chapel Hill	8.05	0.54	0.093	A	A
Preston Rd (NB)	7.22	0.48	0.053	A	A

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

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	11.08	0.74	0.107	A	A
Chapel Hill	5.83	0.39	0.081	A	A
Preston Rd (NB)	5.59	0.37	0.049	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

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Filename: Import of 2. Preston Road_Chapel Hill PM.arc8
Path: N:\Vectos Job Data\2013\VN30277 Longridge\Arcady\363 Dwellings - April 15\Callibrated
Report generation date: 07/04/2015 16:55:32

Summary of junction performance

	PM			
	Queue (PCU)	Delay (min)	RFC	LOS
	Preston Road/ Chapel Hill - 2014 Surveyed			
Preston Rd (SB)	2.25	0.29	0.70	C
Chapel Hill	1.65	0.40	0.63	C
Preston Rd (NB)	2.40	0.16	0.71	A
	Preston Road/ Chapel Hill - 2016 Assessment			
Preston Rd (SB)	13.11	1.38	0.97	F
Chapel Hill	9.68	1.85	0.97	F
Preston Rd (NB)	17.70	0.90	0.97	F
	Preston Road/ Chapel Hill - 2016 Baseline			
Preston Rd (SB)	8.29	0.96	0.92	F
Chapel Hill	7.29	1.43	0.92	F
Preston Rd (NB)	10.26	0.56	0.93	D
	Preston Road/ Chapel Hill - 2025 Assessment			
Preston Rd (SB)	37.54	3.26	1.10	F
Chapel Hill	23.57	3.85	1.10	F
Preston Rd (NB)	58.30	2.36	1.07	F
	Preston Road/ Chapel Hill - 2025 Baseline			
Preston Rd (SB)	27.23	2.53	1.06	F
Chapel Hill	19.69	3.23	1.07	F
Preston Rd (NB)	34.30	1.53	1.02	F

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

"D2 - 2016 Baseline, PM " model duration: 16:45 - 18:15
"D4 - 2025 Baseline, PM" model duration: 16:45 - 18:15
"D6 - 2016 Assessment, PM" model duration: 16:45 - 18:15
"D8 - 2025 Assessment, PM" model duration: 16:45 - 18:15
"D9 - 2014 Surveyed, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 07/04/2015 16:55:31

File summary

Title	Inglewhite Road / Berry Lane
Location	Longridge
Site Number	
Date	03/02/2014
Version	
Status	(new file)
Identifier	VN30277
Client	
Jobnumber	VN30277
Enumerator	Workstation\Workstation1
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin

Preston Road/ Chapel Hill - 2016 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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	Relations
2016 Baseline, PM	2016 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.81	E

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	None			
Chapel Hill	Direct	Queue Surveys	-280.00	
Preston Rd (NB)	Direct	Queue Surveys	400.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	876.783
Chapel Hill		(calculated)	(calculated)	0.601	653.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1289.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	506.00	100.000
Chapel Hill	ONE HOUR	✓	299.00	100.000
Preston Rd (NB)	ONE HOUR	✓	1066.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	53.000	453.000
	Chapel Hill	41.000	0.000	258.000
	Preston Rd (NB)	637.000	429.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.10	0.90
	Chapel Hill	0.14	0.00	0.86
	Preston Rd (NB)	0.60	0.40	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.92	0.96	8.29	F	464.31	696.47	309.29	0.44	3.44	309.36	0.44
Chapel Hill	0.92	1.43	7.29	F	274.37	411.55	263.92	0.64	2.93	264.00	0.64
Preston Rd (NB)	0.93	0.56	10.26	D	978.18	1467.27	403.80	0.28	4.49	403.87	0.28

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	380.94	95.24	376.17	505.92	320.29	0.00	691.65	582.61	0.551	0.00	1.19	0.188	B
Chapel Hill	225.10	56.28	221.24	359.69	336.77	0.00	450.56	339.42	0.500	0.00	0.96	0.258	C
Preston Rd (NB)	802.54	200.64	795.88	527.68	30.34	0.00	1273.47	1264.67	0.630	0.00	1.67	0.124	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	454.88	113.72	451.08	606.04	383.63	0.00	655.05	582.61	0.694	1.19	2.14	0.289	C
Chapel Hill	268.79	67.20	265.58	430.87	403.83	0.00	410.24	339.42	0.655	0.96	1.77	0.406	C
Preston Rd (NB)	958.31	239.58	953.25	632.99	36.42	0.00	1270.17	1264.67	0.754	1.67	2.93	0.186	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	557.12	139.28	538.43	729.95	462.61	0.00	609.39	582.61	0.914	2.14	6.81	0.708	E
Chapel Hill	329.21	82.30	313.83	519.01	482.04	0.00	363.21	339.42	0.906	1.77	5.61	0.997	F
Preston Rd (NB)	1173.69	293.42	1149.53	752.83	43.03	0.00	1266.57	1264.67	0.927	2.93	8.97	0.441	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	557.12	139.28	551.21	742.49	470.26	0.00	604.97	582.61	0.921	6.81	8.29	0.958	F
Chapel Hill	329.21	82.30	322.49	528.00	493.47	0.00	356.33	339.42	0.924	5.61	7.29	1.427	F
Preston Rd (NB)	1173.69	293.42	1168.53	771.75	44.22	0.00	1265.93	1264.67	0.927	8.97	10.26	0.560	D

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	454.88	113.72	477.94	628.98	396.94	0.00	647.35	582.61	0.703	8.29	2.53	0.394	C
Chapel Hill	268.79	67.20	288.66	447.01	427.88	0.00	395.78	339.42	0.679	7.29	2.32	0.637	E
Preston Rd (NB)	958.31	239.58	986.35	676.95	39.58	0.00	1268.45	1264.67	0.756	10.26	3.25	0.232	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	380.94	95.24	385.97	514.73	325.40	0.00	688.70	582.61	0.553	2.53	1.27	0.201	B
Chapel Hill	225.10	56.28	230.16	365.83	345.54	0.00	445.29	339.42	0.506	2.32	1.06	0.285	C
Preston Rd (NB)	802.54	200.64	808.57	544.15	31.56	0.00	1272.81	1264.67	0.631	3.25	1.74	0.131	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	16.64	1.11	0.188	B	B
Chapel Hill	13.31	0.89	0.258	C	B
Preston Rd (NB)	23.51	1.57	0.124	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	29.51	1.97	0.289	C	B
Chapel Hill	24.09	1.61	0.406	C	C
Preston Rd (NB)	40.76	2.72	0.186	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	79.54	5.30	0.708	E	D
Chapel Hill	64.51	4.30	0.997	F	E
Preston Rd (NB)	107.23	7.15	0.441	D	C

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	114.81	7.65	0.958	F	E
Chapel Hill	98.32	6.55	1.427	F	F
Preston Rd (NB)	145.66	9.71	0.560	D	C

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	48.40	3.23	0.394	C	C
Chapel Hill	46.39	3.09	0.637	E	D
Preston Rd (NB)	59.00	3.93	0.232	B	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	20.39	1.36	0.201	B	B
Chapel Hill	17.30	1.15	0.285	C	B
Preston Rd (NB)	27.63	1.84	0.131	A	A

Preston Road/ Chapel Hill - 2025 Baseline, PM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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	Relations
2025 Baseline, PM	2025 Baseline	PM		ONE HOUR	16:45	18:15	90	15			✓	✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	2.07	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	None			
Chapel Hill	Direct	Queue Surveys	-280.00	
Preston Rd (NB)	Direct	Queue Surveys	400.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	876.783
Chapel Hill		(calculated)	(calculated)	0.601	653.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1289.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	564.00	100.000
Chapel Hill	ONE HOUR	✓	331.00	100.000
Preston Rd (NB)	ONE HOUR	✓	1176.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	**Chapel Hill**	**Preston Rd (NB)**
From	**Preston Rd (SB)**	0.000	59.000	505.000
	Chapel Hill	47.000	0.000	284.000
	Preston Rd (NB)	704.000	472.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	**Chapel Hill**	**Preston Rd (NB)**
From	**Preston Rd (SB)**	0.00	0.10	0.90
	Chapel Hill	0.14	0.00	0.86
	Preston Rd (NB)	0.60	0.40	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	1.06	2.53	27.23	F	517.54	776.30	862.80	1.11	9.59	862.95	1.11
Chapel Hill	1.07	3.23	19.69	F	303.73	455.60	715.76	1.57	7.95	715.96	1.57
Preston Rd (NB)	1.02	1.53	34.30	F	1079.12	1618.68	1014.97	0.63	11.28	1015.10	0.63

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	424.61	106.15	418.06	559.32	351.78	0.00	673.45	583.59	0.630	0.00	1.64	0.230	B
Chapel Hill	249.19	62.30	243.89	395.51	374.33	0.00	427.98	338.84	0.582	0.00	1.32	0.318	C
Preston Rd (NB)	885.35	221.34	876.47	583.59	34.63	0.00	1271.14	1263.81	0.697	0.00	2.22	0.149	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	507.02	126.76	499.47	668.60	420.55	0.00	633.70	583.59	0.800	1.64	3.53	0.424	D
Chapel Hill	297.56	74.39	291.12	472.80	447.22	0.00	384.14	338.84	0.775	1.32	2.94	0.606	E
Preston Rd (NB)	1057.20	264.30	1047.82	697.00	41.34	0.00	1267.49	1263.81	0.834	2.22	4.57	0.262	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	620.98	155.24	568.21	778.73	490.92	0.00	593.03	583.59	1.047	3.53	16.72	1.368	F
Chapel Hill	364.44	91.11	327.60	550.36	508.77	0.00	347.13	338.84	1.050	2.94	12.15	1.785	F
Preston Rd (NB)	1294.80	323.70	1223.13	789.86	46.52	0.00	1264.68	1263.81	1.024	4.57	22.48	0.858	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	620.98	155.24	578.93	794.29	500.71	0.00	587.37	583.59	1.057	16.72	27.23	2.532	F
Chapel Hill	364.44	91.11	334.24	561.27	518.37	0.00	341.36	338.84	1.068	12.15	19.69	3.230	F
Preston Rd (NB)	1294.80	323.70	1247.54	805.15	47.46	0.00	1264.17	1263.81	1.024	22.48	34.30	1.529	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	507.02	126.76	584.24	747.09	469.69	0.00	605.30	583.59	0.838	27.23	7.92	1.956	F
Chapel Hill	297.56	74.39	327.71	530.81	523.12	0.00	338.50	338.84	0.879	19.69	12.16	3.139	F
Preston Rd (NB)	1057.20	264.30	1170.24	804.30	46.53	0.00	1264.67	1263.81	0.836	34.30	6.04	0.859	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	424.61	106.15	449.00	580.08	361.19	0.00	668.01	583.59	0.636	7.92	1.83	0.302	C
Chapel Hill	249.19	62.30	291.21	408.16	402.03	0.00	411.32	338.84	0.606	12.16	1.65	0.649	E
Preston Rd (NB)	885.35	221.34	899.92	651.89	41.35	0.00	1267.49	1263.81	0.699	6.04	2.39	0.169	B

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	22.38	1.49	0.230	B	B
Chapel Hill	17.87	1.19	0.318	C	B
Preston Rd (NB)	30.80	2.05	0.149	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	46.11	3.07	0.424	D	C
Chapel Hill	37.79	2.52	0.606	E	D
Preston Rd (NB)	60.89	4.06	0.262	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	163.86	10.92	1.368	F	F
Chapel Hill	121.53	8.10	1.785	F	F
Preston Rd (NB)	222.56	14.84	0.858	F	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	331.31	22.09	2.532	F	F
Chapel Hill	240.19	16.01	3.230	F	F
Preston Rd (NB)	428.55	28.57	1.529	F	F

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	263.47	17.56	1.956	F	F
Chapel Hill	246.73	16.45	3.139	F	F
Preston Rd (NB)	232.49	15.50	0.859	F	D

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	35.67	2.38	0.302	C	B
Chapel Hill	51.65	3.44	0.649	E	D
Preston Rd (NB)	39.68	2.65	0.169	B	B

Preston Road/ Chapel Hill - 2016 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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
2016 Assessment, PM	2016 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	1.18	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	None			
Chapel Hill	Direct	Queue Surveys	-280.00	
Preston Rd (NB)	Direct	Queue Surveys	400.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	876.783
Chapel Hill		(calculated)	(calculated)	0.601	653.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1289.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	537.00	100.000
Chapel Hill	ONE HOUR	✓	299.00	100.000
Preston Rd (NB)	ONE HOUR	✓	1120.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	53.000	484.000
	Chapel Hill	41.000	0.000	258.000
	Preston Rd (NB)	691.000	429.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.10	0.90
	Chapel Hill	0.14	0.00	0.86
	Preston Rd (NB)	0.62	0.38	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.97	1.38	13.11	F	492.76	739.14	434.42	0.59	4.83	434.51	0.59
Chapel Hill	0.97	1.85	9.68	F	274.37	411.55	329.28	0.80	3.66	329.38	0.80
Preston Rd (NB)	0.97	0.90	17.70	F	1027.73	1541.60	592.04	0.38	6.58	592.14	0.38

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	404.28	101.07	398.84	545.82	320.05	0.00	691.79	596.63	0.584	0.00	1.36	0.201	B
Chapel Hill	225.10	56.28	221.01	359.41	359.47	0.00	436.91	329.70	0.515	0.00	1.02	0.273	C
Preston Rd (NB)	843.19	210.80	835.56	550.18	30.31	0.00	1273.49	1265.39	0.662	0.00	1.91	0.135	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	482.75	120.69	477.83	653.40	383.09	0.00	655.35	596.63	0.737	1.36	2.59	0.329	C
Chapel Hill	268.79	67.20	265.01	430.25	430.67	0.00	394.09	329.70	0.682	1.02	1.97	0.452	D
Preston Rd (NB)	1006.86	251.71	1000.15	659.34	36.34	0.00	1270.21	1265.39	0.793	1.91	3.58	0.217	B

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	591.25	147.81	563.06	778.11	456.73	0.00	612.79	596.63	0.965	2.59	9.64	0.902	F
Chapel Hill	329.21	82.30	309.57	512.30	507.49	0.00	347.90	329.70	0.946	1.97	6.88	1.193	F
Preston Rd (NB)	1233.14	308.29	1192.39	774.61	42.45	0.00	1266.89	1265.39	0.973	3.58	13.77	0.605	E

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	591.25	147.81	577.38	794.71	466.32	0.00	607.25	596.63	0.974	9.64	13.11	1.384	F
Chapel Hill	329.21	82.30	317.98	523.30	520.39	0.00	340.14	329.70	0.968	6.88	9.68	1.850	F
Preston Rd (NB)	1233.14	308.29	1217.42	794.77	43.60	0.00	1266.26	1265.39	0.974	13.77	17.70	0.899	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	482.75	120.69	521.71	695.10	406.40	0.00	641.88	596.63	0.752	13.11	3.37	0.610	E
Chapel Hill	268.79	67.20	295.37	457.89	470.22	0.00	370.31	329.70	0.726	9.68	3.04	0.952	F
Preston Rd (NB)	1006.86	251.71	1061.00	725.09	40.50	0.00	1267.95	1265.39	0.794	17.70	4.17	0.351	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	404.28	101.07	411.87	557.44	326.27	0.00	688.20	596.63	0.587	3.37	1.47	0.223	B
Chapel Hill	225.10	56.28	232.69	366.92	371.22	0.00	429.85	329.70	0.524	3.04	1.14	0.315	C
Preston Rd (NB)	843.19	210.80	851.80	572.00	31.91	0.00	1272.62	1265.39	0.663	4.17	2.02	0.145	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	18.86	1.26	0.201	B	B
Chapel Hill	14.05	0.94	0.273	C	B
Preston Rd (NB)	26.72	1.78	0.135	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	35.12	2.34	0.329	C	B
Chapel Hill	26.49	1.77	0.452	D	C
Preston Rd (NB)	49.02	3.27	0.217	B	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	105.25	7.02	0.902	F	D
Chapel Hill	75.77	5.05	1.193	F	E
Preston Rd (NB)	150.87	10.06	0.605	E	D

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	172.80	11.52	1.384	F	F
Chapel Hill	126.03	8.40	1.850	F	F
Preston Rd (NB)	238.71	15.91	0.899	F	D

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	78.33	5.22	0.610	E	D
Chapel Hill	67.66	4.51	0.952	F	E
Preston Rd (NB)	94.43	6.30	0.351	C	C

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	24.05	1.60	0.223	B	B
Chapel Hill	19.27	1.28	0.315	C	B
Preston Rd (NB)	32.30	2.15	0.145	A	A

Preston Road/ Chapel Hill - 2025 Assessment, PM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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
2025 Assessment, PM	2025 Assessment	PM		ONE HOUR	16:45	18:15	90	15			✓	✓	

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	2.84	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	None			
Chapel Hill	Direct	Queue Surveys	-280.00	
Preston Rd (NB)	Direct	Queue Surveys	400.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	876.783
Chapel Hill		(calculated)	(calculated)	0.601	653.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1289.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	595.00	100.000
Chapel Hill	ONE HOUR	✓	331.00	100.000
Preston Rd (NB)	ONE HOUR	✓	1231.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	59.000	536.000
	Chapel Hill	47.000	0.000	284.000
	Preston Rd (NB)	759.000	472.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.10	0.90
	Chapel Hill	0.14	0.00	0.86
	Preston Rd (NB)	0.62	0.38	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	1.10	3.26	37.54	F	545.98	818.97	1329.49	1.62	14.77	1329.75	1.62
Chapel Hill	1.10	3.85	23.57	F	303.73	455.60	903.73	1.98	10.04	904.30	1.98
Preston Rd (NB)	1.07	2.36	58.30	F	1129.59	1694.38	1832.80	1.08	20.36	1833.00	1.08

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	447.95	111.99	440.40	599.62	351.38	0.00	673.68	596.54	0.665	0.00	1.89	0.250	B
Chapel Hill	249.19	62.30	243.50	395.05	396.73	0.00	414.51	329.92	0.601	0.00	1.42	0.341	C
Preston Rd (NB)	926.76	231.69	916.43	605.65	34.58	0.00	1271.17	1264.50	0.729	0.00	2.58	0.165	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	534.89	133.72	524.63	715.25	419.21	0.00	634.48	596.54	0.843	1.89	4.45	0.504	D
Chapel Hill	297.56	74.39	289.69	471.24	472.61	0.00	368.87	329.92	0.807	1.42	3.39	0.696	E
Preston Rd (NB)	1106.64	276.66	1093.33	721.16	41.13	0.00	1267.60	1264.50	0.873	2.58	5.91	0.321	C

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	655.11	163.78	584.62	811.41	476.22	0.00	601.53	596.54	1.089	4.45	22.08	1.663	F
Chapel Hill	364.44	91.11	321.28	534.19	526.65	0.00	336.38	329.92	1.083	3.39	14.18	2.062	F
Preston Rd (NB)	1355.36	338.84	1242.01	802.30	45.62	0.00	1265.17	1264.50	1.071	5.91	34.25	1.167	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	655.11	163.78	593.24	822.78	482.80	0.00	597.72	596.54	1.096	22.08	37.54	3.264	F
Chapel Hill	364.44	91.11	326.88	541.62	534.41	0.00	331.71	329.92	1.099	14.18	23.57	3.831	F
Preston Rd (NB)	1355.36	338.84	1259.17	814.88	46.42	0.00	1264.74	1264.50	1.072	34.25	58.30	2.360	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	534.89	133.72	585.54	812.62	476.89	0.00	601.14	596.54	0.890	37.54	24.88	3.232	F
Chapel Hill	297.56	74.39	322.21	534.96	527.48	0.00	335.88	329.92	0.886	23.57	17.41	3.852	F
Preston Rd (NB)	1106.64	276.66	1243.76	803.94	45.75	0.00	1265.10	1264.50	0.875	58.30	24.02	2.047	F

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	447.95	111.99	537.87	667.33	387.77	0.00	652.65	596.54	0.686	24.88	2.40	0.844	F
Chapel Hill	249.19	62.30	308.33	441.10	484.54	0.00	361.70	329.92	0.689	17.41	2.62	1.533	F
Preston Rd (NB)	926.76	231.69	1011.32	749.09	43.78	0.00	1266.17	1264.50	0.732	24.02	2.88	0.312	C

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	25.53	1.70	0.250	B	B
Chapel Hill	19.05	1.27	0.341	C	C
Preston Rd (NB)	35.42	2.36	0.165	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	56.47	3.76	0.504	D	C
Chapel Hill	42.65	2.84	0.696	E	D
Preston Rd (NB)	76.24	5.08	0.321	C	B

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	208.83	13.92	1.663	F	F
Chapel Hill	139.09	9.27	2.062	F	F
Preston Rd (NB)	316.39	21.09	1.167	F	E

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	448.29	29.89	3.264	F	F
Chapel Hill	284.22	18.95	3.831	F	F
Preston Rd (NB)	695.54	46.37	2.360	F	F

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	468.19	31.21	3.232	F	F
Chapel Hill	307.34	20.49	3.852	F	F
Preston Rd (NB)	617.34	41.16	2.047	F	F

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	122.18	8.15	0.844	F	D
Chapel Hill	111.38	7.43	1.533	F	F
Preston Rd (NB)	91.86	6.12	0.312	C	B

Preston Road/ Chapel Hill - 2014 Surveyed, PM

Data Errors and Warnings

No errors or warnings

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
Preston Road/ Chapel Hill	ARCADY		✓				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	Relatio
2014 Surveyed, PM	2014 Surveyed	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
1	Preston Road / Chapel Hill	Mini-roundabout	A,B,C	0.24	B

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Name	Arm	Name	Description
Preston Rd (SB)	A	Preston Rd (SB)	
Chapel Hill	B	Chapel Hill	
Preston Rd (NB)	C	Preston Rd (NB)	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Preston Rd (SB)	0.00	99999.00		0.00
Chapel Hill	0.00	99999.00		0.00
Preston Rd (NB)	0.00	99999.00		0.00

Mini Roundabout Geometry

Name	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
Preston Rd (SB)	4.00	4.00	6.00	2.00	9.00	4.00	0.00	
Chapel Hill	4.00	4.00	4.00	0.00	15.00	15.00	0.00	
Preston Rd (NB)	3.50	3.50	4.50	1.00	10.00	9.00	0.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Name	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
Preston Rd (SB)	None			
Chapel Hill	Direct	Queue Surveys	-280.00	
Preston Rd (NB)	Direct	Queue Surveys	400.00	

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Preston Rd (SB)		(calculated)	(calculated)	0.578	876.783
Chapel Hill		(calculated)	(calculated)	0.601	653.082
Preston Rd (NB)		(calculated)	(calculated)	0.543	1289.951

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Preston Rd (SB)	ONE HOUR	✓	427.00	100.000
Chapel Hill	ONE HOUR	✓	231.00	100.000
Preston Rd (NB)	ONE HOUR	✓	816.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.000	49.000	378.000
	Chapel Hill	40.000	0.000	191.000
	Preston Rd (NB)	495.000	321.000	0.000

Turning Proportions (PCU) - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.00	0.11	0.89
	Chapel Hill	0.17	0.00	0.83
	Preston Rd (NB)	0.61	0.39	0.00

Vehicle Mix

Average PCU Per Vehicle - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	1.000	1.000	1.000
	Chapel Hill	1.000	1.000	1.000
	Preston Rd (NB)	1.000	1.000	1.000

Heavy Vehicle Percentages - Preston Road / Chapel Hill (for whole period)

		To		
		Preston Rd (SB)	Chapel Hill	Preston Rd (NB)
From	Preston Rd (SB)	0.0	0.0	0.0
	Chapel Hill	0.0	0.0	0.0
	Preston Rd (NB)	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (min)
Preston Rd (SB)	0.70	0.29	2.25	C	391.82	587.73	122.09	0.21	1.36	122.12	0.21
Chapel Hill	0.63	0.40	1.65	C	211.97	317.95	89.10	0.28	0.99	89.12	0.28
Preston Rd (NB)	0.71	0.16	2.40	A	748.78	1123.16	138.07	0.12	1.53	138.09	0.12

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	321.47	80.37	318.43	400.16	240.22	0.00	737.94	590.72	0.436	0.00	0.76	0.142	A
Chapel Hill	173.91	43.48	171.71	276.76	281.89	0.00	483.56	338.61	0.360	0.00	0.55	0.191	B
Preston Rd (NB)	614.33	153.58	610.64	423.86	29.73	0.00	1273.80	1258.10	0.482	0.00	0.92	0.090	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	383.86	95.97	382.31	479.73	287.91	0.00	710.37	590.72	0.540	0.76	1.15	0.182	B
Chapel Hill	207.66	51.92	206.53	331.78	338.44	0.00	449.56	338.61	0.462	0.55	0.83	0.246	B
Preston Rd (NB)	733.57	183.39	731.88	509.21	35.76	0.00	1270.52	1258.10	0.577	0.92	1.34	0.111	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	470.14	117.53	466.00	586.06	351.83	0.00	673.42	590.72	0.698	1.15	2.18	0.284	C
Chapel Hill	254.34	63.58	251.34	405.30	412.52	0.00	405.01	338.61	0.628	0.83	1.58	0.383	C
Preston Rd (NB)	898.43	224.61	894.37	620.34	43.52	0.00	1266.31	1258.10	0.709	1.34	2.36	0.160	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	470.14	117.53	469.86	588.90	353.36	0.00	672.54	590.72	0.699	2.18	2.25	0.295	C
Chapel Hill	254.34	63.58	254.08	407.28	415.95	0.00	402.95	338.61	0.631	1.58	1.65	0.401	C
Preston Rd (NB)	898.43	224.61	898.27	626.03	44.00	0.00	1266.05	1258.10	0.710	2.36	2.40	0.163	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	383.86	95.97	388.02	483.92	290.16	0.00	709.07	590.72	0.541	2.25	1.21	0.189	B
Chapel Hill	207.66	51.92	210.68	334.69	343.49	0.00	446.52	338.61	0.465	1.65	0.90	0.258	C
Preston Rd (NB)	733.57	183.39	737.60	517.69	36.48	0.00	1270.13	1258.10	0.578	2.40	1.39	0.114	A

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

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (min)	LOS
Preston Rd (SB)	321.47	80.37	323.16	404.08	242.37	0.00	736.69	590.72	0.436	1.21	0.79	0.146	A
Chapel Hill	173.91	43.48	175.18	279.45	286.08	0.00	481.05	338.61	0.362	0.90	0.58	0.197	B
Preston Rd (NB)	614.33	153.58	616.12	430.93	30.33	0.00	1273.47	1258.10	0.482	1.39	0.94	0.092	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	10.81	0.72	0.142	A	A
Chapel Hill	7.79	0.52	0.191	B	B
Preston Rd (NB)	13.28	0.89	0.090	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	16.40	1.09	0.182	B	B
Chapel Hill	11.88	0.79	0.246	B	B
Preston Rd (NB)	19.43	1.30	0.111	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	29.95	2.00	0.284	C	B
Chapel Hill	21.65	1.44	0.383	C	C
Preston Rd (NB)	33.20	2.21	0.160	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	33.34	2.22	0.295	C	B
Chapel Hill	24.36	1.62	0.401	C	C
Preston Rd (NB)	35.76	2.38	0.163	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	19.29	1.29	0.189	B	B
Chapel Hill	14.35	0.96	0.258	C	B
Preston Rd (NB)	21.82	1.45	0.114	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
Preston Rd (SB)	12.30	0.82	0.146	A	A
Chapel Hill	9.07	0.60	0.197	B	B
Preston Rd (NB)	14.59	0.97	0.092	A	A

Appendix 19

PICADY Outputs – Berry Lane/Market Place/King Street

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

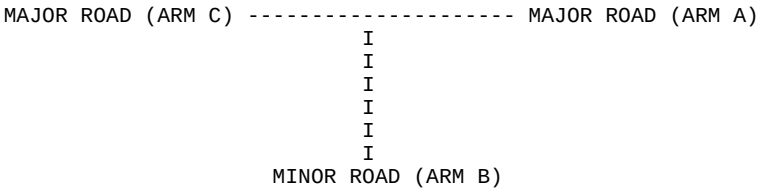
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Berry Lane Market Street King St 2016 Baseline Flows-AM.vpi"
(drive-on-the-left) at 11:29:47 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street/King Street 2016 baline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: Vn30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street/King Street 2016

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.83	5.74	3.83
ARM B	15.00	45.00	75.00	2.84	4.26	2.84
ARM C	15.00	45.00	75.00	5.65	8.48	5.65

Demand set: Berry Lane/Market Street/King Street 2016

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.467	0.533
		0.0	143.0	163.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.313	0.000	0.687
		71.0	0.0	156.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.513	0.487	0.000
		232.0	220.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	2.85	9.22	0.309		0.00	0.44	6.3		0.16
C-AB	2.76	9.44	0.292		0.00	0.44	6.5		0.15
A-B	1.79								
A-C	2.05								
08.00-08.15									
B-AC	3.40	8.94	0.381		0.44	0.60	8.7		0.18
C-AB	3.30	9.27	0.355		0.44	0.61	9.2		0.17
A-B	2.14								
A-C	2.44								
08.15-08.30									
B-AC	4.17	8.54	0.488		0.60	0.93	13.2		0.23
C-AB	4.04	9.05	0.446		0.61	0.94	14.2		0.20
A-B	2.62								
A-C	2.99								
08.30-08.45									
B-AC	4.17	8.53	0.488		0.93	0.94	14.0		0.23
C-AB	4.04	9.05	0.446		0.94	0.96	14.6		0.20
A-B	2.62								
A-C	2.99								

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TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	3.40	8.93	0.381		0.94	0.63	9.8		0.18
C-AB	3.30	9.27	0.355		0.96	0.64	9.7		0.17
A-B	2.14								
A-C	2.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	2.85	9.21	0.309		0.63	0.45	7.0		0.16
C-AB	2.76	9.44	0.292		0.64	0.46	6.9		0.15
A-B	1.79								
A-C	2.05								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.6	*
08.30	0.9	*
08.45	0.9	*
09.00	0.6	*
09.15	0.5	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.4	
08.15	0.6	*
08.30	0.9	*
08.45	1.0	*
09.00	0.6	*
09.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	312.4	208.3	59.1	0.19	59.1	0.19
C-AB	302.8	201.9	61.1	0.20	61.1	0.20
A-B	196.8	131.2				
A-C	224.4	149.6				
ALL	1355.8	903.9	120.2	0.09	120.2	0.09

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

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

========== end of file ==========

Printed at 11:34:02 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
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TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

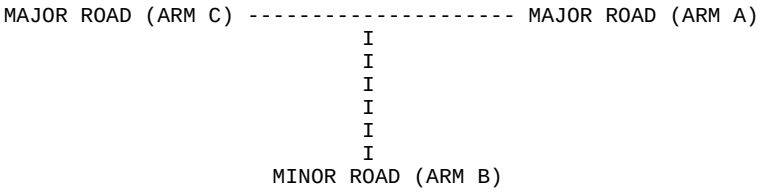
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Berry Lane Market Street King St 2016 Baseline Flows-PM.vpi"
(drive-on-the-left) at 11:36:08 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street 2016 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street 2016

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.84	7.26	4.84
ARM B	15.00	45.00	75.00	3.51	5.27	3.51
ARM C	15.00	45.00	75.00	4.19	6.28	4.19

TRL TRL Viewer 3.2 AG N:\.. \2016 Baseline Flows\Berry Lane Market Street King St 2016 Baseline Flows-PM.vpo

Demand set: Berry Lane/Market Street 2016

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.346	0.654
		0.0	134.0	253.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.338	0.000	0.662
		95.0	0.0	186.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.472	0.528	0.000
		158.0	177.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	3.53	9.02	0.391		0.00	0.63	8.9		0.18
C-AB	2.22	9.21	0.241		0.00	0.33	4.9		0.14
A-B	1.68								
A-C	3.17								
17.00-17.15									
B-AC	4.21	8.72	0.483		0.63	0.91	13.0		0.22
C-AB	2.65	9.01	0.294		0.33	0.44	6.6		0.16
A-B	2.01								
A-C	3.79								
17.15-17.30									
B-AC	5.16	8.30	0.621		0.91	1.56	21.6		0.31
C-AB	3.25	8.72	0.373		0.44	0.65	9.8		0.18
A-B	2.46								
A-C	4.64								
17.30-17.45									
B-AC	5.16	8.30	0.621		1.56	1.60	23.7		0.32
C-AB	3.25	8.72	0.373		0.65	0.66	10.0		0.18
A-B	2.46								
A-C	4.64								

TRL TRL Viewer 3.2 AG N:\.. \2016 Baseline Flows\Berry Lane Market Street King St 2016 Baseline Flows-PM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	4.21	8.72	0.483		1.60	0.96	15.3		0.23
C-AB	2.65	9.01	0.294		0.66	0.46	6.9		0.16
A-B	2.01								
A-C	3.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	3.53	9.01	0.391		0.96	0.65	10.3		0.18
C-AB	2.22	9.21	0.241		0.46	0.34	5.1		0.14
A-B	1.68								
A-C	3.17								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.6	*
17.15	0.9	*
17.30	1.6	**
17.45	1.6	**
18.00	1.0	*
18.15	0.7	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	386.8	257.9	92.8	0.24	92.8	0.24
C-AB	243.6	162.4	43.3	0.18	43.3	0.18
A-B	184.4	123.0				
A-C	348.2	232.2				
ALL	1380.6	920.4	136.1	0.10	136.1	0.10

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

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

========== end of file ==========

Printed at 11:36:36 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

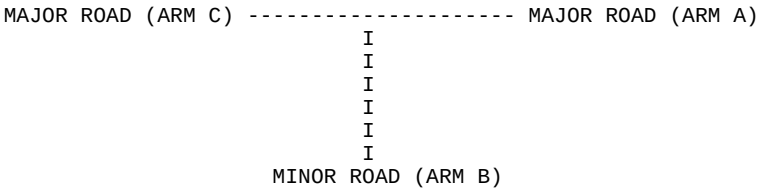
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Berry Lane Market Street King St 2025 Baseline Flows-AM.vpi"
(drive-on-the-left) at 11:40:31 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street/King Street 2025 Baseline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: Vn30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street/King Street 2025

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.29	6.43	4.29
ARM B	15.00	45.00	75.00	3.16	4.74	3.16
ARM C	15.00	45.00	75.00	6.31	9.47	6.31

TRL TRL Viewer 3.2 AG N:\.. \2025 Baseline Flows\Berry Lane Market Street King St 2025 Baseline Flows-AM.vpo

Demand set: Berry Lane/Market Street/King Street 2025

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.472	0.528
		0.0	162.0	181.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.312	0.000	0.688
		79.0	0.0	174.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.513	0.487	0.000
		259.0	246.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	3.17	9.06	0.351		0.00	0.53	7.5		0.17
C-AB	3.09	9.34	0.331		0.00	0.54	7.9		0.16
A-B	2.03								
A-C	2.27								
08.00-08.15									
B-AC	3.79	8.74	0.434		0.53	0.75	10.8		0.20
C-AB	3.69	9.15	0.403		0.54	0.77	11.5		0.18
A-B	2.43								
A-C	2.71								
08.15-08.30									
B-AC	4.64	8.28	0.561		0.75	1.23	17.3		0.27
C-AB	4.51	8.90	0.507		0.77	1.26	18.9		0.23
A-B	2.97								
A-C	3.32								
08.30-08.45									
B-AC	4.64	8.27	0.561		1.23	1.25	18.7		0.27
C-AB	4.51	8.90	0.507		1.26	1.28	19.6		0.23
A-B	2.97								
A-C	3.32								

TRL TRL Viewer 3.2 AG N:\.. \2025 Baseline Flows\Berry Lane Market Street King St 2025 Baseline Flows-AM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	3.79	8.73	0.434		1.25	0.79	12.4		0.20
C-AB	3.69	9.15	0.403		1.28	0.81	12.3		0.19
A-B	2.43								
A-C	2.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	3.17	9.05	0.351		0.79	0.55	8.6		0.17
C-AB	3.09	9.34	0.331		0.81	0.56	8.5		0.16
A-B	2.03								
A-C	2.27								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.7	*
08.30	1.2	*
08.45	1.3	*
09.00	0.8	*
09.15	0.5	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.8	*
08.30	1.3	*
08.45	1.3	*
09.00	0.8	*
09.15	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	348.2	232.2	75.3	0.22	75.3	0.22
C-AB	338.6	225.7	78.7	0.23	78.8	0.23
A-B	223.0	148.7				
A-C	249.1	166.1				
ALL	1515.4	1010.3	154.0	0.10	154.0	0.10

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

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

========== end of file ==========

Printed at 11:41:00 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

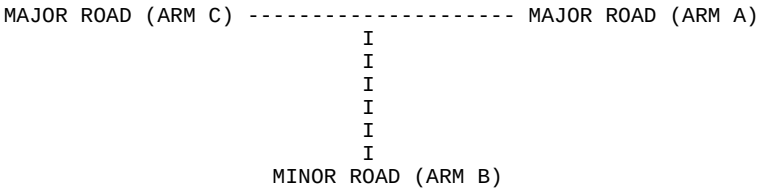
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Berry Lane Market Street King St 2025 Baseline Flows-PM.vpi"
(drive-on-the-left) at 11:43:40 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street 2016 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street 2025

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.40	8.10	5.40
ARM B	15.00	45.00	75.00	3.91	5.87	3.91
ARM C	15.00	45.00	75.00	4.66	6.99	4.66

TRL TRL Viewer 3.2 AG N:\.. \2025 Baseline Flows\Berry Lane Market Street King St 2025 Baseline Flows-PM.vpo

Demand set: Berry Lane/Market Street 2025

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.350	0.650
		0.0	151.0	281.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.339	0.000	0.661
		106.0	0.0	207.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.469	0.531	0.000
		175.0	198.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	3.93	8.85	0.444		0.00	0.78	10.9		0.20
C-AB	2.48	9.09	0.273		0.00	0.39	5.8		0.15
A-B	1.89								
A-C	3.53								
17.00-17.15									
B-AC	4.69	8.51	0.551		0.78	1.19	16.8		0.26
C-AB	2.97	8.86	0.335		0.39	0.54	8.1		0.17
A-B	2.26								
A-C	4.21								
17.15-17.30									
B-AC	5.74	8.03	0.715		1.19	2.30	30.9		0.41
C-AB	3.63	8.53	0.426		0.54	0.84	12.5		0.20
A-B	2.77								
A-C	5.16								
17.30-17.45									
B-AC	5.74	8.03	0.716		2.30	2.40	35.4		0.43
C-AB	3.63	8.53	0.426		0.84	0.85	12.9		0.20
A-B	2.77								
A-C	5.16								

TRL TRL Viewer 3.2 AG N:\.. \2025 Baseline Flows\Berry Lane Market Street King St 2025 Baseline Flows-PM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	4.69	8.50	0.552		2.40	1.28	20.6		0.27
C-AB	2.97	8.86	0.335		0.85	0.56	8.6		0.17
A-B	2.26								
A-C	4.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	3.93	8.84	0.444		1.28	0.82	12.9		0.21
C-AB	2.48	9.09	0.273		0.56	0.41	6.1		0.15
A-B	1.89								
A-C	3.53								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.2	*
17.30	2.3	**
17.45	2.4	**
18.00	1.3	*
18.15	0.8	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.6	*
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	430.8	287.2	127.6	0.30	127.6	0.30
C-AB	272.5	181.7	54.0	0.20	54.0	0.20
A-B	207.8	138.6				
A-C	386.8	257.9				
ALL	1538.8	1025.9	181.6	0.12	181.7	0.12

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

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

========== end of file ==========

Printed at 11:44:02 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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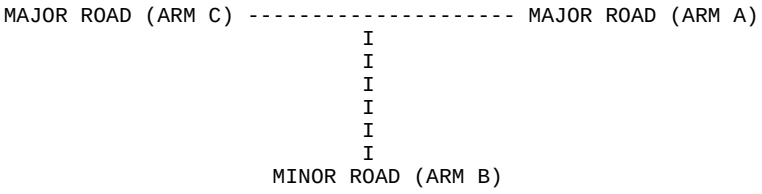
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Berry Lane Market Street King St 2016 Assessment Flows-AM.vpi"
(drive-on-the-left) at 11:48:25 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street/King Street 2016 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street/King Street 2016

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	3.83	5.74	3.83
ARM B	15.00	45.00	75.00	3.20	4.80	3.20
ARM C	15.00	45.00	75.00	5.79	8.68	5.79

Demand set: Berry Lane/Market Street/King Street 2016

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.467	0.533
		0.0	143.0	163.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.277	0.000	0.723
		71.0	0.0	185.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.501	0.499	0.000
		232.0	231.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	3.21	9.35	0.344		0.00	0.51	7.3		0.16
C-AB	2.90	9.44	0.307		0.00	0.48	7.0		0.15
A-B	1.79								
A-C	2.05								
08.00-08.15									
B-AC	3.84	9.07	0.423		0.51	0.72	10.3		0.19
C-AB	3.46	9.27	0.373		0.48	0.66	10.0		0.17
A-B	2.14								
A-C	2.44								
08.15-08.30									
B-AC	4.70	8.68	0.541		0.72	1.14	16.1		0.25
C-AB	4.24	9.05	0.469		0.66	1.04	15.6		0.21
A-B	2.62								
A-C	2.99								
08.30-08.45									
B-AC	4.70	8.68	0.541		1.14	1.16	17.3		0.25
C-AB	4.24	9.05	0.469		1.04	1.06	16.1		0.21
A-B	2.62								
A-C	2.99								

TRL TRL Viewer 3.2 AG N:\.. \2016 Assessment Flows\Berry Lane Market Street King St 2016 Assessment Flows-AM

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	3.84	9.07	0.423		1.16	0.75	11.8		0.19
C-AB	3.46	9.27	0.373		1.06	0.69	10.5		0.17
A-B	2.14								
A-C	2.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	3.21	9.34	0.344		0.75	0.53	8.3		0.16
C-AB	2.90	9.44	0.307		0.69	0.49	7.4		0.15
A-B	1.79								
A-C	2.05								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	*
08.15	0.7	*
08.30	1.1	*
08.45	1.2	*
09.00	0.7	*
09.15	0.5	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	
08.15	0.7	*
08.30	1.0	*
08.45	1.1	*
09.00	0.7	*
09.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	352.4	234.9	71.1	0.20	71.2	0.20
C-AB	318.0	212.0	66.7	0.21	66.7	0.21
A-B	196.8	131.2				
A-C	224.4	149.6				
ALL	1410.8	940.6	137.8	0.10	137.8	0.10

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

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

========== end of file ==========

Printed at 11:50:32 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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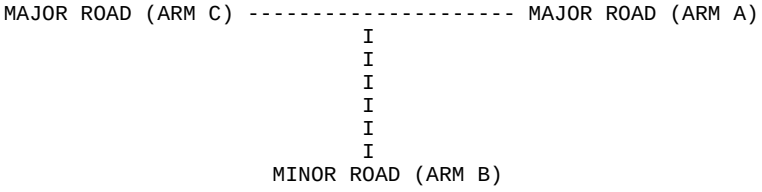
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Berry Lane Market Street King St 2016 Assessment Flows-PM.vpi"
(drive-on-the-left) at 11:51:28 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street 2016 Assessment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	7.70 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	75.00 M.
- BLOCKS TRAFFIC (SPACES)		YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	34.0 M.
- VISIBILITY TO RIGHT	(VB-A)	38.0 M.
- LANE 1 WIDTH	(WB-C)	3.60 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street 2016

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.84	7.26	4.84
ARM B	15.00	45.00	75.00	3.70	5.55	3.70
ARM C	15.00	45.00	75.00	4.53	6.79	4.53

TRL TRL Viewer 3.2 AG N:\.. \2016 Assessment Flows\Berry Lane Market Street King St 2016 Assessment Flows-PM

Demand set: Berry Lane/Market Street 2016

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.346	0.654
		0.0	134.0	253.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.321	0.000	0.679
		95.0	0.0	201.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.436	0.564	0.000
		158.0	204.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	3.71	9.03	0.412		0.00	0.68	9.7		0.19
C-AB	2.56	9.21	0.278		0.00	0.40	5.9		0.15
A-B	1.68								
A-C	3.17								
17.00-17.15									
B-AC	4.43	8.72	0.509		0.68	1.01	14.3		0.23
C-AB	3.06	9.01	0.339		0.40	0.55	8.2		0.17
A-B	2.01								
A-C	3.79								
17.15-17.30									
B-AC	5.43	8.28	0.656		1.01	1.80	24.7		0.34
C-AB	3.74	8.72	0.429		0.55	0.84	12.5		0.20
A-B	2.46								
A-C	4.64								
17.30-17.45									
B-AC	5.43	8.27	0.656		1.80	1.85	27.4		0.35
C-AB	3.74	8.72	0.429		0.84	0.85	12.9		0.20
A-B	2.46								
A-C	4.64								

TRL TRL Viewer 3.2 AG N:\.. \2016 Assessment Flows\Berry Lane Market Street King St 2016 Assessment Flows-PM

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	4.43	8.71	0.509		1.85	1.07	17.1		0.24
C-AB	3.06	9.01	0.339		0.85	0.57	8.6		0.17
A-B	2.01								
A-C	3.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	3.71	9.02	0.412		1.07	0.71	11.2		0.19
C-AB	2.56	9.21	0.278		0.57	0.41	6.2		0.15
A-B	1.68								
A-C	3.17								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.8	**
17.45	1.9	**
18.00	1.1	*
18.15	0.7	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	0.8	*
17.45	0.8	*
18.00	0.6	*
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	407.4	271.6	104.5	0.26	104.5	0.26
C-AB	280.8	187.2	54.4	0.19	54.4	0.19
A-B	184.4	123.0				
A-C	348.2	232.2				
ALL	1438.4	958.9	158.9	0.11	158.9	0.11

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

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

========== end of file ==========

Printed at 11:51:51 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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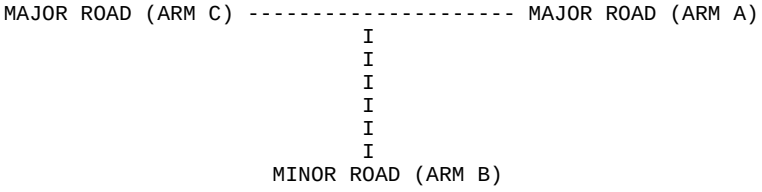
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Berry Lane Market Street King St 2025 Assessment Flows-AM.vpi"
(drive-on-the-left) at 11:53:06 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street/King Street 2025 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street/King Street 2025

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.29	6.43	4.29
ARM B	15.00	45.00	75.00	3.53	5.29	3.53
ARM C	15.00	45.00	75.00	6.45	9.67	6.45

Demand set: Berry Lane/Market Street/King Street 2025

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.472	0.528
		0.0	162.0	181.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.280	0.000	0.720
		79.0	0.0	203.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.502	0.498	0.000
		259.0	257.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	3.54	9.18	0.386		0.00	0.62	8.7		0.17
C-AB	3.22	9.34	0.345		0.00	0.58	8.5		0.16
A-B	2.03								
A-C	2.27								
08.00-08.15									
B-AC	4.23	8.86	0.477		0.62	0.89	12.7		0.21
C-AB	3.85	9.15	0.421		0.58	0.83	12.5		0.19
A-B	2.43								
A-C	2.71								
08.15-08.30									
B-AC	5.17	8.41	0.615		0.89	1.52	21.2		0.30
C-AB	4.72	8.90	0.530		0.83	1.39	20.8		0.24
A-B	2.97								
A-C	3.32								
08.30-08.45									
B-AC	5.17	8.40	0.616		1.52	1.56	23.2		0.31
C-AB	4.72	8.90	0.530		1.39	1.42	21.6		0.24
A-B	2.97								
A-C	3.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	4.23	8.85	0.477		1.56	0.94	14.9		0.22
C-AB	3.85	9.15	0.421		1.42	0.88	13.4		0.19
A-B	2.43								
A-C	2.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	3.54	9.17	0.386		0.94	0.64	10.0		0.18
C-AB	3.22	9.34	0.345		0.88	0.60	9.1		0.16
A-B	2.03								
A-C	2.27								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.6	*
08.15	0.9	*
08.30	1.5	**
08.45	1.6	**
09.00	0.9	*
09.15	0.6	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.6	*
08.15	0.8	*
08.30	1.4	*
08.45	1.4	*
09.00	0.9	*
09.15	0.6	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	388.2	258.8	90.8	0.23	90.8	0.23
C-AB	353.7	235.8	85.9	0.24	86.0	0.24
A-B	223.0	148.7				
A-C	249.1	166.1				
ALL	1570.5	1047.0	176.7	0.11	176.8	0.11

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

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

========== end of file ==========

Printed at 11:53:21 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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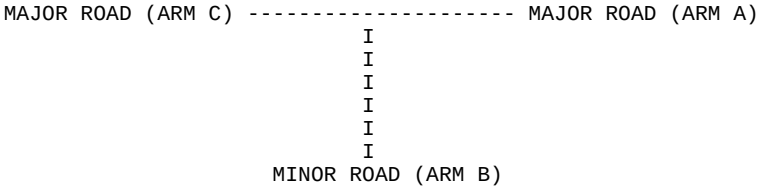
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Berry Lane Market Street King St 2025 Assessment Flows-PM.vpi"
(drive-on-the-left) at 11:54:36 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Berry Lane/Market Street 2025 Assessment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	:
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Market Place
ARM B IS Berry Lane
ARM C IS King Street

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.70 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 75.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 34.0 M.
- VISIBILITY TO RIGHT	(VB-A) 38.0 M.
- LANE 1 WIDTH	(WB-C) 3.60 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.78	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
537.77	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
617.40	0.22	0.22

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Berry Lane/Market Street 2025

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.40	8.10	5.40
ARM B	15.00	45.00	75.00	4.10	6.15	4.10
ARM C	15.00	45.00	75.00	5.00	7.50	5.00

Demand set: Berry Lane/Market Street 2025

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.350	0.650
		0.0	151.0	281.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.323	0.000	0.677
		106.0	0.0	222.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.438	0.563	0.000
		175.0	225.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	4.12	8.84	0.465		0.00	0.85	11.9		0.21
C-AB	2.82	9.09	0.311		0.00	0.48	7.0		0.16
A-B	1.89								
A-C	3.53								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	4.91	8.49	0.579		0.85	1.32	18.6		0.27
C-AB	3.37	8.86	0.381		0.48	0.67	10.0		0.18
A-B	2.26								
A-C	4.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	6.02	8.00	0.753		1.32	2.72	35.9		0.46
C-AB	4.13	8.53	0.484		0.67	1.07	16.0		0.23
A-B	2.77								
A-C	5.16								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	6.02	7.99	0.753		2.72	2.87	42.1		0.50
C-AB	4.13	8.53	0.484		1.07	1.09	16.6		0.23
A-B	2.77								
A-C	5.16								

TRL TRL Viewer 3.2 AG N:\.. \2025 Assessment Flows\Berry Lane Market Street King St 2025 Assessment Flows-PM

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	4.91	8.49	0.579		2.87	1.43	23.4		0.29
C-AB	3.37	8.86	0.381		1.09	0.70	10.6		0.18
A-B	2.26								
A-C	4.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	4.12	8.84	0.466		1.43	0.89	14.2		0.22
C-AB	2.82	9.09	0.311		0.70	0.49	7.4		0.16
A-B	1.89								
A-C	3.53								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.8	*
17.15	1.3	*
17.30	2.7	***
17.45	2.9	***
18.00	1.4	*
18.15	0.9	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.7	*
17.30	1.1	*
17.45	1.1	*
18.00	0.7	*
18.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	451.5	301.0	146.0	0.32	146.1	0.32
C-AB	309.7	206.5	67.7	0.22	67.7	0.22
A-B	207.8	138.6				
A-C	386.8	257.9				
ALL	1596.7	1064.4	213.7	0.13	213.8	0.13

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

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

========== end of file ==========

Printed at 11:55:02 on 07/04/2015]

Appendix 20

PICADY Outputs – Inglewhite Road/Halfpenny Lane

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

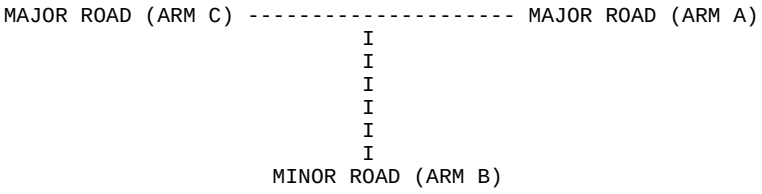
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Halfpenny and Inglewhite Rd 2016 Baseline Flows-AM.vpi"
(drive-on-the-left) at 15:28:31 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2016 Baseline Flows
LOCATION	: Longridge
DATE	: 24/03/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	2.83	4.24	2.83
ARM B	15.00	45.00	75.00	0.71	1.07	0.71
ARM C	15.00	45.00	75.00	2.04	3.06	2.04

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.208	0.792
		0.0	47.0	179.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.544	0.000	0.456
		31.0	0.0	26.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.914	0.086	0.000
		149.0	14.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	0.72	8.55	0.084		0.00	0.09	1.3		0.13
C-AB	0.18	9.99	0.018		0.00	0.02	0.3		0.10
A-B	0.59								
A-C	2.25								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.85	8.39	0.102		0.09	0.11	1.6		0.13
C-AB	0.21	9.85	0.021		0.02	0.02	0.3		0.10
A-B	0.70								
A-C	2.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.05	8.16	0.128		0.11	0.15	2.1		0.14
C-AB	0.26	9.66	0.027		0.02	0.03	0.4		0.11
A-B	0.86								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.05	8.16	0.128		0.15	0.15	2.2		0.14
C-AB	0.26	9.66	0.027		0.03	0.03	0.4		0.11
A-B	0.86								
A-C	3.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.85	8.39	0.102		0.15	0.11	1.8		0.13
C-AB	0.21	9.85	0.021		0.03	0.02	0.3		0.10
A-B	0.70								
A-C	2.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.72	8.55	0.084		0.11	0.09	1.4		0.13
C-AB	0.18	9.99	0.018		0.02	0.02	0.3		0.10
A-B	0.59								
A-C	2.25								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	78.5	52.3	10.5	0.13	10.5	0.13
C-AB	19.3	12.8	2.0	0.10	2.0	0.10
A-B	64.7	43.1				
A-C	246.4	164.3				
ALL	613.9	409.3	12.5	0.02	12.5	0.02

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

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

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Printed at 15:31:22 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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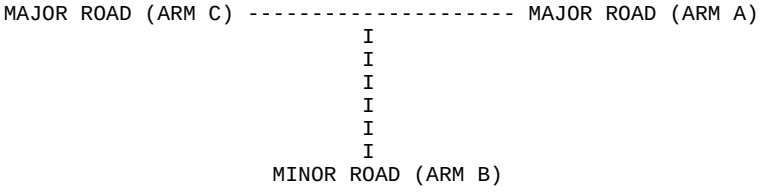
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Halfpenny and Inglewhite Rd 2016 Baseline Flows-PM.vpi"
(drive-on-the-left) at 15:32:31 on Tuesday, 7 April 2015

RUN INFORMATION
****

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2016 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 24/03/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.70	4.05	2.70
ARM B	15.00	45.00	75.00	0.73	1.09	0.73
ARM C	15.00	45.00	75.00	2.05	3.07	2.05

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.208	0.792
		0.0	45.0	171.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.862	0.000	0.138
		50.0	0.0	8.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.945	0.055	0.000
		155.0	9.0	0.0
		(10.0)	(10.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00										
	B-AC	0.73	7.04	0.103		0.00	0.11	1.6		0.16
	C-AB	0.11	9.05	0.012		0.00	0.01	0.2		0.11
	A-B	0.56								
	A-C	2.15								
17.00-17.15										
	B-AC	0.87	6.87	0.126		0.11	0.14	2.1		0.17
	C-AB	0.13	8.92	0.015		0.01	0.02	0.2		0.11
	A-B	0.67								
	A-C	2.56								
17.15-17.30										
	B-AC	1.06	6.64	0.160		0.14	0.19	2.7		0.18
	C-AB	0.17	8.74	0.019		0.02	0.02	0.3		0.12
	A-B	0.83								
	A-C	3.14								
17.30-17.45										
	B-AC	1.06	6.64	0.160		0.19	0.19	2.8		0.18
	C-AB	0.17	8.74	0.019		0.02	0.02	0.3		0.12
	A-B	0.83								
	A-C	3.14								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.87	6.87	0.126		0.19	0.15	2.3		0.17
C-AB	0.13	8.92	0.015		0.02	0.02	0.2		0.11
A-B	0.67								
A-C	2.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.73	7.04	0.103		0.15	0.12	1.8		0.16
C-AB	0.11	9.05	0.012		0.02	0.01	0.2		0.11
A-B	0.56								
A-C	2.15								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	79.8	53.2	13.4	0.17	13.4	0.17
C-AB	12.4	8.3	1.4	0.11	1.4	0.11
A-B	61.9	41.3				
A-C	235.4	156.9				
ALL	602.9	401.9	14.8	0.02	14.8	0.02

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

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

========== end of file ==========

Printed at 15:32:52 on 07/04/2015]

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

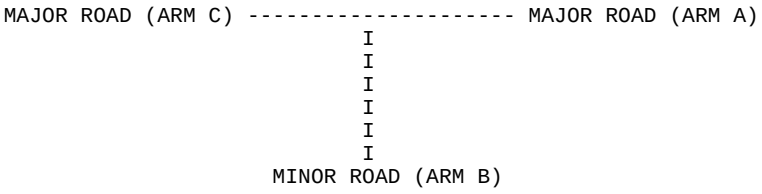
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Halfpenny and Inglewhite Rd 2025 Baseline Flows-AM.vpi"
(drive-on-the-left) at 15:40:26 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2016 Baseline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.15	4.73	3.15
ARM B	15.00	45.00	75.00	0.80	1.20	0.80
ARM C	15.00	45.00	75.00	2.29	3.43	2.29

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.210	0.790
		0.0	53.0	199.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.531	0.000	0.469
		34.0	0.0	30.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.913	0.087	0.000
		167.0	16.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	0.80	8.49	0.095		0.00	0.10	1.5		0.13
C-AB	0.20	9.91	0.020		0.00	0.02	0.3		0.10
A-B	0.67								
A-C	2.50								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.96	8.30	0.115		0.10	0.13	1.9		0.14
C-AB	0.24	9.76	0.025		0.02	0.03	0.4		0.11
A-B	0.79								
A-C	2.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.17	8.05	0.146		0.13	0.17	2.5		0.15
C-AB	0.29	9.55	0.031		0.03	0.03	0.5		0.11
A-B	0.97								
A-C	3.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.17	8.05	0.146		0.17	0.17	2.5		0.15
C-AB	0.29	9.55	0.031		0.03	0.03	0.5		0.11
A-B	0.97								
A-C	3.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.96	8.30	0.115		0.17	0.13	2.0		0.14
C-AB	0.24	9.76	0.025		0.03	0.03	0.4		0.11
A-B	0.79								
A-C	2.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.80	8.49	0.095		0.13	0.11	1.6		0.13
C-AB	0.20	9.91	0.020		0.03	0.02	0.3		0.10
A-B	0.67								
A-C	2.50								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	88.1	58.7	12.1	0.14	12.1	0.14
C-AB	22.0	14.7	2.3	0.11	2.3	0.11
A-B	73.0	48.6				
A-C	273.9	182.6				
ALL	686.8	457.9	14.4	0.02	14.4	0.02

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

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

========== end of file ==========

Printed at 15:40:59 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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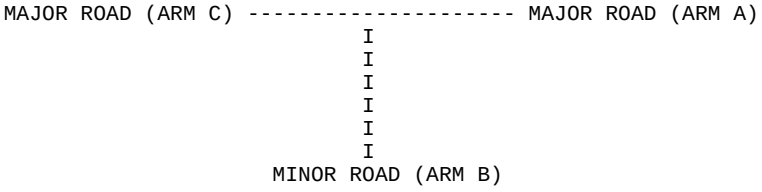
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Halfpenny and Inglewhite Rd 2025 Baseline Flows-PM.vpi"
(drive-on-the-left) at 15:50:00 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2025 Baseline Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.05	4.57	3.05
ARM B	15.00	45.00	75.00	0.81	1.22	0.81
ARM C	15.00	45.00	75.00	2.30	3.45	2.30

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.209	0.791
		0.0	51.0	193.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.862	0.000	0.138
		56.0	0.0	9.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.946	0.054	0.000
		174.0	10.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.82	7.72	0.106		0.00	0.12	1.7		0.14
C-AB	0.13	9.93	0.013		0.00	0.01	0.2		0.10
A-B	0.64								
A-C	2.42								
17.00-17.15									
B-AC	0.97	7.53	0.129		0.12	0.15	2.1		0.15
C-AB	0.15	9.79	0.015		0.01	0.02	0.2		0.10
A-B	0.76								
A-C	2.89								
17.15-17.30									
B-AC	1.19	7.27	0.164		0.15	0.19	2.8		0.16
C-AB	0.18	9.58	0.019		0.02	0.02	0.3		0.11
A-B	0.94								
A-C	3.54								
17.30-17.45									
B-AC	1.19	7.27	0.164		0.19	0.19	2.9		0.16
C-AB	0.18	9.58	0.019		0.02	0.02	0.3		0.11
A-B	0.94								
A-C	3.54								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.97	7.53	0.129		0.19	0.15	2.3		0.15
C-AB	0.15	9.79	0.015		0.02	0.02	0.2		0.10
A-B	0.76								
A-C	2.89								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.82	7.72	0.106		0.15	0.12	1.8		0.14
C-AB	0.13	9.93	0.013		0.02	0.01	0.2		0.10
A-B	0.64								
A-C	2.42								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	89.5	59.6	13.7	0.15	13.7	0.15
C-AB	13.8	9.2	1.4	0.10	1.4	0.10
A-B	70.2	46.8				
A-C	265.7	177.1				
ALL	678.6	452.4	15.2	0.02	15.2	0.02

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

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

========== end of file ==========

Printed at 15:50:27 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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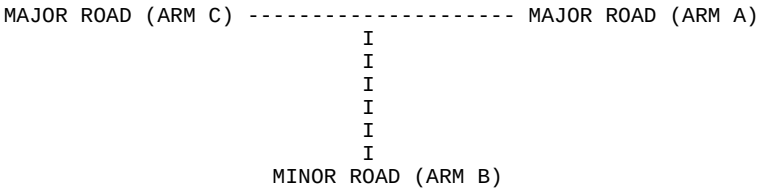
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Halfpenny and Inglewhite Rd 2016 Assessment Flows-AM.vpi"
(drive-on-the-left) at 15:52:05 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2016 Assessment Flows
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS Halfpenny Lane
ARM C IS Inglewhite Road W

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.44	5.16	3.44
ARM B	15.00	45.00	75.00	0.90	1.35	0.90
ARM C	15.00	45.00	75.00	2.06	3.09	2.06

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.327	0.673
		0.0	90.0	185.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.639	0.000	0.361
		46.0	0.0	26.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.915	0.085	0.000
		151.0	14.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	0.90	8.24	0.110		0.00	0.12	1.8		0.14
C-AB	0.18	9.84	0.018		0.00	0.02	0.3		0.10
A-B	1.13								
A-C	2.32								
08.00-08.15									
B-AC	1.08	8.06	0.134		0.12	0.15	2.2		0.14
C-AB	0.21	9.67	0.022		0.02	0.02	0.3		0.11
A-B	1.35								
A-C	2.77								
08.15-08.30									
B-AC	1.32	7.80	0.169		0.15	0.20	2.9		0.15
C-AB	0.26	9.44	0.027		0.02	0.03	0.4		0.11
A-B	1.65								
A-C	3.39								
08.30-08.45									
B-AC	1.32	7.80	0.169		0.20	0.20	3.0		0.15
C-AB	0.26	9.44	0.027		0.03	0.03	0.4		0.11
A-B	1.65								
A-C	3.39								

TRL TRL Viewer 3.2 AG N:\.. \2016 Assessment Flows\Halfpenny and Inglewhite Rd 2016 Assessment Flows-AM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.08	8.05	0.134		0.20	0.16	2.4		0.14
C-AB	0.21	9.67	0.022		0.03	0.02	0.3		0.11
A-B	1.35								
A-C	2.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.90	8.24	0.110		0.16	0.12	1.9		0.14
C-AB	0.18	9.84	0.018		0.02	0.02	0.3		0.10
A-B	1.13								
A-C	2.32								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	99.1	66.1	14.3	0.14	14.3	0.14
C-AB	19.3	12.8	2.1	0.11	2.1	0.11
A-B	123.9	82.6				
A-C	254.6	169.8				
ALL	704.7	469.8	16.4	0.02	16.4	0.02

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

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

========== end of file ==========

Printed at 15:52:58 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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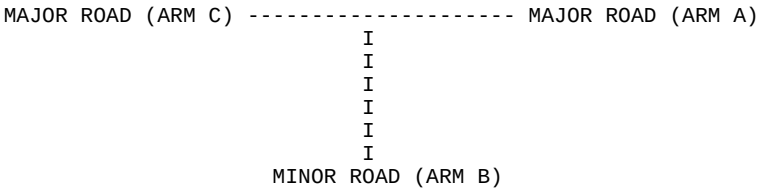
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Halfpenny and Inglewhite Rd 2016 Assessment Flows-PM.vpi"
(drive-on-the-left) at 15:53:58 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2016 Assesment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS Halfpenny Lane
ARM C IS Inglewhite Road W

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.01	4.52	3.01
ARM B	15.00	45.00	75.00	1.23	1.84	1.23
ARM C	15.00	45.00	75.00	2.11	3.17	2.11

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.278	0.722
		0.0	67.0	174.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.918	0.000	0.082
		90.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.947	0.053	0.000
		160.0	9.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.23	7.67	0.160		0.00	0.19	2.7		0.15
C-AB	0.11	9.94	0.011		0.00	0.01	0.2		0.10
A-B	0.84								
A-C	2.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.47	7.49	0.196		0.19	0.24	3.5		0.17
C-AB	0.13	9.80	0.014		0.01	0.01	0.2		0.10
A-B	1.00								
A-C	2.61								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	1.80	7.25	0.248		0.24	0.33	4.7		0.18
C-AB	0.17	9.60	0.017		0.01	0.02	0.3		0.11
A-B	1.23								
A-C	3.19								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	1.80	7.25	0.248		0.33	0.33	4.9		0.18
C-AB	0.17	9.60	0.017		0.02	0.02	0.3		0.11
A-B	1.23								
A-C	3.19								

TRL TRL Viewer 3.2 AG N:\.. \2016 Assessment Flows\Halfpenny and Inglewhite Rd 2016 Assessment Flows-PM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	1.47	7.49	0.196		0.33	0.25	3.8		0.17
C-AB	0.13	9.80	0.014		0.02	0.01	0.2		0.10
A-B	1.00								
A-C	2.61								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	1.23	7.67	0.160		0.25	0.19	3.0		0.16
C-AB	0.11	9.94	0.011		0.01	0.01	0.2		0.10
A-B	0.84								
A-C	2.18								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	134.9	89.9	22.6	0.17	22.6	0.17
C-AB	12.4	8.3	1.3	0.10	1.3	0.10
A-B	92.2	61.5				
A-C	239.5	159.7				
ALL	699.2	466.1	23.9	0.03	23.9	0.03

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

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

========== end of file ==========

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TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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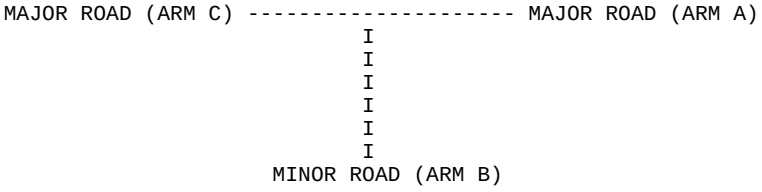
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Halfpenny and Inglewhite Rd 2025 Assessment Flows-AM.vpi"
(drive-on-the-left) at 16:01:19 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2025 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS halfpenny Lane
ARM C IS Inglewhite Road W

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.79	5.68	3.79
ARM B	15.00	45.00	75.00	1.00	1.50	1.00
ARM C	15.00	45.00	75.00	2.33	3.49	2.33

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.317	0.683
		0.0	96.0	207.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.625	0.000	0.375
		50.0	0.0	30.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.914	0.086	0.000
		170.0	16.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.00	8.16	0.123		0.00	0.14	2.0		0.14
C-AB	0.20	9.75	0.021		0.00	0.02	0.3		0.10
A-B	1.20								
A-C	2.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.20	7.96	0.151		0.14	0.18	2.6		0.15
C-AB	0.24	9.57	0.025		0.02	0.03	0.4		0.11
A-B	1.44								
A-C	3.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.47	7.68	0.191		0.18	0.23	3.4		0.16
C-AB	0.29	9.31	0.032		0.03	0.03	0.5		0.11
A-B	1.76								
A-C	3.80								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.47	7.68	0.191		0.23	0.23	3.5		0.16
C-AB	0.29	9.31	0.032		0.03	0.03	0.5		0.11
A-B	1.76								
A-C	3.80								

TRL TRL Viewer 3.2 AG N:\.. \2025 Assessment Flows\Halfpenny and Inglewhite Rd 2025 Assessment Flows-AM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.20	7.96	0.151		0.23	0.18	2.8		0.15
C-AB	0.24	9.57	0.025		0.03	0.03	0.4		0.11
A-B	1.44								
A-C	3.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	1.00	8.16	0.123		0.18	0.14	2.2		0.14
C-AB	0.20	9.75	0.021		0.03	0.02	0.3		0.10
A-B	1.20								
A-C	2.60								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	110.1	73.4	16.4	0.15	16.4	0.15
C-AB	22.0	14.7	2.4	0.11	2.4	0.11
A-B	132.1	88.1				
A-C	284.9	189.9				
ALL	783.2	522.1	18.8	0.02	18.8	0.02

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

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

========== end of file ==========

Printed at 16:01:57 on 07/04/2015]

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

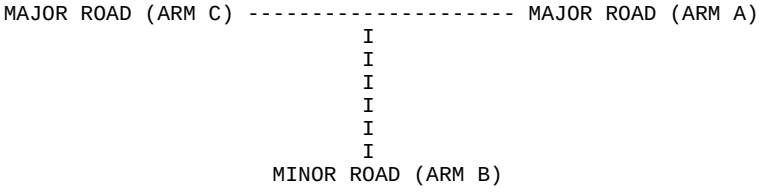
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Halfpenny and Inglewhite Rd 2025 Assessment Flows-PM.vpi"
(drive-on-the-left) at 16:02:39 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Inglewhite Road 2025 Assessment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Inglewhite Road E
ARM B IS Halpenny Lane
ARM C IS Inglewhite Road W

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)117.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 15.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
652.40	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
504.92	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
641.72	0.25	0.25

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Inglewhite Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.36	5.04	3.36
ARM B	15.00	45.00	75.00	1.31	1.97	1.31
ARM C	15.00	45.00	75.00	2.36	3.54	2.36

Demand set: Halfpenny Lane/Inglewhite Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.271	0.729
		0.0	73.0	196.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.914	0.000	0.086
		96.0	0.0	9.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.947	0.053	0.000
		179.0	10.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.32	7.57	0.174		0.00	0.21	3.0		0.16
C-AB	0.13	9.86	0.013		0.00	0.01	0.2		0.10
A-B	0.92								
A-C	2.46								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.57	7.37	0.214		0.21	0.27	3.9		0.17
C-AB	0.15	9.69	0.015		0.01	0.02	0.2		0.10
A-B	1.09								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	1.93	7.09	0.272		0.27	0.37	5.3		0.19
C-AB	0.18	9.47	0.019		0.02	0.02	0.3		0.11
A-B	1.34								
A-C	3.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	1.93	7.09	0.272		0.37	0.37	5.5		0.19
C-AB	0.18	9.47	0.019		0.02	0.02	0.3		0.11
A-B	1.34								
A-C	3.60								

TRL TRL Viewer 3.2 AG N:\.. \2025 Assessment Flows\Halfpenny and Inglewhite Rd 2025 Assessment Flows-PM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	1.57	7.37	0.214		0.37	0.28	4.3		0.17
C-AB	0.15	9.69	0.015		0.02	0.02	0.2		0.10
A-B	1.09								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	1.32	7.57	0.174		0.28	0.21	3.3		0.16
C-AB	0.13	9.86	0.013		0.02	0.01	0.2		0.10
A-B	0.92								
A-C	2.46								

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

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	144.5	96.3	25.3	0.17	25.3	0.18
C-AB	13.8	9.2	1.5	0.11	1.5	0.11
A-B	100.5	67.0				
A-C	269.8	179.9				
ALL	774.9	516.6	26.7	0.03	26.7	0.03

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

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

========== end of file ==========

Printed at 16:02:52 on 07/04/2015]

Appendix 21

PICADY Outputs – Whittingham Road/Halfpenny Lane

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

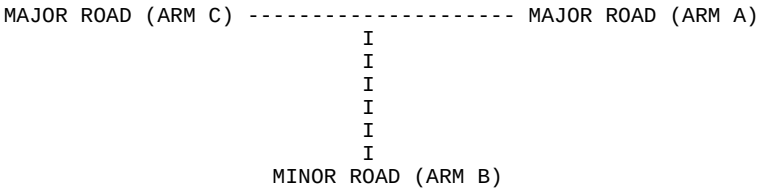
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Halfpenny and Whittingham Rd 2016 Baseline Flows-AM.vpi"
(drive-on-the-left) at 14:40:56 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittingham Road2016 Baseline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

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

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

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

Demand set: Halfpenny Lane/Whittingham Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.75	5.63	3.75
ARM B	15.00	45.00	75.00	0.90	1.35	0.90
ARM C	15.00	45.00	75.00	4.63	6.94	4.63

Demand set: Halfpenny Lane/Whittingham Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.073	0.927
		0.0	22.0	278.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.806	0.000	0.194
		58.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.914	0.086	0.000
		338.0	32.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	0.90	6.51	0.139		0.00	0.16	2.3		0.18
C-AB	0.40	9.53	0.042		0.00	0.04	0.7		0.11
A-B	0.28								
A-C	3.49								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.08	6.24	0.173		0.16	0.21	3.0		0.19
C-AB	0.48	9.35	0.051		0.04	0.06	0.8		0.11
A-B	0.33								
A-C	4.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.32	5.87	0.225		0.21	0.29	4.1		0.22
C-AB	0.59	9.11	0.064		0.06	0.07	1.1		0.12
A-B	0.40								
A-C	5.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.32	5.87	0.225		0.29	0.29	4.3		0.22
C-AB	0.59	9.11	0.064		0.07	0.07	1.1		0.12
A-B	0.40								
A-C	5.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.08	6.24	0.173		0.29	0.21	3.3		0.19
C-AB	0.48	9.35	0.051		0.07	0.06	0.8		0.11
A-B	0.33								
A-C	4.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	0.90	6.51	0.139		0.21	0.16	2.5		0.18
C-AB	0.40	9.53	0.042		0.06	0.05	0.7		0.11
A-B	0.28								
A-C	3.49								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	99.1	66.1	19.5	0.20	19.5	0.20
C-AB	44.0	29.4	5.2	0.12	5.2	0.12
A-B	30.3	20.2				
A-C	382.6	255.1				
ALL	1021.3	680.9	24.7	0.02	24.7	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:42:26 on 07/04/2015]

TRL LIMITED

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

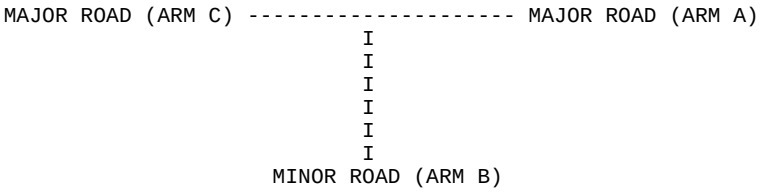
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Baseline Flows\
Halfpenny and Whittingham Rd 2016 Baseline Flows-PM.vpi"
(drive-on-the-left) at 14:43:39 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittinghjam Road 2016 Basleine Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittinghjam Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.63	6.94	4.63
ARM B	15.00	45.00	75.00	0.74	1.11	0.74
ARM C	15.00	45.00	75.00	3.56	5.34	3.56

Demand set: Halfpenny Lane/Whittinghjam Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.135	0.865
		0.0	50.0	320.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.763	0.000	0.237
		45.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.919	0.081	0.000
		262.0	23.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.74	6.60	0.112		0.00	0.12	1.8		0.17
C-AB	0.29	9.32	0.031		0.00	0.03	0.5		0.11
A-B	0.63								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.88	6.34	0.140		0.12	0.16	2.3		0.18
C-AB	0.34	9.10	0.038		0.03	0.04	0.6		0.11
A-B	0.75								
A-C	4.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	1.08	5.97	0.181		0.16	0.22	3.2		0.20
C-AB	0.42	8.80	0.048		0.04	0.05	0.8		0.12
A-B	0.92								
A-C	5.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	1.08	5.97	0.181		0.22	0.22	3.3		0.20
C-AB	0.42	8.80	0.048		0.05	0.05	0.8		0.12
A-B	0.92								
A-C	5.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.88	6.34	0.140		0.22	0.16	2.5		0.18
C-AB	0.34	9.10	0.038		0.05	0.04	0.6		0.11
A-B	0.75								
A-C	4.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.74	6.60	0.112		0.16	0.13	2.0		0.17
C-AB	0.29	9.32	0.031		0.04	0.03	0.5		0.11
A-B	0.63								
A-C	4.02								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	81.2	54.1	15.1	0.19	15.1	0.19
C-AB	31.7	21.1	3.7	0.12	3.7	0.12
A-B	68.8	45.9				
A-C	440.5	293.6				
ALL	982.8	655.2	18.8	0.02	18.8	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:43:56 on 07/04/2015]

TRL LIMITED

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

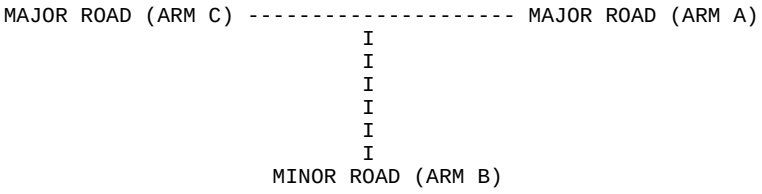
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Halfpenny and Whittingham Rd 2025 Baseline Flows-AM.vpi"
(drive-on-the-left) at 14:45:16 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittingham Road 2025 Baseline Flows-AM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittingham Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.07	6.11	4.07
ARM B	15.00	45.00	75.00	1.01	1.52	1.01
ARM C	15.00	45.00	75.00	5.05	7.58	5.05

Demand set: Halfpenny Lane/Whittingham Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15		TURNING PROPORTIONS		
	ARM A	0.000	0.077	0.923
		0.0	25.0	301.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.802	0.000	0.198
		65.0	0.0	16.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.911	0.089	0.000
		368.0	36.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.02	6.39	0.159		0.00	0.19	2.7		0.19
C-AB	0.45	9.45	0.048		0.00	0.05	0.8		0.11
A-B	0.31								
A-C	3.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.21	6.10	0.199		0.19	0.24	3.6		0.20
C-AB	0.54	9.26	0.058		0.05	0.06	1.0		0.11
A-B	0.37								
A-C	4.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.49	5.69	0.261		0.24	0.35	5.0		0.24
C-AB	0.66	8.99	0.073		0.06	0.08	1.2		0.12
A-B	0.46								
A-C	5.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.49	5.69	0.261		0.35	0.35	5.2		0.24
C-AB	0.66	8.99	0.073		0.08	0.08	1.3		0.12
A-B	0.46								
A-C	5.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.21	6.10	0.199		0.35	0.25	3.9		0.21
C-AB	0.54	9.26	0.058		0.08	0.06	1.0		0.11
A-B	0.37								
A-C	4.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	1.02	6.39	0.159		0.25	0.19	3.0		0.19
C-AB	0.45	9.45	0.048		0.06	0.05	0.8		0.11
A-B	0.31								
A-C	3.78								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	111.5	74.3	23.3	0.21	23.3	0.21
C-AB	49.6	33.0	6.0	0.12	6.0	0.12
A-B	34.4	22.9				
A-C	414.3	276.2				
ALL	1116.3	744.2	29.3	0.03	29.3	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:45:42 on 07/04/2015]

TRL LIMITED

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

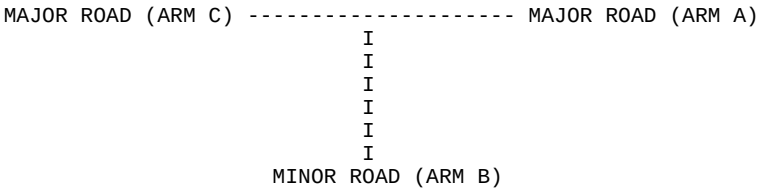
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Baseline Flows\
Halfpenny and Whittingham Rd 2025 Baseline Flows-PM.vpi"
(drive-on-the-left) at 14:47:03 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittinghjam Road 2025 Basleine Flows-PM
LOCATION	: Longridge
DATE	: 02/12/14
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Arm A
ARM B IS Arm B
ARM C IS Arm C

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittinghjam Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.04	7.56	5.04
ARM B	15.00	45.00	75.00	0.84	1.26	0.84
ARM C	15.00	45.00	75.00	3.89	5.83	3.89

Demand set: Halfpenny Lane/Whittinghjam Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.139	0.861
		0.0	56.0	347.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.761	0.000	0.239
		51.0	0.0	16.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.916	0.084	0.000
		285.0	26.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.84	6.48	0.130		0.00	0.15	2.1		0.18
C-AB	0.33	9.22	0.035		0.00	0.04	0.5		0.11
A-B	0.70								
A-C	4.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.00	6.19	0.162		0.15	0.19	2.8		0.19
C-AB	0.39	8.98	0.043		0.04	0.05	0.7		0.12
A-B	0.84								
A-C	5.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	1.23	5.79	0.212		0.19	0.26	3.8		0.22
C-AB	0.48	8.65	0.055		0.05	0.06	0.9		0.12
A-B	1.03								
A-C	6.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	1.23	5.79	0.212		0.26	0.27	4.0		0.22
C-AB	0.48	8.65	0.055		0.06	0.06	0.9		0.12
A-B	1.03								
A-C	6.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	1.00	6.19	0.162		0.27	0.20	3.0		0.19
C-AB	0.39	8.98	0.043		0.06	0.05	0.7		0.12
A-B	0.84								
A-C	5.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.84	6.48	0.130		0.20	0.15	2.3		0.18
C-AB	0.33	9.22	0.035		0.05	0.04	0.6		0.11
A-B	0.70								
A-C	4.35								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	92.2	61.5	18.1	0.20	18.1	0.20
C-AB	35.8	23.9	4.3	0.12	4.3	0.12
A-B	77.1	51.4				
A-C	477.6	318.4				
ALL	1075.0	716.7	22.4	0.02	22.4	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:47:24 on 07/04/2015]

TRL LIMITED

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

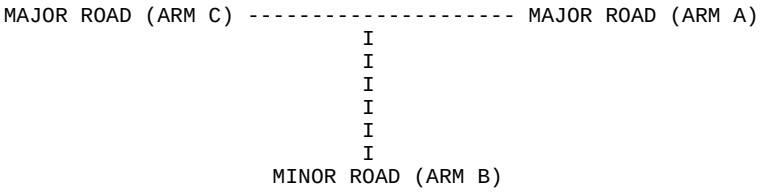
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Halfpenny and Whittingham Rd 2016 Assessment Flows-AM.vpi"
(drive-on-the-left) at 14:51:14 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittingham Road2016 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Whittingham Road W
ARM B IS Halfpenny Lane
ARM C IS Whittingham Road E

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittingham Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	3.95	5.93	3.95
ARM B	15.00	45.00	75.00	1.44	2.16	1.44
ARM C	15.00	45.00	75.00	4.63	6.94	4.63

Demand set: Halfpenny Lane/Whittingham Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.120	0.880
		0.0	38.0	278.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.878	0.000	0.122
		101.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.914	0.086	0.000
		338.0	32.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.44	6.34	0.228		0.00	0.29	4.1		0.20
C-AB	0.40	9.48	0.042		0.00	0.04	0.7		0.11
A-B	0.48								
A-C	3.49								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.72	6.06	0.284		0.29	0.39	5.6		0.23
C-AB	0.48	9.29	0.052		0.04	0.06	0.8		0.11
A-B	0.57								
A-C	4.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	2.11	5.68	0.371		0.39	0.57	8.2		0.28
C-AB	0.59	9.04	0.065		0.06	0.07	1.1		0.12
A-B	0.70								
A-C	5.10								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	2.11	5.68	0.371		0.57	0.58	8.7		0.28
C-AB	0.59	9.04	0.065		0.07	0.07	1.1		0.12
A-B	0.70								
A-C	5.10								

TRL TRL Viewer 3.2 AG N:\.. \2016 Assessment Flows\Halfpenny and Whittingham Rd 2016 Assessment Flows-AM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.72	6.06	0.284		0.58	0.41	6.4		0.23
C-AB	0.48	9.29	0.052		0.07	0.06	0.8		0.11
A-B	0.57								
A-C	4.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	1.44	6.34	0.228		0.41	0.30	4.7		0.20
C-AB	0.40	9.48	0.042		0.06	0.05	0.7		0.11
A-B	0.48								
A-C	3.49								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.6	*
08.45	0.6	*
09.00	0.4	
09.15	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	158.3	105.5	37.6	0.24	37.6	0.24
C-AB	44.0	29.4	5.2	0.12	5.2	0.12
A-B	52.3	34.9				
A-C	382.6	255.1				
ALL	1102.5	735.0	42.8	0.04	42.8	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:51:34 on 07/04/2015]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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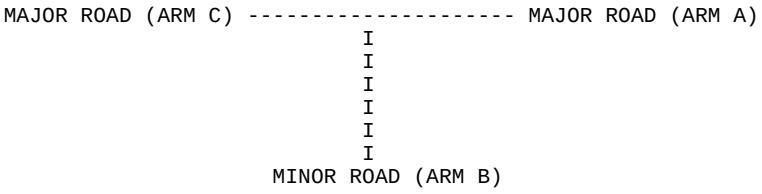
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2016 Assessment Flows\
Halfpenny and Whittingham Rd 2016 Assessment Flows-PM.vpi"
(drive-on-the-left) at 14:52:37 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittingham Road 2016 Assessment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Whittingham Road W
ARM B IS Halfpenny Lane
ARM C IS Whittingham Road E

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittingham Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.13	7.69	5.13
ARM B	15.00	45.00	75.00	1.01	1.52	1.01
ARM C	15.00	45.00	75.00	3.56	5.34	3.56

Demand set: Halfpenny Lane/Whittingham Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.220	0.780
		0.0	90.0	320.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.827	0.000	0.173
		67.0	0.0	14.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.919	0.081	0.000
		262.0	23.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.02	6.42	0.158		0.00	0.19	2.6		0.18
C-AB	0.29	9.19	0.031		0.00	0.03	0.5		0.11
A-B	1.13								
A-C	4.02								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.21	6.15	0.197		0.19	0.24	3.5		0.20
C-AB	0.34	8.95	0.038		0.03	0.04	0.6		0.12
A-B	1.35								
A-C	4.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	1.49	5.77	0.258		0.24	0.34	4.9		0.23
C-AB	0.42	8.62	0.049		0.04	0.05	0.8		0.12
A-B	1.65								
A-C	5.87								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	1.49	5.77	0.258		0.34	0.34	5.1		0.23
C-AB	0.42	8.62	0.049		0.05	0.05	0.8		0.12
A-B	1.65								
A-C	5.87								

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TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	1.21	6.15	0.197		0.34	0.25	3.9		0.20
C-AB	0.34	8.95	0.038		0.05	0.04	0.6		0.12
A-B	1.35								
A-C	4.79								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	1.02	6.42	0.158		0.25	0.19	2.9		0.19
C-AB	0.29	9.19	0.031		0.04	0.03	0.5		0.11
A-B	1.13								
A-C	4.02								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.2
17.30	0.3
17.45	0.3
18.00	0.2
18.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	111.5	74.3	23.0	0.21	23.0	0.21
C-AB	31.7	21.1	3.8	0.12	3.8	0.12
A-B	123.9	82.6				
A-C	440.5	293.6				
ALL	1068.1	712.1	26.8	0.03	26.8	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:53:05 on 07/04/2015]

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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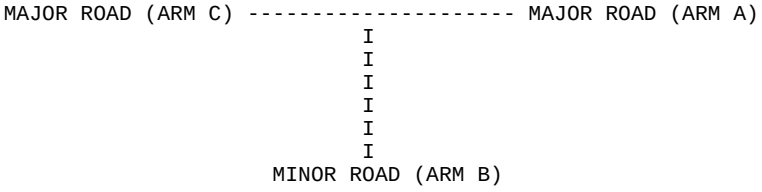
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Halfpenny and Whittingham Rd 2025 Assessment Flows-AM.vpi"
(drive-on-the-left) at 14:54:56 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittingham Road 2025 Assessment Flows-AM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Whittingham Road W
ARM B IS Halfpenny Lane
ARM C IS Whittingham Road E

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittingham Road

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.28	6.41	4.28
ARM B	15.00	45.00	75.00	1.55	2.32	1.55
ARM C	15.00	45.00	75.00	5.05	7.58	5.05

Demand set: Halfpenny Lane/Whittingham Road

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
	ARM A	0.000 0.0 (0.0)	0.120 41.0 (0.0)	0.880 301.0 (0.0)
	ARM B	0.871 108.0 (0.0)	0.000 0.0 (0.0)	0.129 16.0 (0.0)
	ARM C	0.911 368.0 (0.0)	0.089 36.0 (0.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-AC	1.56	6.23	0.250		0.00	0.33	4.6		0.21
C-AB	0.45	9.40	0.048		0.00	0.05	0.8		0.11
A-B	0.51								
A-C	3.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.86	5.93	0.313		0.33	0.45	6.4		0.24
C-AB	0.54	9.20	0.059		0.05	0.06	1.0		0.12
A-B	0.61								
A-C	4.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	2.28	5.52	0.413		0.45	0.68	9.6		0.31
C-AB	0.66	8.92	0.074		0.06	0.08	1.3		0.12
A-B	0.75								
A-C	5.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	2.28	5.52	0.413		0.68	0.69	10.3		0.31
C-AB	0.66	8.92	0.074		0.08	0.08	1.3		0.12
A-B	0.75								
A-C	5.52								

TRL TRL Viewer 3.2 AG N:\.. \2025 Assessment Flows\Halfpenny and Whittingham Rd 2025 Assessment Flows-AM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.86	5.93	0.313		0.69	0.47	7.3		0.25
C-AB	0.54	9.20	0.059		0.08	0.07	1.0		0.12
A-B	0.61								
A-C	4.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-AC	1.56	6.23	0.250		0.47	0.34	5.3		0.21
C-AB	0.45	9.40	0.048		0.07	0.05	0.8		0.11
A-B	0.51								
A-C	3.78								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.5	
09.15	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	170.7	113.8	43.6	0.26	43.6	0.26
C-AB	49.6	33.0	6.0	0.12	6.0	0.12
A-B	56.4	37.6				
A-C	414.3	276.2				
ALL	1197.5	798.3	49.6	0.04	49.6	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 14:55:12 on 07/04/2015]

CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
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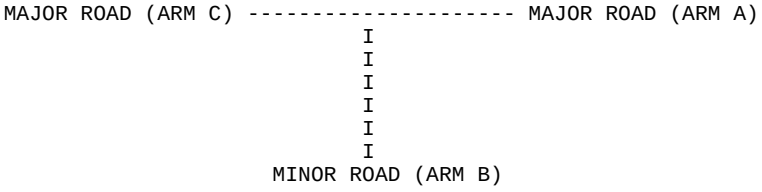
Run with file:-
"N:\Vectos Job Data\2013\VN30277 Longridge\Picady\April 15\363 Dwellings\2025 Assessment Flows\
Halfpenny and Whittingham Rd 2025 Assessment Flows-PM.vpi"
(drive-on-the-left) at 14:56:36 on Tuesday, 7 April 2015

RUN INFORMATION

RUN TITLE	: Halfpenny Lane/Whittinghjam Road 2025 Assessment Flows-PM
LOCATION	: Longridge
DATE	: 11/03/15
CLIENT	: Barratt Homes
ENUMERATOR	: Hannah [HANNAH-ZOO]
JOB NUMBER	: VN30277
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Whittingham Road E
ARM B IS Halfpenny Lane
ARM C IS Whittingham Road W

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.15 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B) 90.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 16.0 M.
- VISIBILITY TO RIGHT	(VB-A) 16.0 M.
- LANE 1 WIDTH	(WB-C) 2.20 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
583.23	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
451.39	0.21	0.08	0.13	0.29

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
626.08	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: Halfpenny Lane/Whittinghjam Road

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	5.54	8.31	5.54
ARM B	15.00	45.00	75.00	1.11	1.67	1.11
ARM C	15.00	45.00	75.00	3.89	5.83	3.89

Demand set: Halfpenny Lane/Whittinghjam Road

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.217	0.783
		0.0	96.0	347.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.820	0.000	0.180
		73.0	0.0	16.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.916	0.084	0.000
		285.0	26.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	1.12	6.32	0.177		0.00	0.21	3.0		0.19
C-AB	0.33	9.10	0.036		0.00	0.04	0.6		0.11
A-B	1.20								
A-C	4.35								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	1.33	6.02	0.222		0.21	0.28	4.1		0.21
C-AB	0.39	8.84	0.044		0.04	0.05	0.7		0.12
A-B	1.44								
A-C	5.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	1.63	5.60	0.292		0.28	0.40	5.8		0.25
C-AB	0.48	8.48	0.056		0.05	0.06	0.9		0.12
A-B	1.76								
A-C	6.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	1.63	5.60	0.292		0.40	0.41	6.1		0.25
C-AB	0.48	8.48	0.056		0.06	0.06	0.9		0.12
A-B	1.76								
A-C	6.37								

TRL TRL Viewer 3.2 AG N:\.. \2025 Assessment Flows\Halfpenny and Whittingham Rd 2025 Assessment Flows-PM.vpo

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
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18.00-18.15									
B-AC	1.12	6.32	0.177		0.29	0.22	3.4		0.19
C-AB	0.33	9.10	0.036		0.05	0.04	0.6		0.11
A-B	1.20								
A-C	4.35								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.3
18.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	122.5	81.7	26.8	0.22	26.8	0.22
C-AB	35.8	23.9	4.4	0.12	4.4	0.12
A-B	132.1	88.1				
A-C	477.6	318.4				
ALL	1160.3	773.6	31.2	0.03	31.2	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

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