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Proposed Residential Development Casthorpe Road Barrowby Lincolnshire

Transport Assessment Scoping Report

Revision 0: August 2025
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Proposed Residential Development
Casthorpe Road
Barrowby
Lincolnshire

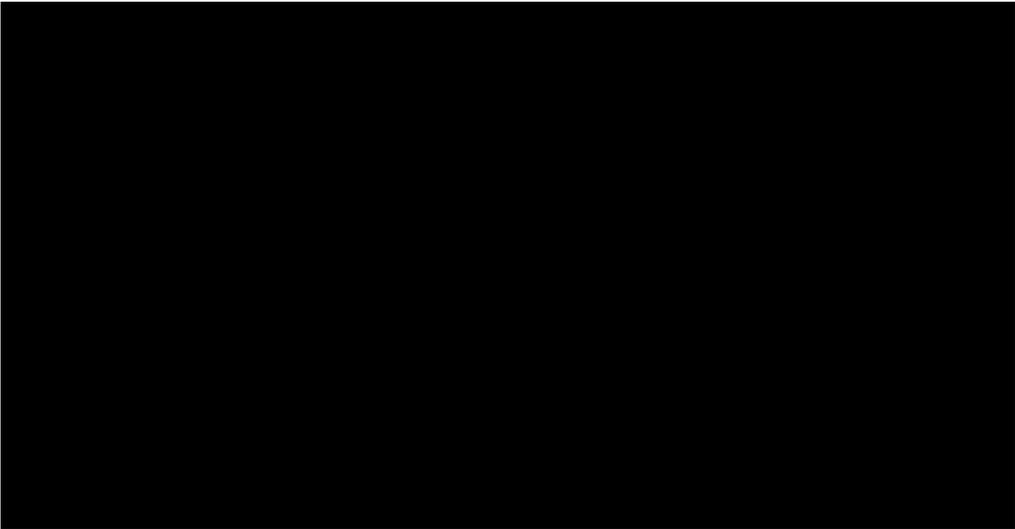
Transport Assessment Scoping Report

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Contents

1.0 Introduction..... 4

 1.1 Background and Scope of Assessment..... 4

2.0 Site Location and Existing Conditions 5

 2.2 Local Highway Network..... 5

 2.3 Public Rights of Way (PRoW)..... 6

 2.4 Access to Existing Local Amenities 8

 2.5 Pedestrian Isochrone..... 9

 2.6 Cycle Facilities 10

 2.7 Cycling Isochrone..... 10

 2.8 Public Transport 11

3.0 Access Strategy 14

 3.1 Vehicular Access from Grange Paddock..... 14

 3.2 Emergency Access from Casthorpe Road..... 14

4.0 Trip Generation and Distribution 15

5.0 Vehicle Impact 17

 5.1 Introduction..... 17

 5.2 Baseline Traffic 17

 5.3 Distribution..... 17

 5.4 Assessment Periods..... 18

 5.5 Junction Assessments..... 18

 5.4 J1: A52 / Rectory Lane (Priority Junction) 19

 5.5 J1: A52 / Rectory Lane (Cross Junction) 19

 5.6 J2: A1 / High Road 20

 5.7 Assessment Results Summary 22

 5.8 J3: A1 Northbound (on-slip) 22

6.0 Conclusions..... 24

Appendix A A

 Redline Boundary Plan and Indicative Masterplan (Draft) A

Appendix B B

 Proposed Site Access Arrangements B

 JPP Consulting drawing no. 22879-TA02/TA04 B

Appendix C..... C

 TRICS data..... C

Appendix D D

 Turning Count Survey Results D

Appendix E..... E

 Traffic Flows and Distribution Information E

Appendix F..... F



Junctions Assessment Results F

Appendix G G

National Highways TRIS data G

Figures

Figure 2.1 Proposed Development Site 5

Figure 2.2 Local Highway Network 6

Figure 2.3 Grange Paddock towards the Site Frontage 6

Figure 2.4 Public Rights of Way Map 7

Figure 2.5 Public Footway (Northern Access) 7

Figure 2.6 Public Footway (Eastern Access) 8

Figure 2.7 Location of Local Facilities 9

Figure 2.8 Walking Isochrone, 15-minute distance, 5-minute intervals 10

Figure 2.9 Cycling Isochrone, 20-minute distance, 5-minute intervals 11

Figure 2.10 Bus Route Map (Bus Routes Surrounding the Site) 12

Figure 3.1 Casthorpe Road, Personal Injury Collisions 2018-2022 14

Figure 5.1 Junction Assessment Locations 17

Figure 5.2 Junction 1: A52 / Rectory Lane (Priority Junction) 19

Figure 5.3 Junction 1: A52 / Rectory Lane (Cross Junction) 20

Figure 5.4 Junction 2: A1 / High Road 20

Figure 5.5 Junction 3: A1 Northbound (on-slip) 22

Tables

Table 2.1 Summary of local facilities, amenities and schools 8

Table 2.2 Summary of Bus Services 12

Table 4.1 TRICS Parameters 15

Table 4.2 Proposed Person Trip Generation Rate 15

Table 4.3 Person Trips (200 units) 15

Table 4.4 Method of Travel to Work, Census 2021 16

Table 4.5 Trip Numbers by Mode (200 units) 16

Table 5.1 TEMPro Growth Factors 18

Table 5.2 Junction Capacity Assessment Results: Summary 21

1.0 Introduction

1.1 Background and Scope of Assessment

1.1.1 This Transport Assessment Scoping Report has been prepared by JPP Consulting Limited on behalf of William Davis (Homes) Ltd as part of a Pre-Application submission to South Kesteven District Council (SKDC) Local Plan (2041), and is associated with the promotion of land adjacent to Casthorpe Road, Barrowby for residential development.

1.1.2 Accordingly, the purpose of this scoping report is to provide evidence-based information on matters relating to highways and transport in support of a forthcoming outline planning application for residential development on land south of Casthorpe Road (the site), Barrowby. This report will provide evidence on the location of its site within Barrowby and its connectivity to surrounding transport infrastructure, including walking, cycling, public transport and whether, in terms of highway impact, the site would have a 'major' impact.

1.1.3 In terms of development quantum, residential development equalling 200 units has been utilised for the purposes of highway assessment. A copy of the draft masterplan and redline boundary for the site is contained in **Appendix A**.

1.1.4 Based on the above, this report has been structured as follows:

- Chapter 2 provides a comprehensive baseline review of the current transport network which surrounds the site. The review includes aspects associated with the local highway network, sustainable transport provisions (walking, cycling and public transport), plus the general accessibility of the site, including access to local key amenities;
- Chapter 3 outlines the access strategy for the site;
- Chapter 4 provides an assessment of projected multi-modal trip generation and distribution of onto the local and strategic highway network with the site; and,
- Chapter 5 provides a comprehensive junction assessment on two major junctions within the vicinity of the site. These include both the High Road / A1 junction and the Rectory Lane / A52 junction.

2.0 Site Location and Existing Conditions

2.1.1 The proposed residential development is located at land south of Casthorpe Road and to the east of Grange Paddock, Barrowby as shown in Figure 2.1 below. Barrowby is located circa 3km west of Grantham. The National Grid Reference for the site is E487830 N335940.



Figure 2.1 Proposed Development Site

Source: Google Maps

Obtained: 13/06/2024

2.2 Local Highway Network

2.2.1 The site directly abuts Casthorpe Road at the northern boundary of the site and Grange Paddock on its eastern boundary. Casthorpe Road provides a main highway connection to the west of Barrowby. Low Road provides the main vehicular route through the village and towards the A1 and A52. Both the A1 and A52 are easily accessible in relation to the site location. The A1 is accessed via 'High Road' circa 1km east of the proposed site access. A map depicting the local highway network is illustrated in Figure 2.2 below.



Figure 2.2 Local Highway Network
Source: OpenStreetMap

2.2.2 The proposed site will be directly accessed via Grange Paddock and is further discussed in Chapter 4 of this report. Grange Paddock provides 5.5m carriageway and a continual 2.0m footway on the northern and partially on the southern side. This is illustrated below in Figure 2.3. Low Road is subject to 30mph speed limit, has the benefit of street lighting and footways linking the northern and southern sides of the village.



Figure 2.3 Grange Paddock towards the Site Frontage
Source: Google Maps

2.3 Public Rights of Way (PRoW)

2.3.1 Ordnance Survey mapping confirms that a number of Public Rights of Way are located within the vicinity of the site. As Figure 2.4 demonstrates, the site has direct

connectivity onto public footpath provisions and wider connectivity to public footpaths and bridleways in Barrowby. To confirm the PRoW will be fully retained as part of the proposals and will form an integral part of the sites masterplan.

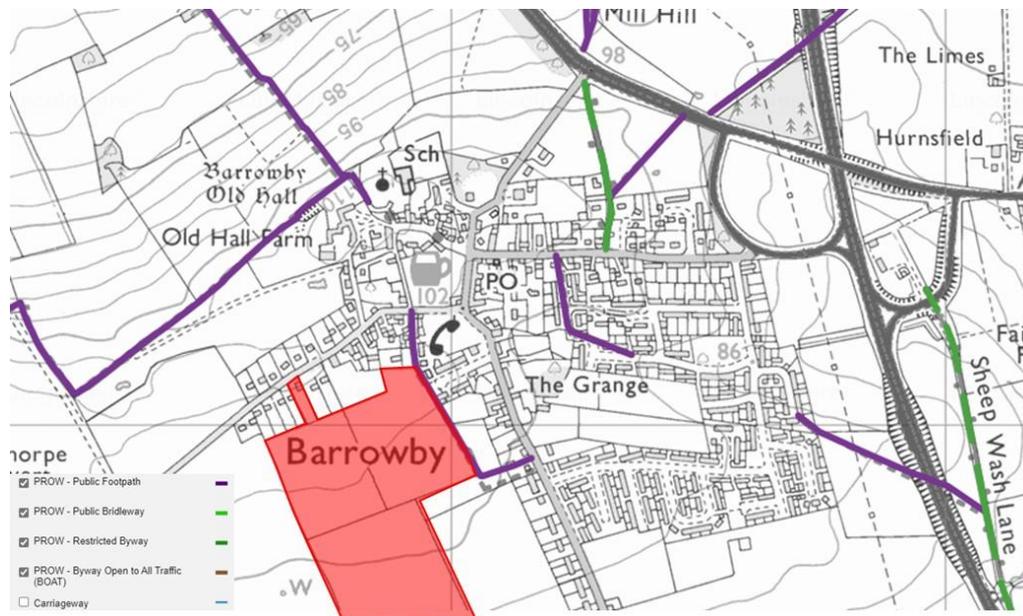


Figure 2.4 Public Rights of Way Map
Source: Lincolnshire County Council

2.3.2

It should be noted that the existing public footpath located to the east of the development site will form a key pedestrian route, connecting Casthorpe Road via Mill Road to the north and Low Road via the playing fields to the east. Both access points of this provision are illustrated below in Figure 2.5 and Figure 2.6 respectively.



Figure 2.5 Public Footway (Northern Access)
Source: Google Maps



Figure 2.6 Public Footway (Eastern Access)
 Source: Google Maps

2.4 Access to Existing Local Amenities

2.4.1 The IHT document ‘Providing Journeys for Foot, 2000’ provides preferred maximum walk distances for local facilities, as follows:

- Town Centres: 800m;
- Commuting/School/Sight Seeing: 2,000m; and,
- Elsewhere: 1,200m.

2.4.2 Table 2.1 and Figure 2.7 below summarises, and illustrates the walk / cycle distances to a selection of existing local facilities, amenities and school opportunities all within 2.0km distance of the site.

Walking and cycling distance to local facilities, amenities and schools			
Destination	Distance (metres)	Walking (minutes)	Cycling (minutes)
1. Bistro (Dougie’s)	355	<5	<5
2. Barrowby C of E Primary School	360	<5	<5
3. Public House (The White Swan)	360	<5	<5
4. Bus Stop (The White Swan PH)	370	<5	<5
5. Convenience Store (Co-op Food)	385	<5	<5
6. Barrowby Village Hall	490	>5	<5

Source: Google Maps

Table 2.1 Summary of local facilities, amenities and schools

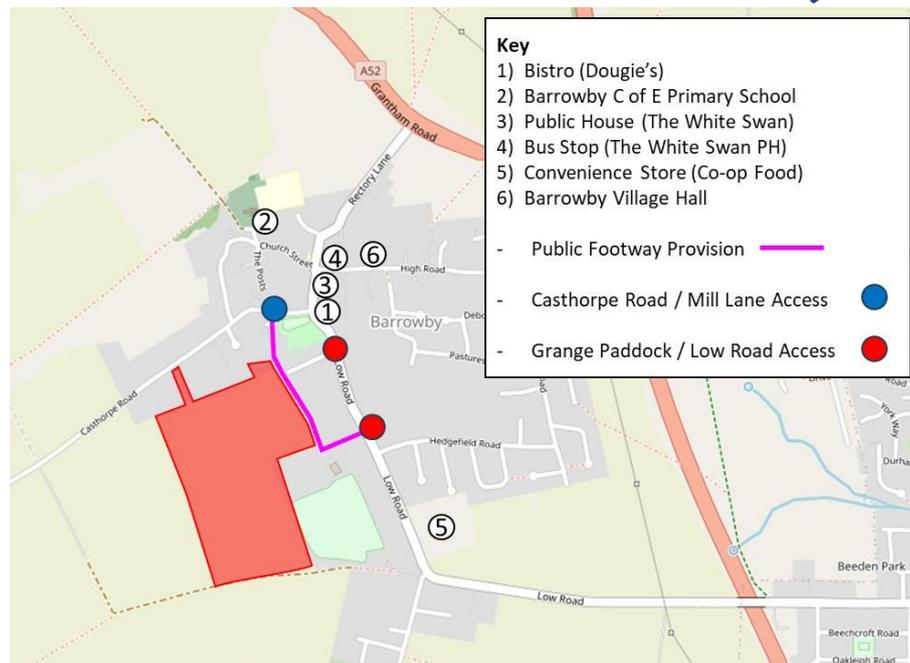


Figure 2.7 Location of Local Facilities
 Source: OpenStreetMap

2.5 Pedestrian Isochrone

- 2.5.1 Figure 2.8 below has been prepared to understand indicative areas which are currently located within a 15-minute walking distance of the Site. The walking distance of 15 minutes is based on an average speed of 5.04km/h¹ or approximately, 1,250m.
- 2.5.2 Whilst the site’s internal road network / pedestrian infrastructure are not included in this assessment, the centroid used to define the isochrones ‘starting-point’ has been located on Grange Paddock; at the point from which the site will be accessed. As such, the evidence provided in Figure 2.8 below confirms that existing local facilities, including the centre of Barrowby Village, plus the Co-op food store would be within close proximity and suitable walking distance of the site.

¹ CIHT publication, “Guidelines for providing journeys on foot”, (2000).

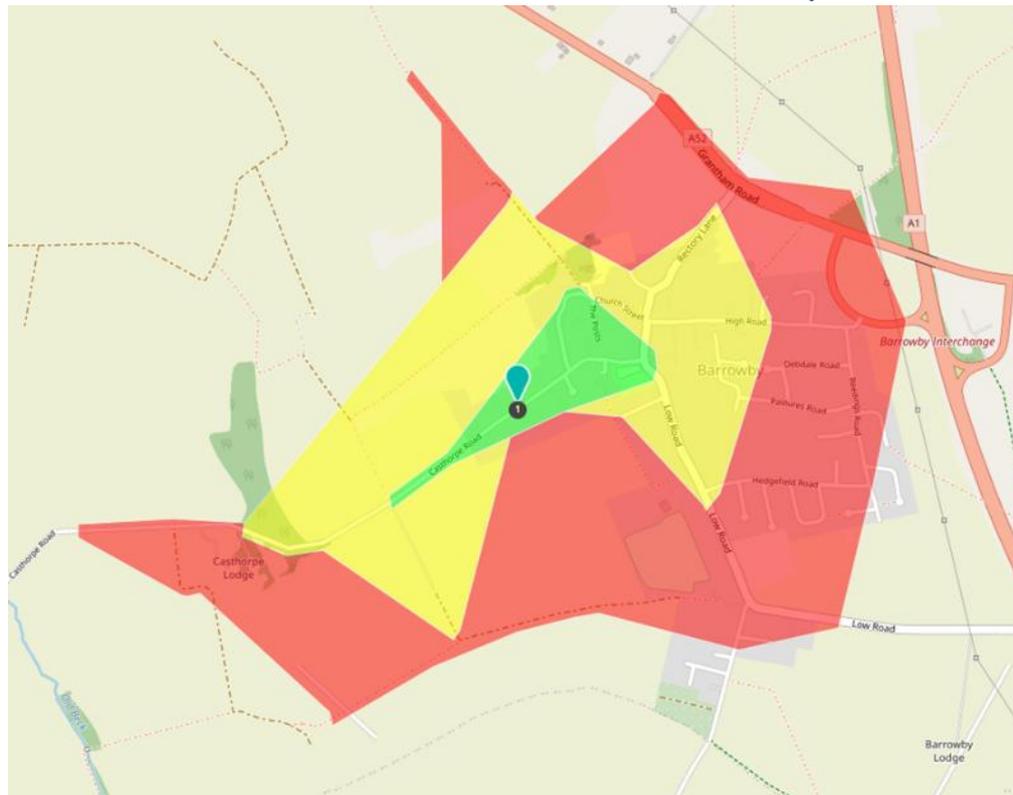


Figure 2.8 Walking Isochrone, 15-minute distance, 5-minute intervals
Source: OpenRouteService

2.6 Cycle Facilities

2.6.1 There are no designated cycling facilities within the vicinity of the site. It should be noted that OS mapping suggests that the closest cycling facility is national cycle route 15 located circa 2.4km south west of the site access. On this basis, cycling journeys will be undertaken on the local highway network. Given the rural nature of the local road network, traffic flows and speeds are likely to be conducive to cycling.

2.7 Cycling Isochrone

2.7.1 An isochrone map has been prepared to measure the site's accessibility by cycling and is illustrated in Figure 2.9 below. In tandem with the walking isochrone, the centroid making the 'starting-point' has been located on Grange Paddock; at the proposed location of the site access.

2.7.2 This accessibility map confirms the extent of area which is located within 20 minutes cycling distance of the site by use of the existing road network. The journey time of 20 minutes is based upon the Sustrans 'Cycle Friendly Employers Information Fact Sheet' which proposed an acceptable cycling speed for analysis as 4.4 metres per second (15.84km/h).

2.7.3 The evidence provided in Figure 2.9, confirms that the site is within a reasonable and acceptable cycling distance of several core areas including the entire western and central areas of Grantham. Given the geographical coverage of the cycle isochrone

and its semi-urban context, the opportunity to access an extensive range of facilities (education, retail, employment and leisure) by bicycle is therefore significant.

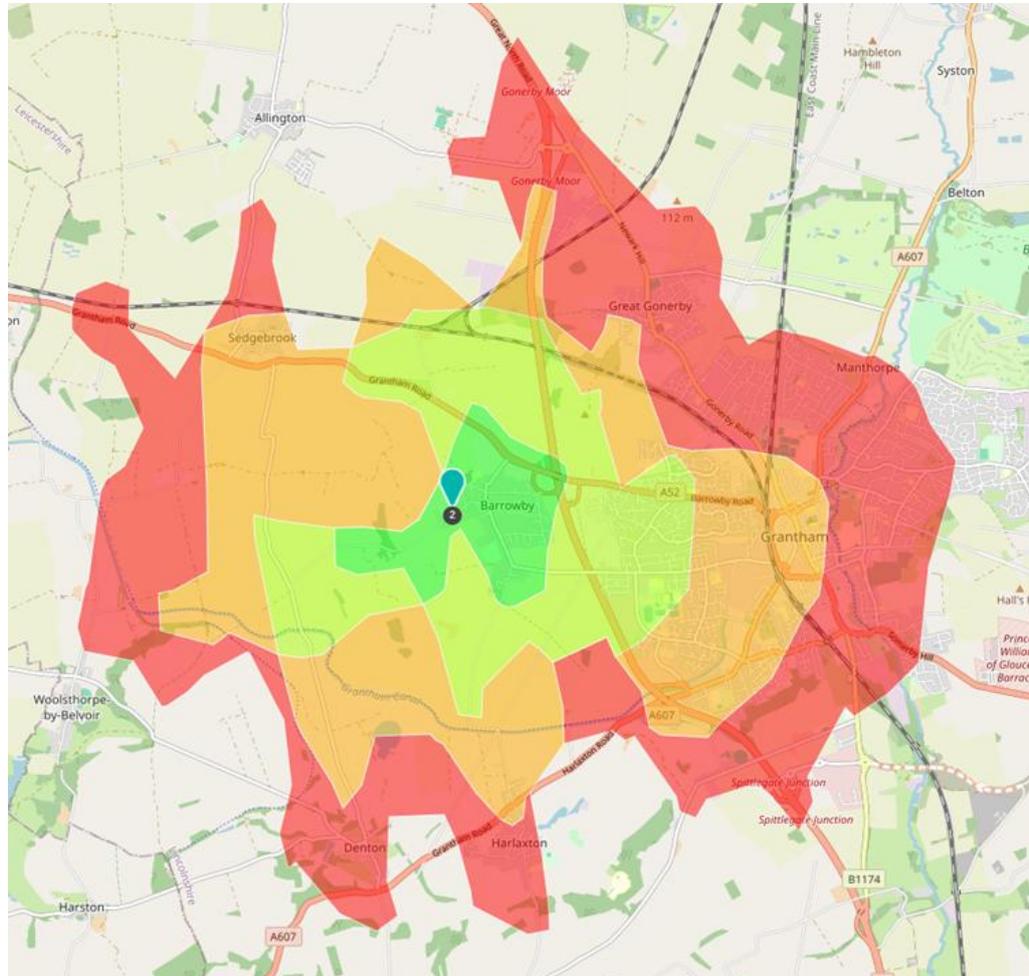


Figure 2.9 Cycling Isochrone, 20-minute distance, 5-minute intervals
Source: OpenRouteService

2.8 Public Transport

2.8.1 Bus

2.8.1.1 The ‘The White Swan PH’ bus stops are located circa 365m north of the proposed access of the site on Main Street. The stops are served by the number 6 service. The adjacent stop is comprised of a ‘flag and pole’ design, with full bus timetable information. The opposite stop is comprised of a bus shelter, with full bus timetable information.

2.8.1.2 General bus frequencies and routes of buses utilising the ‘The White Sawn PH’ bus stops are set out in Table 2.2 below. The information provided in the table below and the appendices was correct at the time of publication.

Summary of Bus Services

Services	Route	Frequency	Direction	Times
6 Centrebus	Bottesford - - - - > Grantham	MON-FRI	Eastbound	09:54 – 15:30
			Westbound	09:25 – 15:00
		SAT	Eastbound	10:40 – 15:19
			Westbound	10:10 – 14:45
		SUN	N/A	

Source: Traveline website – 14.06.2024

Table 2.2 Summary of Bus Services

2.8.1.3 The bus route within the vicinity of the site is outlined below in Figure 2.10.



Figure 2.10 Bus Route Map (Bus Routes Surrounding the Site)

Source: OpenStreetMap

2.8.1.4 Although only one bus route is accessible within the vicinity of the site, it should be mentioned that the service does terminate at a location (Grantham) where multiple other services are available to a range of additional areas. Therefore, the site can be seen to be in an area where bus travel can be used as a realistic alternative to single occupancy car journeys.

2.8.2 Rail

2.8.2.1 The nearest railway station is Grantham Station, located approximately 4.5km (2.8miles) from the proposed development. The railway station is located on the line between Peterborough and Newark-on-Trent. The station provides services to London, Lincoln, Nottingham and York.

- 2.8.2.2 The railway station can be accessed from the site location via a multi-modal route: walking to the bus stop (The White Swan PH) located approximately 365m from the site entrance, taking the 6 bus service to Grantham Bus Station and walking approximately 300m to the railway station. Further, the railway station is located within 5km of the site and is therefore within an acceptable cycling distance.

3.0 Access Strategy

3.1 Vehicular Access from Grange Paddock

3.1.1 Vehicular access into the site will be taken via the continuation of Grange Paddock directly into the site. As previously discussed, Grange Paddock offers a 5.5m carriageway and 2 x 2.0m pedestrian footways and these geometric features will form the basis of the internal site layout.

3.1.2 Visibility splays of 2.4m x 43m are achievable at the junction of Grange Paddock and Low Road.

3.2 Emergency Access from Casthorpe Road

3.2.1 An emergency access point will be provided into the development and from Casthorpe Road and will be managed by the inclusion of regulatory signage which prohibits access for motor vehicles and cycles. The emergency access point will allow both pedestrians and cyclists with a further route from the site and into Barrowby via Casthorpe Road.

3.2.2 **Appendix B** to this report contains an outline engineering design demonstrating the proposed access arrangements into the site both from Grange Paddock and the emergency access from Casthorpe Road.

3.2.3 In term of highway safety, evidence obtained from Crashmap data confirms that between 2019 and 2023, a single personal injury collision, slight in severity, was reported Low Road, within the vicinity of its junction with Grange Paddock. This is illustrated below in Figure 3.1. Therefore, it can be concluded that the access strategy for the site will not be at a location where an existing issue relating to highway safety would need to be accounted for.

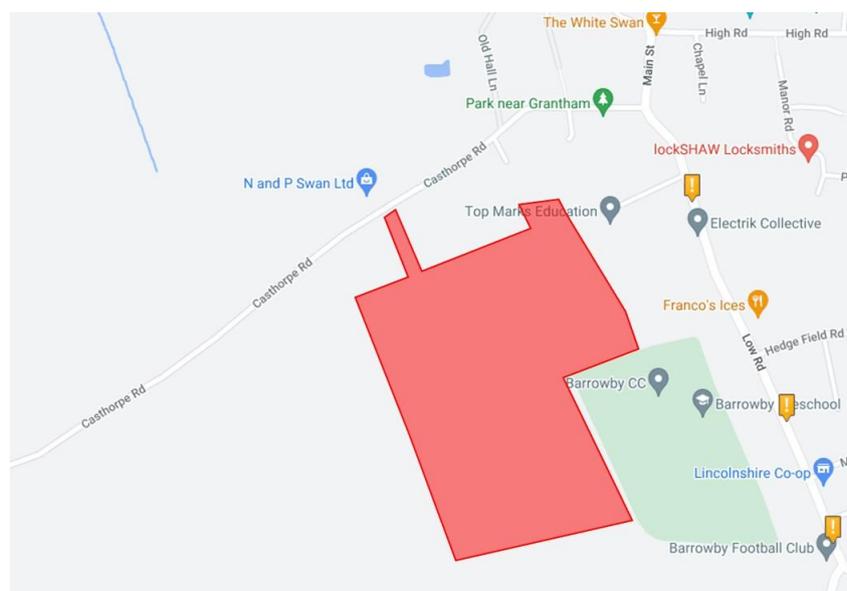


Figure 3.1 Casthorpe Road, Personal Injury Collisions 2018-2022
Source: Crashmap Database

4.0 Trip Generation and Distribution

4.1 At this stage, it is the intention for the site to provide up to 200 units, and this metric has been utilised to calculate both the multi-modal trip generation and subsequent highway impact analysis.

4.2 Person trip generation rates have been obtained from the TRICS database version 7.11.1. The TRICS data is enclosed in **Appendix C**. The parameters selected to obtain the TRICS data is detailed in Table 4.1 below.

TRICS Parameters	
Parameter	Selection
Main Land Use	03 – Residential
Sub Land Use	A – Houses Privately Owned
Locations	Edge of Town
Quantum of Development	Number of Dwellings

Source: TRICS 7.11.1

Table 4.1 TRICS Parameters

4.3 Person trip rates are shown in Table 4.2 below.

Person Trip Generation Rate – 85 th %ile / MEAN						
Use	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Residential per dwelling	0.248	0.912	1.16	0.682	0.298	0.98

Source – TRICS database version 7.11.1 – 17.06.2024

Table 4.2 Proposed Person Trip Generation Rate

4.4 From the above person trip rates, the number of person trips for the development site can be calculated based on a development size of the proposed 200 units. The predicted person trips associated with 200 units are set out in Table 4.3 below.

Person Trips (200 units)						
Use	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Residential	50	182	232	136	60	196

Table 4.3 Person Trips (200 units)

4.5 To predict the number of trips generated by mode of transport, travel to work data has been obtained from the 2021 Census for South Kesteven 002A (E01026291) which

the development is located within. The journey to work data is shown in Table 4.4 below.

Method of Travel to Work Resident Population: South Kesteven 002A (E01026291) 2021 Census		
Mode	Number	Percentage
Driving a Car or Van	473	85%
Passenger in a Car or Van	36	6%
On foot	31	6%
Bicycle	12	2%
Train	3	1%
Bus, Minibus or Coach	2	0%
Motorcycle, Scooter or Moped	0	0%

Source: 2021 Census Data

Table 4.4 Method of Travel to Work, Census 2021

4.6 Using the above modal split information, it is possible to predict the number of trips from the development made using all forms of transport. Whilst the data does not reflect the fact that not all peak period trips are made to work, it offers a good reflection of the actual circumstances. The predicted number of trips by mode from the development is set out in Table 4.5 below.

Trip Numbers by Mode (200 units)						
Mode	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Car	42	155	197	116	51	166
Car Passenger	3	12	15	9	4	13
On Foot	3	10	13	8	3	11
Bicycle	1	4	5	3	1	4
Train	0	1	1	1	0	1
Bus	0	1	1	0	0	1
Motorbike	0	0	0	0	0	0

Table 4.5 Trip Numbers by Mode (200 units)

4.7 200 units is predicted to generate 197 new vehicle trips in the morning peak period and 200 new trips in the evening peak period.

5.0 Vehicle Impact

5.1 Introduction

5.1.1 It should be noted that no formal scoping exercise has been undertaken, at this stage, to agree the full technical content of this report. However, and in order to assess the impact of development trips from the site, three off-site junctions; which provide direct access onto the wider and primary highway network have been assessed. The junctions are namely:

- Junction 1 – A52 / Rectory Lane;
- Junction 2 – A1 / High Road; and,
- Junction 3 – A1 Northbound (on-slip)

5.1.2 The locations of the above junctions are presented in Figure 5.1 below.



Figure 5.1 Junction Assessment Locations
Source: OpenStreetMap

5.2 Baseline Traffic

5.2.1 Turning count surveys at the above two junctions (A52 / Rectory Lane and A1 / High Road) were completed between the hours of 07:30 – 09:30 and 16:30 – 18:30 on Wednesday 19th of June 2024, to provide data on both the morning and evening peak periods. The survey results are enclosed in **Appendix D**.

5.3 Distribution

5.3.1 Vehicle trips generated by the proposed development have been distributed on to the surrounding highway infrastructure using 2011¹ MSOA level method of travel to work census data, for E02005477: South Kesteven 002.

5.4 Assessment Periods

5.4.1 The impact of the development will be considered on the junctions identified above during the morning and evening peak periods of 0800-0900 and 1700-1800.

5.4.2 Both Junction 1 (A52 / Rectory Lane) and Junction 2 (A1 / High Road) have been assessed (AM and PM Peaks) within each of the following assessment scenarios:

- 2024 Baseline Year;
- 2029 Forecast Year; and,
- 2029 Forecast Year + Development Flows.

5.4.3 The 2024 Base Year traffic flow data has been growthed to a 2029 Future Year using TEMPro 7.2 using NTEM dataset 72 and NTM dataset AF15. Growth factors have been obtained for E02005477: South Kesteven 002. The growth factors are set out in Table 5.1 below.

TEMPro Growth Factors		
	AM Peak	PM Peak
2025 - 2030	1.0458	1.0473

Source: TEMPro 7.2

Table 5.1 TEMPro Growth Factors

5.4.4 The relevant distribution and traffic flow diagrams for each scenario are provided in **Appendix E**.

5.5 Junction Assessments

5.5.1 The junctions listed have been assessed where appropriate utilising TRL software Junctions 10; PICADY.

5.5.2 The capacity of a junction is assessed in terms of Ratio of Flow to Capacity (RFC) for priority junctions and Degree of Saturation (DoS) for signal controlled junctions. The absolute capacity of a junction is 1 or 100%, however, a lower value is used to reflect the practical capacity of the junction.

5.5.3 As such, a junction is considered to be operating within its design capacity if the RFC (Ratio to Flow Capacity) value is equal to, or less than 0.85 (85%).

5.5.4 It should be mentioned that due to the geometries of the A52 / Rectory Lane junction, two junction models were created to assess the impact of the development flows on this junction. Splitting the junction in this manner was required due to the limitations of PICADY and the inability to model a junction of this nature.

5.5.5 For clarity, the eastbound carriageway of the A52 has been modelled as the 'Priority Junction', and the westbound carriageway has been modelled as the 'Cross Junction'.

5.5.6 The results of the junction assessments are summarised in Table 5.2 below, with the full results enclosed in **Appendix F**.

5.4 J1: A52 / Rectory Lane (Priority Junction)

5.4.1 The location of 'Junction 1 (Priority Junction)' is illustrated below in **Error! Reference source not found.**

5.4.2 The three arms of the junction are labelled as follows:

- Arm A = A52 (E);
- Arm B = A52 Access (E); and,
- Arm C = A52 (W).



*Figure 5.2 Junction 1: A52 / Rectory Lane (Priority Junction)
Source: Google Maps*

5.4.2

5.5 J1: A52 / Rectory Lane (Cross Junction)

5.5.1 The location of 'Junction 1 (Cross Junction)' is illustrated below in Table 5.2.

5.5.2 The four arms of the junction are labelled as follows:

- Arm A = A52 (E);
- Arm B = Rectory Lane (N);
- Arm C = A52 (W); and,
- Arm D = Rectory Lane (S).

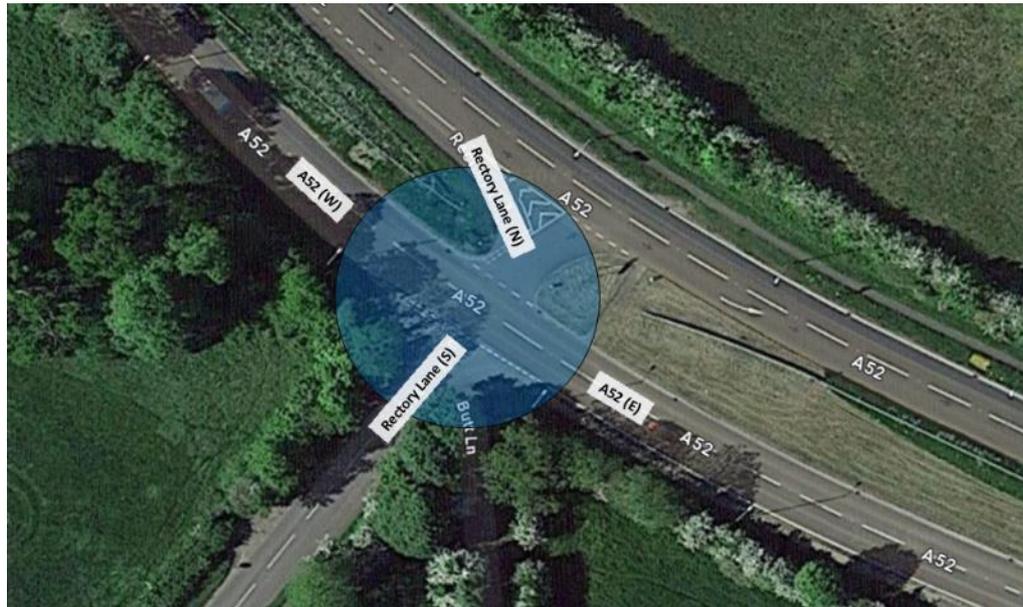


Figure 5.3 Junction 1: A52 / Rectory Lane (Cross Junction)
Source: Google Maps

5.6 J2: A1 / High Road

5.6.1 The location of 'Junction 2' is illustrated below in **Error! Reference source not found.**

5.6.2 The three arms of the junction are labelled as follows:

- Arm A = A1 (E);
- Arm B = High Road; and,
- Arm C = A1 (N).

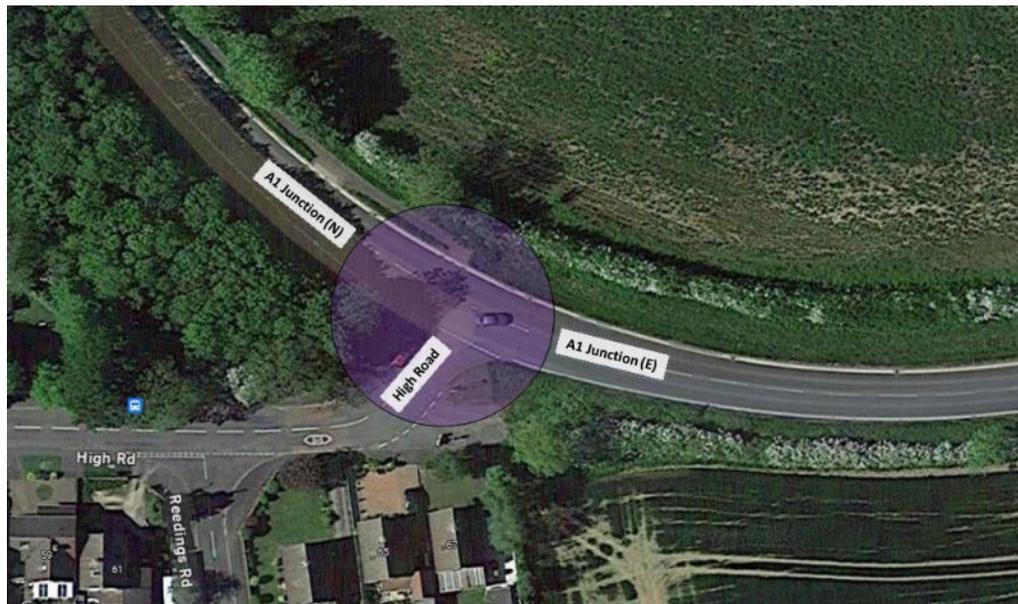


Figure 5.4 Junction 2: A1 / High Road
Source: Google Maps

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Junction Capacity Assessment Results

Junction	Arm	2024 Base				2029 Projected				2029 + Development Impact			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		RFC / DoS	MMQ	RFC / DoS	MMQ	RFC / DoS	MMQ	RFC / DoS	MMQ	RFC / DoS	MMQ	RFC / DoS	MMQ
J1: A52 / Rectory Lane (Priority Junction)	B-AC	0.06	0.1	0.05	0.1	0.06	0.1	0.06	0.1	0.20	0.1	0.10	0.2
	B-AB	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
J1: A52 / Rectory Lane (Cross Junction)	B-ACD	0.23	0.4	0.18	0.3	0.24	0.5	0.20	0.4	0.45	1.5	0.26	0.6
	A-BCD	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
	D-ABC	0.10	0.2	0.15	0.3	0.11	0.2	0.16	0.3	0.13	0.2	0.20	0.4
	C-ABD	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
J2: A1 / High Road (Priority Junction)	B-AC	0.23	0.4	0.11	0.1	0.24	0.5	0.11	0.2	0.38	1.1	0.16	0.2
	C-AB	0.12	0.3	0.20	0.6	0.13	0.3	0.22	0.7	0.13	0.4	0.22	0.7

Source: Junctions 10

Table 5.2 Junction Capacity Assessment Results: Summary

5.7 Assessment Results Summary

5.7.1 Junction 1: A52 / Rectory Lane (Priority Junction)

5.7.1.1 It can be seen that the A52 / Rectory Lane (Priority Junction) junction operates well within capacity for all scenarios during both peak periods. With a maximum RFC of 0.20 (2029 + Development Flows AM peak scenario), the metrics from the capacity analysis further demonstrate that this junction has a significant amount of residual capacity to accommodate future growth on local baseline traffic levels beyond 2029.

5.7.2 Junction 1: A52 / Rectory Lane (Cross Junction)

5.7.1 It can be seen that the A52 / Rectory Lane (Cross Junction) junction operates well within capacity for all scenarios during both peak periods. With a maximum RFC of 0.45 (2029 + Development Flows AM peak scenario), the metrics from the capacity analysis further demonstrate that this junction has a significant amount of residual capacity to accommodate future growth on local baseline traffic levels beyond 2029.

5.7.3 Junction 2: A1 / High Road

5.7.1 It can be seen that the A1 / High Road junction operates well within capacity for all scenarios during both peak periods. With a maximum RFC of 0.38 (2029 + Development Flows AM peak scenario), the metrics from the capacity analysis further demonstrate that this junction has a significant amount of residual capacity to accommodate future growth on local baseline traffic levels beyond 2029.

5.8 J3: A1 Northbound (on-slip)

5.8.1 An additional assessment has been undertaken to assess the impact the development would have on northbound slip-road of the A1. In order to assess this, traffic flow data has been obtained from the National Highways TRIS database for the A1 northbound. The location of 'Junction 3' illustrated below in Figure 5.5.

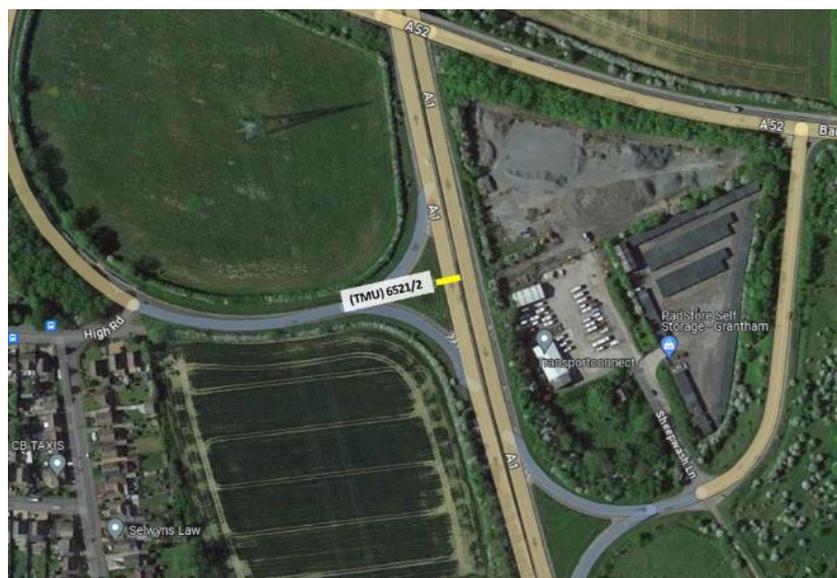


Figure 5.5 Junction 3: A1 Northbound (on-slip)
Source: Google Maps

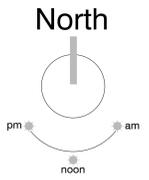
- 5.8.2 The TRIS data used was obtained from Traffic Monitoring Unit (TMU) 6521/2. An average weekday traffic flow figure was calculated for the AM peak (0800-0900) and PM peak (1700-1800) using the monthly summary data for May 2024. The traffic count data is provided in **Appendix G**.
- 5.8.3 The TRIS data outlined the average weekday peak period flows, as listed below:
- AM Peak = 1,159 vehicles; and,
 - PM Peak = 1,540 vehicles.
- 5.8.4 The peak period projected development flows for the A1 / High Road junction are as listed below:
- AM Peak = 49 vehicles; and,
 - PM Peak = 16 vehicles.
- 5.8.5 It can therefore be concluded that the development could result in a 4.2% increase in northbound traffic flows on the A1 during the morning peak period, and result in a 1% increase during the evening peak period; neither of which are considered to comprise a significant increase at the slip-road junction.

6.0 Conclusions

- 6.1 The Transport Scoping Report has been prepared by JPP Consulting Limited on behalf of William Davis (Homes) Ltd as part of a Pre-Application submission to South Kesteven District Council (SKDC) and is associated with a forthcoming outline planning application for up to 200 residential units on land adjacent to Casthorpe Road, Barrowby.
- 6.2 The development is shown to be well served and accessible to more sustainable modes of transport. The proposed development has a good level of accessibility to education, health, employment, retail and leisure facilities.
- 6.3 The proposed development will be accessed from Grange Paddock and onto Low Road via an existing priority junction, and the design of the proposed access incorporates appropriate highway design guidance.
- 6.4 A junction assessment has been completed to understand the impact of the development on the surrounding highway infrastructure. The development is not found to have a significant adverse impact on both the local and strategic highways networks.
- 6.5 Based on the contents of the report we would welcome comment and opinion on matters relating to highway and transport as a precursor to the submission of an outline planning application which will be accompanied by Transport Assessment and Residential Travel Plan.



**Appendix A
Redline Boundary Plan and Indicative Masterplan (Draft)**



WILLIAM DAVIS HOMES
 Forest Field, Forest Road, Loughborough, Leicestershire, LE11 3NS
 01509 231181 www.williamdavis.co.uk

Project:
 Land off Grange Paddock
 Barrowby

Drawing:
 Location Plan

Drawn: RC	Date: Aug 25	Scale: 1:1250 at A0
Project reference:	Drawing number: LP-01	Revision: -

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- KEY**
-  SITE BOUNDARY
 -  INDICATIVE PUBLIC OPEN SPACE
 -  RETAINED EXISTING VEGETATION
 -  INDICATIVE PROPOSED TREES AND PLANTING
 -  INDICATIVE BUILT FORM
 -  FOOTPATH
 -  CONNECTION TO PROW
 -  PRIMARY VEHICULAR ACCESS POINT
 -  MAIN BADGER SETTS - 30M OFFSET
 -  TRIM TRAIL STATIONS
 -  SUDS
 -  POTENTIAL WILDLIFE / HABITAT AREA
 -  POTENTIAL BNG OFFSET WOODLAND





**Appendix B
Proposed Site Access Arrangements
JPP Consulting drawing no. 22879-TA02/TA04**



General Notes

- All dimensions are in metres unless otherwise stated.
- All levels are in metres.
- This drawing is to be read in conjunction with all relevant Engineers and Architect's drawings, Specifications, Reports and Engineering Details.
- Do not scale from this drawing.

Drawing Key

- Proposed Kerbline
- Existing PRow
- Proposed Tactile Paving

This drawing has been based/developed using the following external drawings

Type	Company	Drawing date	Drawing title	Date received	Rev
Topographical Survey	Epic Surveys Ltd	July 2025	Topographic Survey	30.07.2025	-



Northampton
T: 01604 781811
Poole, Milton Keynes & Kettering

E: mail@jppuk.net W: jppuk.net

Client: William Davis Ltd

Project: Proposed Residential Development
Casthorpe Road, Barrowby

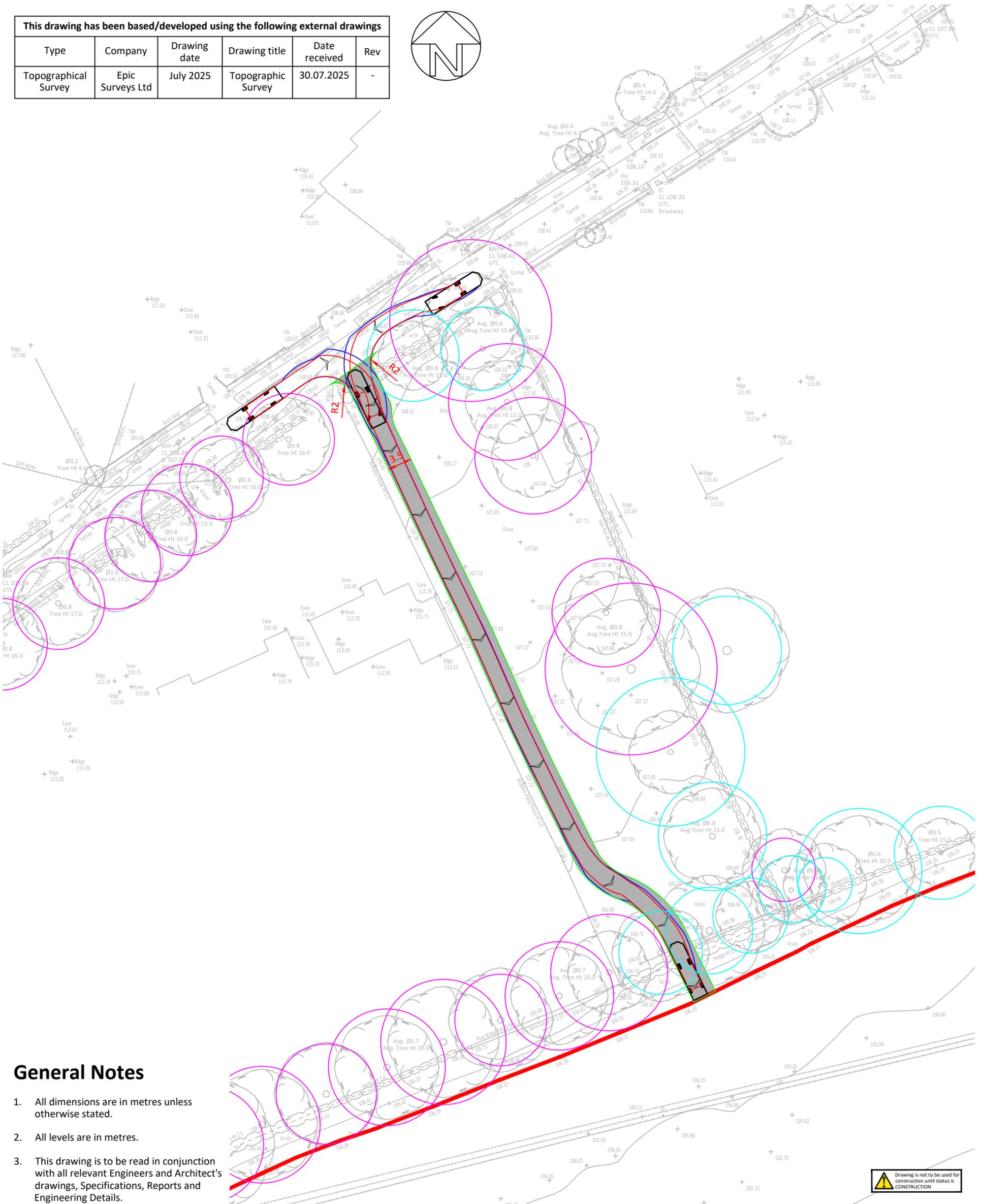
Title: Access Design

Scale at A3: 1:500	Drawn by: JPB	Checked by: IMG	Date: 04.08.2025
Status: FOR INFORMATION	Project ref: 22873	Drawing no.: TA02	Revision: -

JPP (IA) Document T07 R1

This drawing has been based/developed using the following external drawings

Type	Company	Drawing date	Drawing title	Date received	Rev
Topographical Survey	Epic Surveys Ltd	July 2025	Topographic Survey	30.07.2025	-



General Notes

1. All dimensions are in metres unless otherwise stated.
2. All levels are in metres.
3. This drawing is to be read in conjunction with all relevant Engineers and Architect's drawings, Specifications, Reports and Engineering Details.
4. Do not scale from this drawing.

Drawing Key

- Proposed Kerbline
- RPA - Category C
- RPA - Category B
- Site Boundary

Vehicle Profile



Drawing is not to be used for construction until status is CONSTRUCTION

<p>Northampton T: 01604 781811 Poole, Milton Keynes & Kettering</p> <p>E: mail@jppuk.net W: jppuk.net</p>	<p>Client William Davis Ltd</p> <p>Project Proposed Residential Development Castorhe Road, Barrowby</p> <p>Title Emergency Access Design</p>
	<p>Scale at A3 1:500 Drawn by JPB Checked by IMG Date 18.08.2025</p> <p>Status FOR INFORMATION Project ref 22873 Drawing no. TA04 Revision -</p>



Appendix C
TRICS data

Calculation Reference: AUDIT-252601-240617-0641

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	HF HERTFORDSHIRE	1 days
	KC KENT	2 days
	SC SURREY	1 days
	WS WEST SUSSEX	3 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
13	MUNSTER	
	WA WATERFORD	1 days
15	GREATER DUBLIN	
	DL DUBLIN	1 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	1 days
	AR ARMAGH	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 91 to 288 (units:)
 Range Selected by User: 87 to 360 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 01/03/20

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

Selected survey days:

Monday	4 days
Tuesday	2 days
Wednesday	4 days
Thursday	4 days
Friday	2 days

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

Selected survey types:

Manual count	16 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	16
--------------	----

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	15
No Sub Category	1

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	10 days - Selected
Servicing vehicles Excluded	6 days - Selected

Secondary Filtering selection:

Use Class:

C3	16 days
----	---------

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

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	4 days
10,001 to 15,000	5 days
15,001 to 20,000	3 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	2 days
50,001 to 75,000	4 days
75,001 to 100,000	3 days
125,001 to 250,000	6 days
500,001 or More	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	10 days
1.6 to 2.0	3 days

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

Travel Plan:

Yes	7 days
No	9 days

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

PTAL Rating:

No PTAL Present	16 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	AN-03-A-09 SLOEFIELD DRIVE CARRICKFERGUS	DETACHED & SEMI -DETACHED	ANTRIM
	Edge of Town No Sub Category Total No of Dwellings: 151 <i>Survey date: WEDNESDAY 12/10/16</i>		<i>Survey Type: MANUAL</i>
2	AR-03-A-01 BIRCHDALE MANOR LURGAN	MIXED HOUSES	ARMAGH
	Edge of Town Residential Zone Total No of Dwellings: 153 <i>Survey date: TUESDAY 15/06/10</i>		<i>Survey Type: MANUAL</i>
3	DL-03-A-06 UPPER KILMACUD ROAD DUBLIN DUNDRUM	DETACHED	DUBLIN
	Edge of Town Residential Zone Total No of Dwellings: 147 <i>Survey date: FRIDAY 30/04/10</i>		<i>Survey Type: MANUAL</i>
4	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 212 <i>Survey date: MONDAY 11/07/16</i>		<i>Survey Type: MANUAL</i>
5	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 99 <i>Survey date: WEDNESDAY 05/06/19</i>		<i>Survey Type: MANUAL</i>
6	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 91 <i>Survey date: THURSDAY 07/11/19</i>		<i>Survey Type: MANUAL</i>
7	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 160 <i>Survey date: MONDAY 08/07/19</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: FRIDAY</i>	SEMI -DETACHED & TERRACED	110 <i>22/09/17</i>	KENT	<i>Survey Type: MANUAL</i>
9	KC-03-A-07 RECVLVER ROAD HERNE BAY Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	MIXED HOUSES	288 <i>27/09/17</i>	KENT	<i>Survey Type: MANUAL</i>
10	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: MONDAY</i>	MIXED HOUSES	275 <i>23/09/19</i>	NORFOLK	<i>Survey Type: MANUAL</i>
11	SC-03-A-05 REIGATE ROAD HORLEY Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: MONDAY</i>	MIXED HOUSES	207 <i>01/04/19</i>	SURREY	<i>Survey Type: MANUAL</i>
12	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	DETACHED & SEMI -DETACHED	248 <i>22/11/17</i>	STAFFORDSHIRE	<i>Survey Type: MANUAL</i>
13	WA-03-A-04 MAYPARK LANE WATERFORD Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	DETACHED	280 <i>24/06/14</i>	WATERFORD	<i>Survey Type: MANUAL</i>
14	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSES	151 <i>11/12/14</i>	WEST SUSSEX	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

15	WS-03-A-08 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Total No of Dwellings: 180 <i>Survey date: THURSDAY 19/04/18</i>	MIXED HOUSES WEST SUSSEX
16	WS-03-A-09 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON Edge of Town Residential Zone Total No of Dwellings: 195 <i>Survey date: THURSDAY 05/07/18</i>	MIXED HOUSES & FLATS WEST SUSSEX Survey Type: MANUAL Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.73

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	184	0.088	16	184	0.301	16	184	0.389
08:00 - 09:00	16	184	0.154	16	184	0.432	16	184	0.586
09:00 - 10:00	16	184	0.162	16	184	0.209	16	184	0.371
10:00 - 11:00	16	184	0.136	16	184	0.169	16	184	0.305
11:00 - 12:00	16	184	0.153	16	184	0.171	16	184	0.324
12:00 - 13:00	16	184	0.192	16	184	0.167	16	184	0.359
13:00 - 14:00	16	184	0.196	16	184	0.188	16	184	0.384
14:00 - 15:00	16	184	0.213	16	184	0.232	16	184	0.445
15:00 - 16:00	16	184	0.290	16	184	0.196	16	184	0.486
16:00 - 17:00	16	184	0.314	16	184	0.181	16	184	0.495
17:00 - 18:00	16	184	0.392	16	184	0.181	16	184	0.573
18:00 - 19:00	16	184	0.330	16	184	0.211	16	184	0.541
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.620			2.638			5.258

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.*

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Parameter summary

Trip rate parameter range selected: 91 - 288 (units:)
 Survey date date range: 01/01/10 - 01/03/20
 Number of weekdays (Monday-Friday): 16
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.73

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	184	0.126	16	184	0.509	16	184	0.635
08:00 - 09:00	16	184	0.248	16	184	0.912	16	184	1.160
09:00 - 10:00	16	184	0.246	16	184	0.359	16	184	0.605
10:00 - 11:00	16	184	0.205	16	184	0.287	16	184	0.492
11:00 - 12:00	16	184	0.230	16	184	0.280	16	184	0.510
12:00 - 13:00	16	184	0.300	16	184	0.268	16	184	0.568
13:00 - 14:00	16	184	0.308	16	184	0.295	16	184	0.603
14:00 - 15:00	16	184	0.347	16	184	0.357	16	184	0.704
15:00 - 16:00	16	184	0.608	16	184	0.339	16	184	0.947
16:00 - 17:00	16	184	0.604	16	184	0.319	16	184	0.923
17:00 - 18:00	16	184	0.682	16	184	0.298	16	184	0.980
18:00 - 19:00	16	184	0.583	16	184	0.380	16	184	0.963
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.487			4.603			9.090

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.*



**Appendix D
Turning Count Survey Results**

Barrowby
 Wednesday 19th June 2024
 Junction: 1
 Approach: A52 East

TIME	A-B Left to Rectory Lane									A-C Ahead to A52 (W)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	5	1	0	0	1	7	8.0	0	1	137	27	6	15	0	186	207.9
07:45 - 08:00	0	0	2	0	0	0	0	2	2.0	0	1	120	36	10	7	1	175	189.5
Hourly Total	0	0	7	1	0	0	1	9	10.0	0	2	257	63	16	22	1	361	397.4
08:00 - 08:15	0	0	6	0	0	0	0	6	6.0	0	0	130	30	4	14	0	178	198.2
08:15 - 08:30	0	0	11	1	0	0	0	12	12.0	0	2	108	26	10	15	0	161	184.3
08:30 - 08:45	0	0	15	2	1	0	0	18	18.5	0	0	99	1	8	14	4	126	152.2
08:45 - 09:00	0	0	6	2	0	0	0	8	8.0	0	0	107	21	9	15	0	152	176.0
Hourly Total	0	0	38	5	1	0	0	44	44.5	0	2	444	78	31	58	4	617	710.7
09:00 - 09:15	0	0	3	1	0	0	0	4	4.0	0	1	88	17	9	13	0	128	148.8
09:15 - 09:30	0	0	5	0	0	0	0	5	5.0	0	0	65	12	9	12	0	98	118.1
Hourly Total	0	0	8	1	0	0	0	9	9.0	0	1	153	29	18	25	0	226	266.9
TOTAL	0	0	53	7	1	0	1	62	63.5	0	5	854	170	65	105	5	1204	1375.0
16:30 - 16:45	0	0	8	3	0	0	0	11	11.0	0	1	151	36	9	6	0	203	214.7
16:45 - 17:00	0	0	10	4	0	0	0	14	14.0	0	0	153	23	8	5	0	189	199.5
Hourly Total	0	0	18	7	0	0	0	25	25.0	0	1	304	59	17	11	0	392	414.2
17:00 - 17:15	0	0	9	1	0	0	0	10	10.0	0	1	125	23	5	7	1	162	174.0
17:15 - 17:30	0	0	9	1	0	0	0	10	10.0	0	2	110	17	4	4	1	138	145.0
17:30 - 17:45	0	0	9	1	0	0	0	10	10.0	0	2	113	15	3	6	0	139	147.1
17:45 - 18:00	0	0	4	0	0	0	0	4	4.0	0	0	99	15	1	4	0	119	124.7
Hourly Total	0	0	31	3	0	0	0	34	34.0	0	5	447	70	13	21	2	558	590.8
18:00 - 18:15	0	0	5	0	0	0	0	5	5.0	0	1	124	16	2	4	0	147	152.6
18:15 - 18:30	0	0	6	1	0	0	0	7	7.0	0	0	94	8	2	2	0	106	109.6
Hourly Total	0	0	11	1	0	0	0	12	12.0	0	1	218	24	4	6	0	253	262.2
TOTAL	0	0	60	11	0	0	0	71	71.0	0	7	969	153	34	38	2	1203	1267.2

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Barrowby

Wednesday 19th June 2024

Junction: 1

Approach: Rectory Lane

TIME	B-C Left to A52 (W)									B-A Right to A52 (E)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	11	4	0	0	0	15	15.0	0	0	1	0	0	0	0	1	1.0
07:45 - 08:00	0	1	14	6	0	0	0	21	20.4	0	0	5	2	0	0	0	7	7.0
Hourly Total	0	1	25	10	0	0	0	36	35.4	0	0	6	2	0	0	0	8	8.0
08:00 - 08:15	0	0	19	3	0	0	0	22	22.0	0	0	7	0	0	0	0	7	7.0
08:15 - 08:30	0	0	22	4	1	0	0	27	27.5	0	0	7	0	0	0	0	7	7.0
08:30 - 08:45	0	0	7	1	0	0	0	8	8.0	0	0	4	1	0	0	0	5	5.0
08:45 - 09:00	0	0	12	1	0	0	0	13	13.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	0	0	60	9	1	0	0	70	70.5	0	0	23	1	0	0	0	24	24.0
09:00 - 09:15	0	0	8	1	0	0	0	9	9.0	0	0	7	0	0	0	0	7	7.0
09:15 - 09:30	0	0	7	4	0	0	1	12	13.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	15	5	0	0	1	21	22.0	0	0	9	0	0	0	0	9	9.0
TOTAL	0	1	100	24	1	0	1	127	127.9	0	0	38	3	0	0	0	41	41.0
16:30 - 16:45	0	0	12	2	0	0	0	14	14.0	0	0	5	0	0	0	0	5	5.0
16:45 - 17:00	0	0	11	1	0	0	0	12	12.0	0	0	2	1	0	0	0	3	3.0
Hourly Total	0	0	23	3	0	0	0	26	26.0	0	0	7	1	0	0	0	8	8.0
17:00 - 17:15	0	0	20	2	0	0	0	22	22.0	0	0	3	1	0	0	0	4	4.0
17:15 - 17:30	0	0	8	2	0	0	0	10	10.0	0	0	3	0	0	0	0	3	3.0
17:30 - 17:45	0	0	16	1	0	0	0	17	17.0	0	0	10	1	0	0	0	11	11.0
17:45 - 18:00	0	0	10	0	1	0	0	11	11.5	0	0	4	0	0	0	0	4	4.0
Hourly Total	0	0	54	5	1	0	0	60	60.5	0	0	20	2	0	0	0	22	22.0
18:00 - 18:15	0	0	10	1	0	0	0	11	11.0	0	0	3	1	0	0	0	4	4.0
18:15 - 18:30	0	0	13	0	0	0	0	13	13.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	23	1	0	0	0	24	24.0	0	0	4	1	0	0	0	5	5.0
TOTAL	0	0	100	9	1	0	0	110	110.5	0	0	31	4	0	0	0	35	35.0

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Barrowby
 Wednesday 19th June 2024
 Junction: 1
 Approach: A52 West

TIME	C-A Ahead to A52 (E)									C-B Right to Rectory Lane								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	112	39	18	20	0	189	224.0	0	0	7	1	0	0	0	8	8.0
07:45 - 08:00	0	0	105	26	10	14	0	155	178.2	0	0	10	0	0	0	0	10	10.0
Hourly Total	0	0	217	65	28	34	0	344	402.2	0	0	17	1	0	0	0	18	18.0
08:00 - 08:15	0	0	147	26	6	11	3	193	213.3	0	0	6	2	0	0	0	8	8.0
08:15 - 08:30	0	0	112	34	4	17	0	167	191.1	0	0	0	3	2	0	0	5	6.0
08:30 - 08:45	0	0	121	26	7	20	0	174	203.5	0	0	11	1	0	0	0	12	12.0
08:45 - 09:00	0	0	129	30	17	16	0	192	221.3	0	0	8	2	1	0	0	11	11.5
Hourly Total	0	0	509	116	34	64	3	726	829.2	0	0	25	8	3	0	0	36	37.5
09:00 - 09:15	0	0	108	20	9	17	1	155	182.6	0	0	9	3	0	0	0	12	12.0
09:15 - 09:30	0	0	85	32	14	21	1	153	188.3	0	0	9	2	0	0	0	11	11.0
Hourly Total	0	0	193	52	23	38	2	308	370.9	0	0	18	5	0	0	0	23	23.0
TOTAL	0	0	919	233	85	136	5	1378	1602.3	0	0	60	14	3	0	0	77	78.5
16:30 - 16:45	0	0	120	28	3	9	0	160	173.2	0	0	10	6	0	0	0	16	16.0
16:45 - 17:00	0	0	159	15	2	2	2	180	185.6	0	0	5	2	1	0	0	8	8.5
Hourly Total	0	0	279	43	5	11	2	340	358.8	0	0	15	8	1	0	0	24	24.5
17:00 - 17:15	0	2	146	29	5	4	0	186	192.5	0	0	10	6	0	0	0	16	16.0
17:15 - 17:30	0	2	138	23	3	7	0	173	182.4	0	0	12	2	0	0	0	14	14.0
17:30 - 17:45	0	0	113	17	1	8	0	139	149.9	0	0	13	2	0	0	0	15	15.0
17:45 - 18:00	0	0	129	17	1	9	0	156	168.2	0	0	11	1	0	0	0	12	12.0
Hourly Total	0	4	526	86	10	28	0	654	693.0	0	0	46	11	0	0	0	57	57.0
18:00 - 18:15	0	2	114	16	0	4	0	136	140.0	0	0	8	1	0	0	0	9	9.0
18:15 - 18:30	0	0	95	12	1	7	0	115	124.6	0	0	6	1	0	0	0	7	7.0
Hourly Total	0	2	209	28	1	11	0	251	264.6	0	0	14	2	0	0	0	16	16.0
TOTAL	0	6	1014	157	16	50	2	1245	1316.4	0	0	75	21	1	0	0	97	97.5

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Barrowby

Wednesday 19th June 2024

Junction: 2

Approach: Loop Road A1 A52 East

TIME	A-B									A-C								
	Left to High Road									Ahead to Loop Road A1 A52 (W)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
07:30 - 07:45	0	0	1	0	0	0	0	1	1.0	0	0	47	14	3	9	0	73	86.2
07:45 - 08:00	0	0	3	0	0	0	0	3	3.0	0	0	45	14	4	5	0	68	76.5
Hourly Total	0	0	4	0	0	0	0	4	4.0	0	0	92	28	7	14	0	141	162.7
08:00 - 08:15	0	0	3	1	0	0	0	4	4.0	0	2	55	16	2	9	0	84	95.5
08:15 - 08:30	0	0	3	1	0	0	0	4	4.0	0	0	38	10	4	5	0	57	65.5
08:30 - 08:45	0	0	5	0	0	0	0	5	5.0	0	0	41	8	6	13	0	68	87.9
08:45 - 09:00	0	0	2	0	0	0	0	2	2.0	0	0	56	8	7	9	0	80	95.2
Hourly Total	0	0	13	2	0	0	0	15	15.0	0	2	190	42	19	36	0	289	344.1
09:00 - 09:15	0	0	2	0	0	0	0	2	2.0	0	0	32	8	4	8	0	52	64.4
09:15 - 09:30	0	0	4	0	0	0	0	4	4.0	0	0	28	7	6	6	0	47	57.8
Hourly Total	0	0	6	0	0	0	0	6	6.0	0	0	60	15	10	14	0	99	122.2
TOTAL	0	0	23	2	0	0	0	25	25.0	0	2	342	85	36	64	0	529	629.0
16:30 - 16:45	0	0	5	0	0	0	0	5	5.0	0	0	83	31	6	3	0	123	129.9
16:45 - 17:00	0	0	5	0	0	0	0	5	5.0	0	0	67	15	7	5	0	94	104.0
Hourly Total	0	0	10	0	0	0	0	10	10.0	0	0	150	46	13	8	0	217	233.9
17:00 - 17:15	0	0	9	2	0	0	0	11	11.0	0	0	57	17	3	4	0	81	87.7
17:15 - 17:30	0	0	4	1	0	0	0	5	5.0	0	1	58	11	2	3	0	75	79.3
17:30 - 17:45	0	0	5	1	0	0	0	6	6.0	0	1	58	10	3	5	0	77	84.4
17:45 - 18:00	0	0	2	1	0	0	0	3	3.0	0	0	48	11	0	3	0	62	65.9
Hourly Total	0	0	20	5	0	0	0	25	25.0	0	2	221	49	8	15	0	295	317.3
18:00 - 18:15	0	1	4	0	0	0	0	5	4.4	0	0	70	9	0	4	0	83	88.2
18:15 - 18:30	0	0	2	0	0	0	0	2	2.0	0	0	50	5	1	1	0	57	58.8
Hourly Total	0	1	6	0	0	0	0	7	6.4	0	0	120	14	1	5	0	140	147.0
TOTAL	0	1	36	5	0	0	0	42	41.4	0	2	491	109	22	28	0	652	698.2

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Barrowby
 Wednesday 19th June 2024
 Junction: 2
 Approach: High Road

B-C										B-A									
Left to Loop Road A1 A52 (W)										Right to Loop Road A1 A52 (E)									
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	
07:30 - 07:45	0	0	7	2	0	0	0	9	9.0	0	0	13	2	0	0	0	15	15.0	
07:45 - 08:00	0	0	6	0	0	0	0	6	6.0	0	0	15	6	1	0	0	22	22.5	
Hourly Total	0	0	13	2	0	0	0	15	15.0	0	0	28	8	1	0	0	37	37.5	
08:00 - 08:15	0	0	6	0	1	0	0	7	7.5	0	0	4	4	1	0	0	9	9.5	
08:15 - 08:30	0	0	5	2	0	0	0	7	7.0	0	0	15	5	0	0	0	20	20.0	
08:30 - 08:45	0	0	7	0	0	0	0	7	7.0	0	0	20	2	0	0	0	22	22.0	
08:45 - 09:00	0	0	11	0	1	0	0	12	12.5	0	0	10	2	0	0	0	12	12.0	
Hourly Total	0	0	29	2	2	0	0	33	34.0	0	0	49	13	1	0	0	63	63.5	
09:00 - 09:15	0	0	9	0	0	0	0	9	9.0	0	0	5	2	0	0	0	7	7.0	
09:15 - 09:30	0	0	3	2	0	0	0	5	5.0	0	0	8	1	0	0	0	9	9.0	
Hourly Total	0	0	12	2	0	0	0	14	14.0	0	0	13	3	0	0	0	16	16.0	
TOTAL	0	0	54	6	2	0	0	62	63.0	0	0	90	24	2	0	0	116	117.0	
16:30 - 16:45	0	0	4	2	0	1	0	7	8.3	0	1	6	3	0	0	0	10	9.4	
16:45 - 17:00	0	0	4	0	1	0	0	5	5.5	0	0	7	4	0	0	0	11	11.0	
Hourly Total	0	0	8	2	1	1	0	12	13.8	0	1	13	7	0	0	0	21	20.4	
17:00 - 17:15	0	0	5	0	0	0	0	5	5.0	0	0	4	2	0	0	0	6	6.0	
17:15 - 17:30	0	0	8	0	0	0	0	8	8.0	0	0	4	0	0	0	0	4	4.0	
17:30 - 17:45	0	0	8	0	0	0	0	8	8.0	0	0	7	0	0	0	0	7	7.0	
17:45 - 18:00	0	0	2	0	1	0	0	3	3.5	0	0	6	0	0	0	0	6	6.0	
Hourly Total	0	0	23	0	1	0	0	24	24.5	0	0	21	2	0	0	0	23	23.0	
18:00 - 18:15	0	0	4	0	0	0	0	4	4.0	0	0	5	0	0	0	0	5	5.0	
18:15 - 18:30	0	0	2	1	0	0	0	3	3.0	0	0	5	2	0	0	0	7	7.0	
Hourly Total	0	0	6	1	0	0	0	7	7.0	0	0	10	2	0	0	0	12	12.0	
TOTAL	0	0	37	3	2	1	0	43	45.3	0	1	44	11	0	0	0	56	55.4	

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Barrowby

Wednesday 19th June 2024

Junction: 2

Approach: Loop Road A1 A52 West

C-A										C-B									
Ahead to Loop Road A1 A52 (E)										Right to High Road									
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	
07:30 - 07:45	0	0	31	4	3	4	0	42	48.7	0	0	3	1	0	0	1	5	6.0	
07:45 - 08:00	0	0	22	5	2	0	0	29	30.0	0	0	7	1	0	0	0	8	8.0	
Hourly Total	0	0	53	9	5	4	0	71	78.7	0	0	10	2	0	0	1	13	14.0	
08:00 - 08:15	0	0	19	7	1	2	0	29	32.1	0	0	2	2	1	0	0	5	5.5	
08:15 - 08:30	0	0	41	9	2	7	0	59	69.1	0	0	14	1	0	0	0	15	15.0	
08:30 - 08:45	0	0	31	5	4	6	0	46	55.8	0	0	16	3	0	0	0	19	19.0	
08:45 - 09:00	0	0	27	1	3	1	0	32	34.8	0	1	8	2	0	0	0	11	10.4	
Hourly Total	0	0	118	22	10	16	0	166	191.8	0	1	40	8	1	0	0	50	49.9	
09:00 - 09:15	0	0	16	9	6	7	0	38	50.1	0	0	9	2	1	0	0	12	12.5	
09:15 - 09:30	0	0	26	1	4	2	0	33	37.6	0	0	9	1	0	0	0	10	10.0	
Hourly Total	0	0	42	10	10	9	0	71	87.7	0	0	18	3	1	0	0	22	22.5	
TOTAL	0	0	213	41	25	29	0	308	358.2	0	1	68	13	2	0	1	85	86.4	
16:30 - 16:45	0	0	27	4	0	2	0	33	35.6	0	0	18	5	0	0	0	23	23.0	
16:45 - 17:00	0	0	22	5	0	1	0	28	29.3	0	0	18	2	0	0	0	20	20.0	
Hourly Total	0	0	49	9	0	3	0	61	64.9	0	0	36	7	0	0	0	43	43.0	
17:00 - 17:15	0	0	41	3	2	0	0	46	47.0	0	0	20	3	0	0	0	23	23.0	
17:15 - 17:30	0	0	34	4	0	0	0	38	38.0	0	0	22	2	1	0	0	25	25.5	
17:30 - 17:45	0	1	26	5	1	2	0	35	37.5	0	0	22	1	0	0	0	23	23.0	
17:45 - 18:00	0	0	19	1	0	2	0	22	24.6	0	0	18	0	0	0	0	18	18.0	
Hourly Total	0	1	120	13	3	4	0	141	147.1	0	0	82	6	1	0	0	89	89.5	
18:00 - 18:15	0	0	27	5	0	0	0	32	32.0	1	0	16	0	0	0	0	17	16.2	
18:15 - 18:30	0	0	15	2	1	1	0	19	20.8	1	0	10	2	0	0	0	13	12.2	
Hourly Total	0	0	42	7	1	1	0	51	52.8	2	0	26	2	0	0	0	30	28.4	
TOTAL	0	1	211	29	4	8	0	253	264.8	2	0	144	15	1	0	0	162	160.9	

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

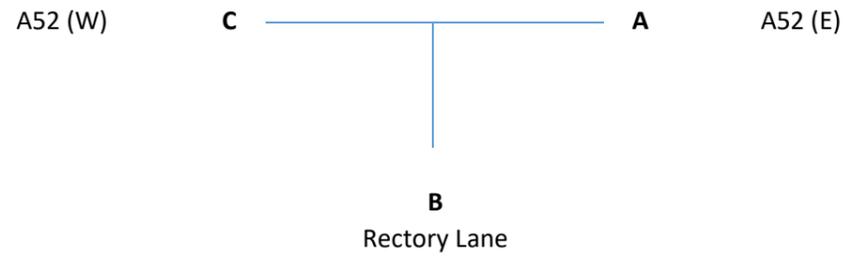


Appendix E
Traffic Flows and Distribution Information



Appendix F
Junctions Assessment Results

Junction 1: A52 (E) / Rectory Lane / A52 (W)



2024-2029	
Growth Factors	
AM	PM
1.0458	1.0473

2029 Assessment

AM Peak 0800-0900

Base 2024

AM	A	B	C
A	0	0	0
B	24	0	0
C	829	0	0

853

Background 2029

AM	A	B	C
A	0	0	0
B	25	0	0
C	867	0	0

892

Development Flows

AM	A	B	C
A	0	0	0
B	54	0	0
C	0	0	0

54

Background 2029 + Development Flows

AM	A	B	C
A	0	0	0
B	79	0	0
C	867	0	0

946

PM Peak 1700-1800

Base 2024

PM	A	B	C
A	0	0	0
B	22	0	0
C	693	0	0

715

Background 2029

PM	A	B	C
A	0	0	0
B	23	0	0
C	726	0	0

749

Development Flows

PM	A	B	C
A	0	0	0
B	18	0	0
C	0	0	0

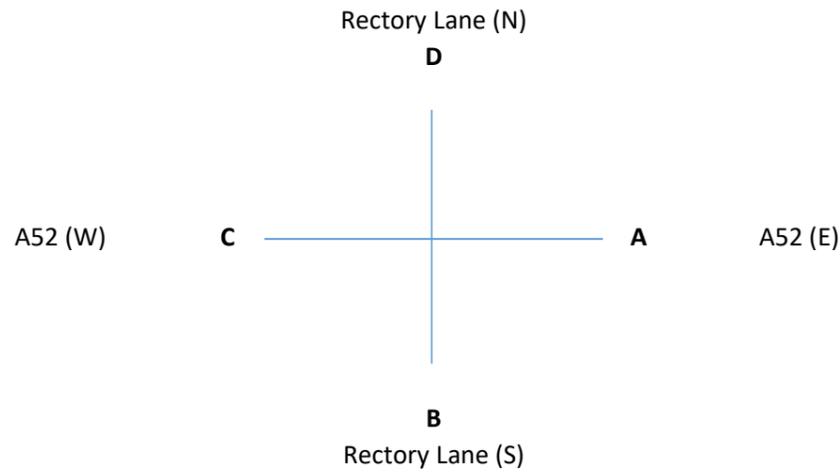
18

Background 2029 + Development Flows

PM	A	B	C
A	0	0	0
B	41	0	0
C	726	0	0

767

Junction 1: A52 (E) / Rectory Lane (S) / A52 (W) / Rectory Lane (S)



2024-2029	
Growth Factors	
AM	PM
1.0458	1.0473

2029 Assessment

AM Peak 0800-0900

Base 2024

PM	A	B	C	D
A	0	45	711	0
B	0	0	71	24
C	0	0	0	0
D	0	38	0	0

887

Background 2029

PM	A	B	C	D
A	0	47	743	0
B	0	0	74	25
C	0	0	0	0
D	0	39	0	0

928

Development Trips

PM	A	B	C	D
A	0	15	0	0
B	0	0	23	54
C	0	0	0	0
D	0	6	0	0

98

Background 2029 + Development Trips

PM	A	B	C	D
A	0	61	743	0
B	0	0	97	79
C	0	0	0	0
D	0	45	0	0

1026

PM Peak 1700-1800

Base 2024

PM	A	B	C	D
A	0	34	591	0
B	0	0	61	22
C	0	0	0	0
D	0	57	0	0

764

Background 2029

PM	A	B	C	D
A	0	36	619	0
B	0	0	63	23
C	0	0	0	0
D	0	60	0	0

800

Development Trips

PM	A	B	C	D
A	0	41	0	0
B	0	0	8	18
C	0	0	0	0
D	0	17	0	0

83

Background 2029 + Development Trips

PM	A	B	C	D
A	0	76	619	0
B	0	0	71	41
C	0	0	0	0
D	0	77	0	0

883

Junctions 10
PICADY 10 - Priority Intersection Module
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Filename: 22873 - A52 (E), A52 Access (E), A52 (W) (Priority Junction).j10
Path: N:\Consulting\JPP Scheme 2021 (22316 -\22873 - Casthorpe Road, Barrowby, South Kesteven\Design\JPP\TA
Report generation date: 28/06/2024 10:08:03

- »2024, AM
- »2024, PM
- »2029, AM
- »2029, PM
- »2029 + Dev, AM
- »2029 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2024										
Stream B-AC	D1	0.1	10.78	0.06	B	D2	0.1	9.98	0.05	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2029										
Stream B-AC	D3	0.1	11.09	0.06	B	D4	0.1	10.22	0.06	B
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2029 + Dev										
Stream B-AC	D5	0.4	18.62	0.20	C	D6	0.2	12.24	0.10	B
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A

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

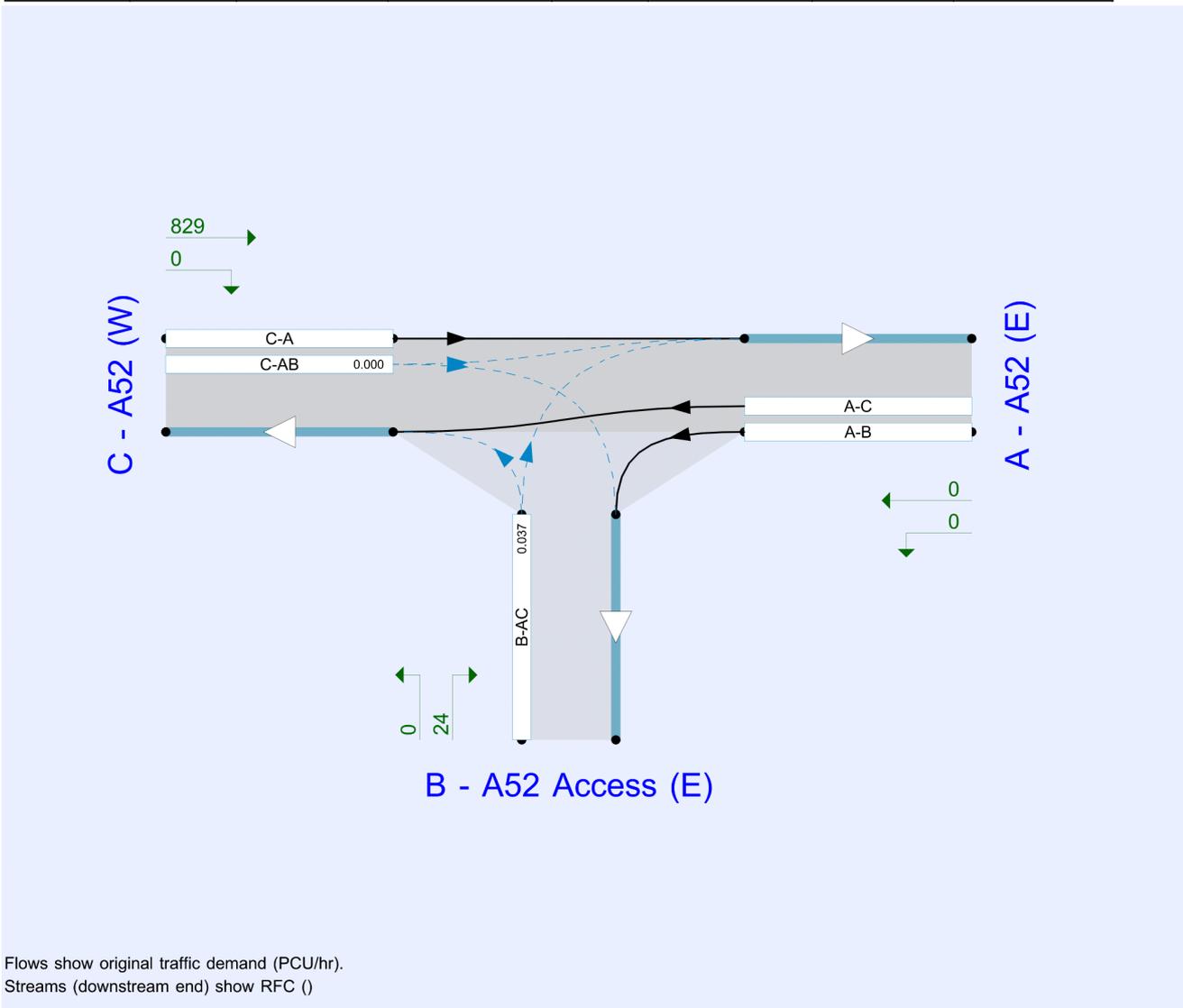
File summary

File Description

Title	
Location	
Site number	
Date	18/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\Thomas.Kirk
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024	PM	ONE HOUR	16:45	18:15	15	✓
D3	2029	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029	PM	ONE HOUR	16:45	18:15	15	✓
D5	2029 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2029 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.30	A

Arms

Arms

Arm	Name	Description	Arm type
A	A52 (E)		Major
B	A52 Access (E)		Minor
C	A52 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A52 (W)	7.40			125.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - A52 Access (E)	One lane	3.00	135	125

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	586	0.100	0.253	0.159	0.362
B-C	703	0.101	0.256	-	-
C-B	646	0.235	0.235	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	0	100.000
B - A52 Access (E)		ONE HOUR	✓	24	100.000
C - A52 (W)		ONE HOUR	✓	829	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	24	0	0
	C - A52 (W)	829	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	24	0	0
	C - A52 (W)	100	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	10.78	0.1	B	22	33
C-AB	0.00	0.00	0.0	A	0	0
C-A					761	1141
A-B					0	0
A-C					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	5	487	0.037	18	0.0	0.0	9.518	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	624	156			624				
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	5	467	0.046	22	0.0	0.1	10.014	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	745	186			745				
A-B	0	0			0				
A-C	0	0			0				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	441	0.060	26	0.1	0.1	10.779	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	913	228			913				
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	441	0.060	26	0.1	0.1	10.780	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	913	228			913				
A-B	0	0			0				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	5	467	0.046	22	0.1	0.1	10.022	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	745	186			745				
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	5	487	0.037	18	0.1	0.0	9.532	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	624	156			624				
A-B	0	0			0				
A-C	0	0			0				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	0	100.000
B - A52 Access (E)		ONE HOUR	✓	22	100.000
C - A52 (W)		ONE HOUR	✓	693	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	22	0	0
	C - A52 (W)	693	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	22	0	0
	C - A52 (W)	100	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.05	9.98	0.1	A	20	30
C-AB	0.00	0.00	0.0	A	0	0
C-A					636	954
A-B					0	0
A-C					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	503	0.033	16	0.0	0.0	9.025	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	522	130			522				
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	487	0.041	20	0.0	0.1	9.405	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	623	156			623				
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	464	0.052	24	0.1	0.1	9.975	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	763	191			763				
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	6	464	0.052	24	0.1	0.1	9.977	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	763	191			763				
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	5	487	0.041	20	0.1	0.1	9.407	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	623	156			623				
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	503	0.033	17	0.1	0.0	9.034	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	522	130			522				
A-B	0	0			0				
A-C	0	0			0				

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2029	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	0	100.000
B - A52 Access (E)		ONE HOUR	✓	25	100.000
C - A52 (W)		ONE HOUR	✓	867	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	25	0	0
	C - A52 (W)	867	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	25	0	0
	C - A52 (W)	100	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	11.09	0.1	B	23	35
C-AB	0.00	0.00	0.0	A	0	0
C-A					796	1194
A-B					0	0
A-C					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	5	482	0.039	19	0.0	0.1	9.717	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	653	163			653				
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	462	0.049	23	0.1	0.1	10.251	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	780	195			780				
A-B	0	0			0				
A-C	0	0			0				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	7	434	0.064	28	0.1	0.1	11.082	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	955	239			955				
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	7	434	0.064	28	0.1	0.1	11.086	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	955	239			955				
A-B	0	0			0				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	462	0.049	23	0.1	0.1	10.257	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	780	195			780				
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	5	482	0.039	19	0.1	0.1	9.727	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	653	163			653				
A-B	0	0			0				
A-C	0	0			0				

2029, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.31	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	0	100.000
B - A52 Access (E)		ONE HOUR	✓	23	100.000
C - A52 (W)		ONE HOUR	✓	726	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	23	0	0
	C - A52 (W)	726	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	23	0	0
	C - A52 (W)	100	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	10.22	0.1	B	21	32
C-AB	0.00	0.00	0.0	A	0	0
C-A					666	999
A-B					0	0
A-C					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	499	0.035	17	0.0	0.0	9.191	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	546	137			546				
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	5	482	0.043	21	0.0	0.1	9.601	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	652	163			652				
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	6	459	0.055	25	0.1	0.1	10.220	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	799	200			799				
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	6	459	0.055	25	0.1	0.1	10.222	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	799	200			799				
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	5	482	0.043	21	0.1	0.1	9.606	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	652	163			652				
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	499	0.035	17	0.1	0.0	9.199	A
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	546	137			546				
A-B	0	0			0				
A-C	0	0			0				

2029 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.56	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.56	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	0	100.000
B - A52 Access (E)		ONE HOUR	✓	79	100.000
C - A52 (W)		ONE HOUR	✓	867	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	79	0	0
	C - A52 (W)	867	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	79	0	0
	C - A52 (W)	100	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.20	18.62	0.4	C	73	109
C-AB	0.00	0.00	0.0	A	0	0
C-A					796	1194
A-B					0	0
A-C					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	482	0.124	59	0.0	0.2	15.213	C
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	653	163			653				
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	18	462	0.154	71	0.2	0.3	16.502	C
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	780	195			780				
A-B	0	0			0				
A-C	0	0			0				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	22	434	0.201	87	0.3	0.4	18.569	C
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	955	239			955				
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	22	434	0.201	87	0.4	0.4	18.618	C
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	955	239			955				
A-B	0	0			0				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	18	462	0.154	72	0.4	0.3	16.565	C
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	780	195			780				
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	60	15	482	0.124	60	0.3	0.3	15.304	C
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	653	163			653				
A-B	0	0			0				
A-C	0	0			0				

2029 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.65	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2029 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	0	100.000
B - A52 Access (E)		ONE HOUR	✓	41	100.000
C - A52 (W)		ONE HOUR	✓	726	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	41	0	0
	C - A52 (W)	726	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A52 (E)	B - A52 Access (E)	C - A52 (W)
From	A - A52 (E)	0	0	0
	B - A52 Access (E)	41	0	0
	C - A52 (W)	100	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	12.24	0.2	B	37	56
C-AB	0.00	0.00	0.0	A	0	0
C-A					666	999
A-B					0	0
A-C					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	499	0.061	30	0.0	0.1	10.805	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	546	137			546				
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	482	0.076	37	0.1	0.1	11.370	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	652	163			652				
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	459	0.098	45	0.1	0.2	12.236	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	799	200			799				
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	459	0.098	45	0.2	0.2	12.243	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	799	200			799				
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	482	0.076	37	0.2	0.1	11.384	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	652	163			652				
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	499	0.061	31	0.1	0.1	10.826	B
C-AB	0	0	646	0.000	0	0.0	0.0	0.000	A
C-A	546	137			546				
A-B	0	0			0				
A-C	0	0			0				

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.1.1.1905 © Copyright TRL Software Limited, 2023
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Filename: 22873 - A52 (E), Rectory Lane (S), A52 (W), Rectory Lane (N) (Cross Junction).j10
Path: N:\Consulting\JPP Scheme 2021 (22316 -\22873 - Casthorpe Road, Barrowby, South Kesteven\Design\JPP\TA
Report generation date: 28/06/2024 10:35:56

- »2024, AM
- »2024, PM
- »2029, AM
- »2029, PM
- »2029 + Dev, AM
- »2029 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2024										
Stream B-ACD	D1	0.4	15.68	0.23	C	D2	0.3	13.18	0.18	B
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.2	13.60	0.10	B		0.3	15.56	0.15	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2029										
Stream B-ACD	D3	0.5	16.59	0.24	C	D4	0.4	13.80	0.20	B
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.2	14.05	0.11	B		0.3	16.17	0.16	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2029 + Dev										
Stream B-ACD	D5	1.5	29.11	0.45	D	D6	0.6	16.42	0.26	C
Stream A-BCD		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream D-ABC		0.2	15.07	0.13	C		0.4	19.28	0.20	C
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A

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

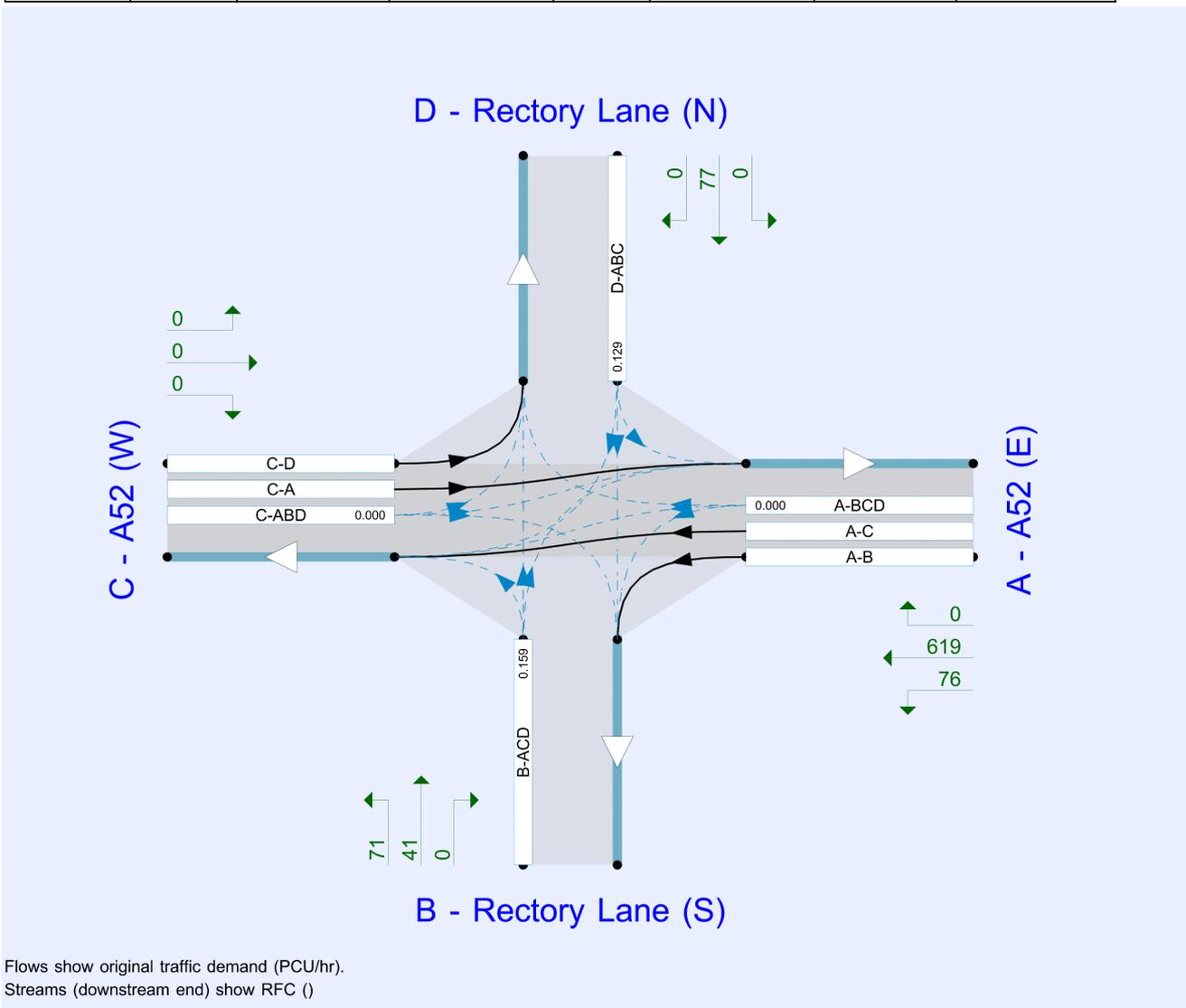
File summary

File Description

Title	
Location	
Site number	
Date	18/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\Thomas.Kirk
Description	

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024	PM	ONE HOUR	16:45	18:15	15	✓
D3	2029	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029	PM	ONE HOUR	16:45	18:15	15	✓
D5	2029 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2029 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.24	A

Arms

Arms

Arm	Name	Description	Arm type
A	A52 (E)		Major
B	Rectory Lane (S)		Minor
C	A52 (W)		Major
D	Rectory Lane (N)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A52 (E)	7.30			115.0	✓	0.00
C - A52 (W)	7.30			125.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Rectory Lane (S)	One lane	3.00	135	125
D - Rectory Lane (N)	One lane	3.00	115	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	641	-	-	-	-	-	-	0.234	0.335	0.234	-	-	-
B-A	586	0.101	0.255	0.255	-	-	-	0.160	0.364	-	0.255	0.255	0.127
B-C	703	0.102	0.257	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	586	0.101	0.255	0.255	-	-	-	0.160	0.364	0.160	-	-	-
B-D, offside lane	586	0.101	0.255	0.255	-	-	-	0.160	0.364	0.160	-	-	-
C-B	646	0.236	0.236	0.338	-	-	-	-	-	-	-	-	-
D-A	637	-	-	-	-	-	-	0.233	-	0.092	-	-	-
D-B, nearside lane	524	0.143	0.143	0.325	-	-	-	0.228	0.228	0.090	-	-	-
D-B, offside lane	524	0.143	0.143	0.325	-	-	-	0.228	0.228	0.090	-	-	-
D-C	524	-	0.143	0.325	0.114	0.228	0.228	0.228	0.228	0.090	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.
 Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	755	100.000
B - Rectory Lane (S)		ONE HOUR	✓	95	100.000
C - A52 (W)		ONE HOUR	✓	0	100.000
D - Rectory Lane (N)		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	45	711	0
	B - Rectory Lane (S)	0	0	71	24
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	38	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	45	100	0
	B - Rectory Lane (S)	0	0	71	24
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	38	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.23	15.68	0.4	C	87	130
ABCD	0.00	0.00	0.0	A	0	0
A-B					41	61
A-C					652	978
D-ABC	0.10	13.60	0.2	B	34	52
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	71	18	527	0.135	70	0.0	0.2	12.237	B
ABCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	34	8			34				
A-C	535	134			535				
D-ABC	28	7	443	0.064	28	0.0	0.1	11.915	B
C-ABD	0	0	512	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	85	21	500	0.170	85	0.2	0.3	13.495	B
ABCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	639	160			639				
D-ABC	34	8	427	0.079	34	0.1	0.1	12.575	B
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	104	26	461	0.225	104	0.3	0.4	15.633	C
ABCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	49	12			49				
A-C	782	196			782				
D-ABC	41	10	405	0.102	41	0.1	0.2	13.587	B
C-ABD	0	0	450	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	104	26	461	0.225	104	0.4	0.4	15.675	C
ABCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	49	12			49				
A-C	782	196			782				
D-ABC	41	10	405	0.102	41	0.2	0.2	13.597	B
C-ABD	0	0	450	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	85	21	500	0.170	85	0.4	0.3	13.546	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	40	10			40				
A-C	639	160			639				
D-ABC	34	8	427	0.079	34	0.2	0.1	12.589	B
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	71	18	527	0.135	71	0.3	0.2	12.307	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	34	8			34				
A-C	535	134			535				
D-ABC	28	7	443	0.064	28	0.1	0.1	11.940	B
C-ABD	0	0	512	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.58	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.58	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	625	100.000
B - Rectory Lane (S)		ONE HOUR	✓	83	100.000
C - A52 (W)		ONE HOUR	✓	0	100.000
D - Rectory Lane (N)		ONE HOUR	✓	57	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	34	591	0
	B - Rectory Lane (S)	0	0	61	22
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	57	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
From		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
	A - A52 (E)	0	34	100	0
	B - Rectory Lane (S)	0	0	61	22
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	57	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.18	13.18	0.3	B	76	114
A-BCD	0.00	0.00	0.0	A	0	0
A-B					31	47
A-C					542	813
D-ABC	0.15	15.56	0.3	C	52	78
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	62	16	550	0.113	61	0.0	0.2	10.896	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	445	111			445				
D-ABC	43	11	457	0.094	42	0.0	0.2	13.606	B
C-ABD	0	0	535	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	74	19	527	0.141	74	0.2	0.2	11.761	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	531	133			531				
D-ABC	51	13	444	0.115	51	0.2	0.2	14.379	B
C-ABD	0	0	514	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	91	23	495	0.183	90	0.2	0.3	13.153	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	650	163			650				
D-ABC	63	16	426	0.147	62	0.2	0.3	15.542	C
C-ABD	0	0	484	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	91	23	495	0.183	91	0.3	0.3	13.176	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	37	9			37				
A-C	650	163			650				
D-ABC	63	16	426	0.147	63	0.3	0.3	15.563	C
C-ABD	0	0	484	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	74	19	527	0.141	74	0.3	0.2	11.788	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	531	133			531				
D-ABC	51	13	444	0.115	51	0.3	0.2	14.411	B
C-ABD	0	0	514	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	62	16	550	0.113	62	0.2	0.2	10.938	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	26	6			26				
A-C	445	111			445				
D-ABC	43	11	457	0.094	43	0.2	0.2	13.661	B
C-ABD	0	0	535	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.36	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2029	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	790	100.000
B - Rectory Lane (S)		ONE HOUR	✓	99	100.000
C - A52 (W)		ONE HOUR	✓	0	100.000
D - Rectory Lane (N)		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	47	743	0
	B - Rectory Lane (S)	0	0	74	25
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	39	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
From		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
	A - A52 (E)	0	47	100	0
	B - Rectory Lane (S)	0	0	74	25
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	39	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.24	16.59	0.5	C	91	136
A-BCD	0.00	0.00	0.0	A	0	0
A-B					43	64
A-C					682	1023
D-ABC	0.11	14.05	0.2	B	36	54
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	74	19	521	0.143	73	0.0	0.3	12.696	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	35	9			35				
A-C	560	140			560				
D-ABC	30	7	439	0.067	29	0.0	0.1	12.210	B
C-ABD	0	0	506	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	89	22	492	0.181	89	0.3	0.3	14.100	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	42	10			42				
A-C	668	167			668				
D-ABC	35	9	423	0.083	35	0.1	0.1	12.929	B
C-ABD	0	0	479	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	109	27	452	0.241	108	0.3	0.5	16.529	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	51	13			51				
A-C	818	205			818				
D-ABC	43	11	400	0.108	43	0.1	0.2	14.040	B
C-ABD	0	0	441	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	109	27	452	0.241	109	0.5	0.5	16.586	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	51	13			51				
A-C	818	205			818				
D-ABC	43	11	400	0.108	43	0.2	0.2	14.051	B
C-ABD	0	0	441	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	89	22	492	0.181	89	0.5	0.4	14.165	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	42	10			42				
A-C	668	167			668				
D-ABC	35	9	423	0.083	35	0.2	0.1	12.945	B
C-ABD	0	0	479	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	74	19	521	0.143	75	0.4	0.3	12.776	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	35	9			35				
A-C	560	140			560				
D-ABC	30	7	439	0.067	30	0.1	0.1	12.240	B
C-ABD	0	0	506	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2029, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		2.70	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.70	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	654	100.000
B - Rectory Lane (S)		ONE HOUR	✓	86	100.000
C - A52 (W)		ONE HOUR	✓	0	100.000
D - Rectory Lane (N)		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	36	619	0
	B - Rectory Lane (S)	0	0	63	23
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	60	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
From		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
	A - A52 (E)	0	36	100	0
	B - Rectory Lane (S)	0	0	63	23
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	60	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.20	13.80	0.4	B	79	119
A-BCD	0.00	0.00	0.0	A	0	0
A-B					33	49
A-C					568	852
D-ABC	0.16	16.17	0.3	C	55	82
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	65	16	544	0.120	64	0.0	0.2	11.251	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	27	7			27				
A-C	466	116			466				
D-ABC	45	11	454	0.099	44	0.0	0.2	14.014	B
C-ABD	0	0	530	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	78	19	520	0.149	77	0.2	0.3	12.207	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	32	8			32				
A-C	556	139			556				
D-ABC	54	13	440	0.122	53	0.2	0.2	14.859	B
C-ABD	0	0	507	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	95	24	487	0.195	95	0.3	0.4	13.769	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	39	10			39				
A-C	681	170			681				
D-ABC	66	16	421	0.156	65	0.2	0.3	16.145	C
C-ABD	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	95	24	487	0.195	95	0.4	0.4	13.796	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	39	10			39				
A-C	681	170			681				
D-ABC	66	16	421	0.156	66	0.3	0.3	16.170	C
C-ABD	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	78	19	520	0.149	78	0.4	0.3	12.242	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	32	8			32				
A-C	556	139			556				
D-ABC	54	13	440	0.122	54	0.3	0.2	14.897	B
C-ABD	0	0	507	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	65	16	544	0.120	65	0.3	0.2	11.298	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	27	7			27				
A-C	466	116			466				
D-ABC	45	11	454	0.099	45	0.2	0.2	14.071	B
C-ABD	0	0	530	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2029 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		5.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.66	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	805	100.000
B - Rectory Lane (S)		ONE HOUR	✓	176	100.000
C - A52 (W)		ONE HOUR	✓	0	100.000
D - Rectory Lane (N)		ONE HOUR	✓	45	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	61	743	0
	B - Rectory Lane (S)	0	0	97	79
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	45	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
From		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
	A - A52 (E)	0	61	100	0
	B - Rectory Lane (S)	0	0	97	79
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	45	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.45	29.11	1.5	D	161	242
A-BCD	0.00	0.00	0.0	A	0	0
A-B					56	84
A-C					682	1023
D-ABC	0.13	15.07	0.2	C	42	63
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	132	33	496	0.267	130	0.0	0.7	18.420	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	46	12			46				
A-C	560	140			560				
D-ABC	34	9	438	0.078	34	0.0	0.1	12.949	B
C-ABD	0	0	503	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	158	40	467	0.339	157	0.7	0.9	21.846	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	55	14			55				
A-C	668	167			668				
D-ABC	41	10	421	0.097	41	0.1	0.2	13.774	B
C-ABD	0	0	475	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	194	48	426	0.455	192	0.9	1.5	28.622	D
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	67	17			67				
A-C	818	205			818				
D-ABC	50	13	398	0.126	50	0.2	0.2	15.053	C
C-ABD	0	0	437	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	194	48	426	0.455	194	1.5	1.5	29.109	D
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	67	17			67				
A-C	818	205			818				
D-ABC	50	13	398	0.126	50	0.2	0.2	15.070	C
C-ABD	0	0	437	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	158	40	467	0.339	160	1.5	1.0	22.305	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	55	14			55				
A-C	668	167			668				
D-ABC	41	10	421	0.097	41	0.2	0.2	13.796	B
C-ABD	0	0	475	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	132	33	496	0.267	134	1.0	0.7	18.807	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	46	12			46				
A-C	560	140			560				
D-ABC	34	9	438	0.078	34	0.2	0.1	12.991	B
C-ABD	0	0	503	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2029 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2029 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A52 (E)		ONE HOUR	✓	695	100.000
B - Rectory Lane (S)		ONE HOUR	✓	112	100.000
C - A52 (W)		ONE HOUR	✓	0	100.000
D - Rectory Lane (N)		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
From	A - A52 (E)	0	76	619	0
	B - Rectory Lane (S)	0	0	71	41
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	77	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
From		A - A52 (E)	B - Rectory Lane (S)	C - A52 (W)	D - Rectory Lane (N)
	A - A52 (E)	0	76	100	0
	B - Rectory Lane (S)	0	0	71	41
	C - A52 (W)	0	0	0	0
	D - Rectory Lane (N)	0	77	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.26	16.42	0.6	C	102	154
A-BCD	0.00	0.00	0.0	A	0	0
A-B					70	105
A-C					568	852
D-ABC	0.20	19.28	0.4	C	71	106
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	84	21	529	0.159	83	0.0	0.3	12.759	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	57	14			57				
A-C	466	116			466				
D-ABC	58	14	449	0.129	57	0.0	0.3	16.177	C
C-ABD	0	0	523	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	100	25	504	0.199	100	0.3	0.4	14.097	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	68	17			68				
A-C	556	139			556				
D-ABC	69	17	435	0.159	69	0.3	0.3	17.379	C
C-ABD	0	0	499	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	123	31	470	0.261	122	0.4	0.5	16.359	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	84	21			84				
A-C	681	170			681				
D-ABC	85	21	415	0.204	84	0.3	0.4	19.231	C
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	123	31	470	0.261	123	0.5	0.6	16.418	C
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	84	21			84				
A-C	681	170			681				
D-ABC	85	21	415	0.204	85	0.4	0.4	19.282	C
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	100	25	504	0.199	101	0.6	0.4	14.168	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	68	17			68				
A-C	556	139			556				
D-ABC	69	17	435	0.159	70	0.4	0.3	17.447	C
C-ABD	0	0	499	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	84	21	529	0.159	84	0.4	0.3	12.847	B
A-BCD	0	0	641	0.000	0	0.0	0.0	0.000	A
A-B	57	14			57				
A-C	466	116			466				
D-ABC	58	14	449	0.129	58	0.3	0.3	16.287	C
C-ABD	0	0	523	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.1.1.1905 © Copyright TRL Software Limited, 2023
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Filename: 22873 - A1 (E), High Road, A1 (N).j10
Path: N:\Consulting\JPP Scheme 2021 (22316 -\22873 - Casthorpe Road, Barrowby, South Kesteven\Design\JPP\TA
Report generation date: 28/06/2024 10:38:16

- »2024, AM
- »2024, PM
- »2029, AM
- »2029, PM
- »2029 + Dev, AM
- »2029 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2024										
Stream B-AC	D1	0.4	15.22	0.23	C	D2	0.1	10.06	0.11	B
Stream C-AB		0.3	9.79	0.12	A		0.6	13.41	0.20	B
2029										
Stream B-AC	D3	0.5	15.96	0.24	C	D4	0.2	10.36	0.11	B
Stream C-AB		0.3	9.97	0.13	A		0.7	13.82	0.22	B
2029 + Dev										
Stream B-AC	D5	1.1	23.53	0.38	C	D6	0.2	12.39	0.16	B
Stream C-AB		0.4	10.02	0.13	B		0.7	14.07	0.22	B

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

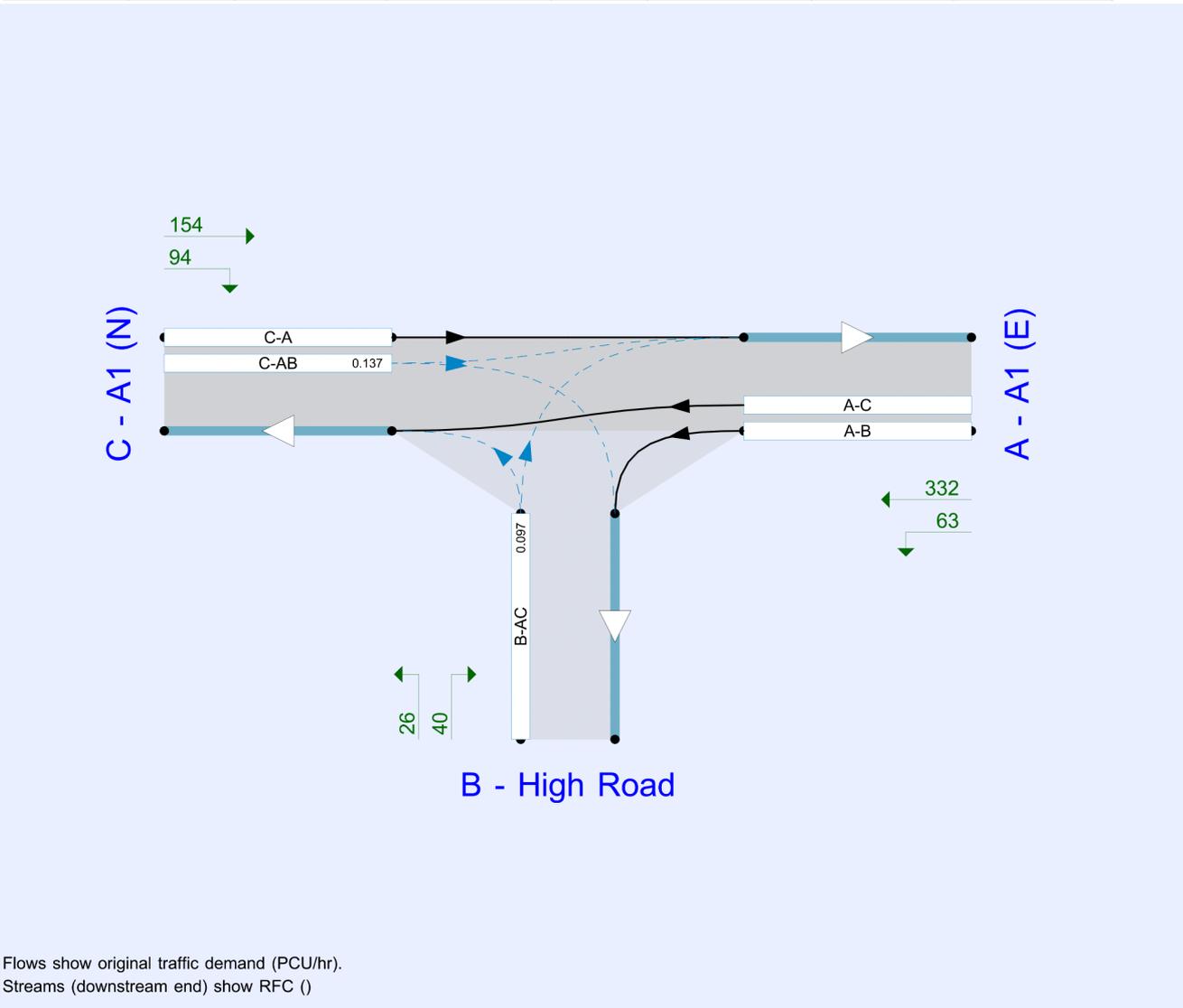
File summary

File Description

Title	
Location	
Site number	
Date	17/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CEDARBARN\Thomas.Kirk
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024	AM	ONE HOUR	07:45	09:15	15	✓
D2	2024	PM	ONE HOUR	16:45	18:15	15	✓
D3	2029	AM	ONE HOUR	07:45	09:15	15	✓
D4	2029	PM	ONE HOUR	16:45	18:15	15	✓
D5	2029 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2029 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.09	A

Arms

Arms

Arm	Name	Description	Arm type
A	A1 (E)		Major
B	High Road		Minor
C	A1 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1 (N)	7.50			77.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - High Road	One lane	3.00	90	110

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	562	0.096	0.242	0.152	0.346
B-C	693	0.099	0.251	-	-
C-B	619	0.224	0.224	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A1 (E)		ONE HOUR	✓	359	100.000
B - High Road		ONE HOUR	✓	98	100.000
C - A1 (N)		ONE HOUR	✓	242	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A1 (E)	B - High Road	C - A1 (N)	
A - A1 (E)	0	15	344	
B - High Road	64	0	34	
C - A1 (N)	192	50	0	

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To			
	A - A1 (E)	B - High Road	C - A1 (N)	
A - A1 (E)	0	15	100	
B - High Road	64	0	34	
C - A1 (N)	100	50	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	15.22	0.4	C	89	134
C-AB	0.12	9.79	0.3	A	63	95
C-A					159	238
A-B					14	21
A-C					316	474

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	18	510	0.144	72	0.0	0.3	12.463	B
C-AB	48	12	658	0.073	47	0.0	0.2	9.354	A
C-A	134	33			134				
A-B	11	3			11				
A-C	259	65			259				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	88	22	492	0.178	87	0.3	0.3	13.509	B
C-AB	61	15	666	0.091	60	0.2	0.2	9.483	A
C-A	157	39			157				
A-B	13	3			13				
A-C	309	77			309				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	466	0.230	107	0.3	0.4	15.179	C
C-AB	80	20	679	0.118	80	0.2	0.3	9.708	A
C-A	186	47			186				
A-B	17	4			17				
A-C	379	95			379				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	466	0.230	107	0.4	0.4	15.221	C
C-AB	80	20	679	0.118	80	0.3	0.3	9.789	A
C-A	186	46			186				
A-B	17	4			17				
A-C	379	95			379				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	88	22	492	0.178	88	0.4	0.3	13.563	B
C-AB	61	15	667	0.091	61	0.3	0.2	9.639	A
C-A	156	39			156				
A-B	13	3			13				
A-C	309	77			309				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	18	510	0.144	74	0.3	0.3	12.546	B
C-AB	48	12	658	0.073	49	0.2	0.2	9.451	A
C-A	134	33			134				
A-B	11	3			11				
A-C	259	65			259				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.22	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2024	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A1 (E)		ONE HOUR	✓	342	100.000
B - High Road		ONE HOUR	✓	48	100.000
C - A1 (N)		ONE HOUR	✓	237	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A1 (E)	B - High Road	C - A1 (N)
From	A - A1 (E)	0	25	317
	B - High Road	23	0	25
	C - A1 (N)	147	90	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A - A1 (E)	B - High Road	C - A1 (N)
From	A - A1 (E)	0	25	100
	B - High Road	23	0	25
	C - A1 (N)	100	90	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	10.06	0.1	B	44	65
C-AB	0.20	13.41	0.6	B	105	158
C-A					112	168
A-B					23	34
A-C					291	437

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	537	0.067	35	0.0	0.1	8.884	A
C-AB	82	20	637	0.128	80	0.0	0.3	12.350	B
C-A	97	24			97				
A-B	19	5			19				
A-C	239	60			239				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	519	0.082	43	0.1	0.1	9.350	A
C-AB	102	25	642	0.158	101	0.3	0.4	12.757	B
C-A	111	28			111				
A-B	22	6			22				
A-C	285	71			285				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	52	13	495	0.106	52	0.1	0.1	10.056	B
C-AB	132	33	648	0.203	131	0.4	0.6	13.361	B
C-A	129	32			129				
A-B	28	7			28				
A-C	349	87			349				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	52	13	495	0.106	52	0.1	0.1	10.065	B
C-AB	132	33	648	0.204	132	0.6	0.6	13.413	B
C-A	129	32			129				
A-B	28	7			28				
A-C	349	87			349				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	519	0.082	43	0.1	0.1	9.360	A
C-AB	102	25	642	0.159	102	0.6	0.5	12.841	B
C-A	111	28			111				
A-B	22	6			22				
A-C	285	71			285				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	9	536	0.067	36	0.1	0.1	8.906	A
C-AB	82	20	637	0.128	82	0.5	0.4	12.443	B
C-A	96	24			96				
A-B	19	5			19				
A-C	239	60			239				

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.22	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.22	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2029	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A1 (E)		ONE HOUR	✓	376	100.000
B - High Road		ONE HOUR	✓	102	100.000
C - A1 (N)		ONE HOUR	✓	253	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	16	360
B - High Road	66	0	36
C - A1 (N)	201	52	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	16	100
B - High Road	66	0	36
C - A1 (N)	100	52	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.24	15.96	0.5	C	94	140
C-AB	0.13	9.97	0.3	A	67	100
C-A					165	247
A-B					14	22
A-C					330	495

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	506	0.152	76	0.0	0.3	12.875	B
C-AB	51	13	660	0.077	50	0.0	0.2	9.506	A
C-A	139	35			139				
A-B	12	3			12				
A-C	271	68			271				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	23	487	0.188	91	0.3	0.4	14.031	B
C-AB	64	16	669	0.096	64	0.2	0.2	9.642	A
C-A	163	41			163				
A-B	14	4			14				
A-C	324	81			324				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	460	0.244	112	0.4	0.5	15.905	C
C-AB	85	21	682	0.125	85	0.2	0.3	9.885	A
C-A	193	48			193				
A-B	17	4			17				
A-C	396	99			396				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	460	0.244	112	0.5	0.5	15.956	C
C-AB	85	21	683	0.125	85	0.3	0.3	9.967	A
C-A	193	48			193				
A-B	17	4			17				
A-C	396	99			396				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	23	486	0.188	92	0.5	0.4	14.098	B
C-AB	65	16	669	0.097	65	0.3	0.3	9.803	A
C-A	163	41			163				
A-B	14	4			14				
A-C	324	81			324				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	505	0.152	77	0.4	0.3	12.966	B
C-AB	51	13	660	0.078	51	0.3	0.2	9.604	A
C-A	139	35			139				
A-B	12	3			12				
A-C	271	68			271				

2029, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.35	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2029	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A1 (E)		ONE HOUR	✓	358	100.000
B - High Road		ONE HOUR	✓	50	100.000
C - A1 (N)		ONE HOUR	✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	26	332
B - High Road	24	0	26
C - A1 (N)	154	94	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	26	100
B - High Road	24	0	26
C - A1 (N)	100	94	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	10.36	0.2	B	46	68
C-AB	0.22	13.82	0.7	B	112	167
C-A					116	174
A-B					24	36
A-C					305	457

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	532	0.070	37	0.0	0.1	9.071	A
C-AB	86	22	638	0.135	85	0.0	0.4	12.657	B
C-A	100	25			100				
A-B	20	5			20				
A-C	250	63			250				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	514	0.087	45	0.1	0.1	9.574	A
C-AB	108	27	643	0.168	107	0.4	0.5	13.109	B
C-A	115	29			115				
A-B	24	6			24				
A-C	299	75			299				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	14	489	0.112	55	0.1	0.2	10.352	B
C-AB	140	35	650	0.216	139	0.5	0.7	13.769	B
C-A	133	33			133				
A-B	29	7			29				
A-C	366	91			366				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	14	489	0.112	55	0.2	0.2	10.361	B
C-AB	140	35	650	0.216	140	0.7	0.7	13.822	B
C-A	132	33			132				
A-B	29	7			29				
A-C	366	91			366				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	11	514	0.087	45	0.2	0.1	9.589	A
C-AB	108	27	643	0.168	109	0.7	0.5	13.187	B
C-A	115	29			115				
A-B	24	6			24				
A-C	299	75			299				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	532	0.070	38	0.1	0.1	9.096	A
C-AB	87	22	638	0.136	87	0.5	0.4	12.758	B
C-A	100	25			100				
A-B	20	5			20				
A-C	250	63			250				

2029 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.41	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A1 (E)		ONE HOUR	✓	389	100.000
B - High Road		ONE HOUR	✓	151	100.000
C - A1 (N)		ONE HOUR	✓	253	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	29	360
B - High Road	116	0	36
C - A1 (N)	201	52	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	29	100
B - High Road	100	0	36
C - A1 (N)	100	52	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.38	23.53	1.1	C	139	208
C-AB	0.13	10.02	0.4	B	67	101
C-A					165	247
A-B					27	40
A-C					330	495

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	28	489	0.233	112	0.0	0.5	17.093	C
C-AB	51	13	658	0.078	50	0.0	0.2	9.541	A
C-A	139	35			139				
A-B	22	5			22				
A-C	271	68			271				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	136	34	469	0.290	135	0.5	0.7	19.370	C
C-AB	65	16	667	0.097	64	0.2	0.2	9.686	A
C-A	163	41			163				
A-B	26	7			26				
A-C	324	81			324				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	42	441	0.377	165	0.7	1.0	23.315	C
C-AB	85	21	680	0.126	85	0.2	0.3	9.939	A
C-A	193	48			193				
A-B	32	8			32				
A-C	396	99			396				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	42	441	0.377	166	1.0	1.1	23.534	C
C-AB	86	21	680	0.126	86	0.3	0.4	10.022	B
C-A	193	48			193				
A-B	32	8			32				
A-C	396	99			396				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	136	34	469	0.290	137	1.1	0.8	19.616	C
C-AB	65	16	667	0.097	65	0.4	0.3	9.847	A
C-A	163	41			163				
A-B	26	7			26				
A-C	324	81			324				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	114	28	488	0.233	115	0.8	0.6	17.368	C
C-AB	51	13	658	0.078	51	0.3	0.2	9.642	A
C-A	139	35			139				
A-B	22	5			22				
A-C	271	68			271				

2029 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.57	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2029 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A1 (E)		ONE HOUR	✓	395	100.000
B - High Road		ONE HOUR	✓	66	100.000
C - A1 (N)		ONE HOUR	✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	63	332
B - High Road	40	0	26
C - A1 (N)	154	94	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From	To		
	A - A1 (E)	B - High Road	C - A1 (N)
A - A1 (E)	0	63	100
B - High Road	40	0	26
C - A1 (N)	100	94	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	12.39	0.2	B	60	91
C-AB	0.22	14.07	0.7	B	112	168
C-A					115	173
A-B					58	87
A-C					305	457

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	12	509	0.097	49	0.0	0.1	10.478	B
C-AB	86	22	632	0.137	85	0.0	0.4	12.794	B
C-A	100	25			100				
A-B	47	12			47				
A-C	250	63			250				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	15	490	0.121	59	0.1	0.2	11.211	B
C-AB	108	27	636	0.170	108	0.4	0.5	13.282	B
C-A	115	29			115				
A-B	57	14			57				
A-C	299	75			299				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	18	463	0.157	72	0.2	0.2	12.366	B
C-AB	141	35	642	0.219	140	0.5	0.7	14.014	B
C-A	132	33			132				
A-B	69	17			69				
A-C	366	91			366				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	18	462	0.157	72	0.2	0.2	12.386	B
C-AB	141	35	642	0.220	141	0.7	0.7	14.067	B
C-A	132	33			132				
A-B	69	17			69				
A-C	366	91			366				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	15	489	0.121	59	0.2	0.2	11.238	B
C-AB	108	27	636	0.170	109	0.7	0.5	13.370	B
C-A	114	29			114				
A-B	57	14			57				
A-C	299	75			299				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	12	509	0.097	50	0.2	0.1	10.521	B
C-AB	87	22	633	0.137	87	0.5	0.4	12.900	B
C-A	100	25			100				
A-B	47	12			47				
A-C	250	63			250				



Appendix G
National Highways TRIS data

Monthly report for Siteld : 8114

May-24

24 Hour Flows by Day of Month

Mon	Flow	6.6m	Tue	Flow	6.6m	Wed	Flow	6.6m	Thur	Flow	6.6m	Fri	Flow	6.6m	Sat	Flow	6.6m	Sun	Flow	6.6m	
							1	20362	29.5				2	22193	27				3	25073	20.6
	6	16636	14.4	7	19374	27.8	8	19397	29.9	9	22006	27.4	10	26512	20.5	11	15941	12.4	12	16919	10.6
	13	19824	26	14	19933	29.8	15	20398	29.5	16	23017	27.4	17	26325	21.2	18	16008	12.5	19	17425	11
	20	20383	26.4	21	19827	29.4	22	20848	28.8	23	23577	26.7	24	30004	19.3	25	20975	9.9	26	18260	8.4
	27	20174	13.1	28	21514	25.6	29	22183	28.4	30	23710	26	31	28034	21.4						

Average Flows

	Mon	Tue	Wed	Thur	Fri	Sat	Sun		ADT	AWT
24hr	19254	20162	20638	22901	27190	17487	17042		20949	22231
%>6.6m	20.2	28.1	29.2	26.9	20.6	11.1	9.6		21.8	24.9
18hr	18224	18836	19261	21462	25722	16589	16334		19747	20890
%>6.6m	19	26.4	27.1	24.8	18.6	9.4	8.8		20	23
16hr	17714	18344	18755	20863	25069	16102	15726		19193	20333
%>6.6m	18.8	26.2	27	24.7	18.6	9.3	8.5		19.9	22.9
12hr	15296	15733	16069	17571	21474	14117	12890		16378	17378
%>6.6m	18.3	26.1	26.7	24.8	18.6	8.7	8.1		19.7	22.7
No.days	4	4	5	5	5	4	4			

Average Hourly Variation (hour ending)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	152	122	106	104	190	357	620	877	924	1032	1363	1534	1520	1496	1490	1465	1393	1239	964	760	601	438	298	212
Tue	164	130	136	141	237	519	898	1233	1187	1085	1215	1351	1408	1366	1420	1507	1532	1445	986	739	559	416	292	201
Wed	169	154	141	159	262	492	883	1185	1210	1128	1220	1346	1370	1288	1497	1555	1677	1525	1069	783	568	453	286	219
Thur	168	162	148	168	281	511	885	1171	1212	1126	1262	1413	1491	1530	1650	1730	1989	1694	1302	1010	815	582	358	241
Fri	194	178	150	164	280	500	831	1143	1262	1322	1638	1921	2135	2277	2314	2288	2089	1797	1289	1126	970	667	396	258
Sat	154	138	113	100	137	256	435	684	1016	1400	1516	1603	1577	1266	1212	1199	1003	902	742	623	516	411	294	194
Sun	153	132	99	81	97	145	241	406	601	955	1219	1384	1352	1256	1210	1160	1174	1123	1051	973	877	745	384	224

Average
weekday
flows 1159

Average
weekday
flows 1540